



Manulife Financial Corporation

**2011 Annual Report**

Annual Meeting May 3, 2012

# 2011

## Our Vision

To be the most professional financial services organization in the world, providing strong, reliable, trustworthy and forward-thinking solutions for our clients' most significant financial decisions.

## Our Values

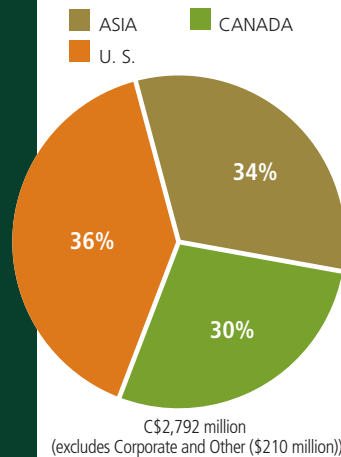
- P**rofessionalism
- R**eal Value to our Customers
- I**ntegrity
- D**emonstrated Financial Strength
- E**mployer of Choice

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# MANULIFE FINANCIAL

## 2011 NET INCOME EXCLUDING NOTABLE ITEMS<sup>1, 2</sup>

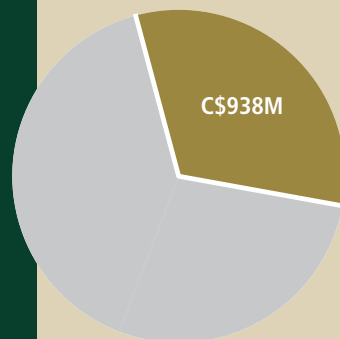


Manulife Financial is a leading Canada-based financial services group with principal operations in Asia, Canada and the United States. In 2012, we celebrate 125 years of providing clients with strong, reliable, trustworthy and forward-thinking solutions for their most significant financial decisions.

Manulife Financial has a significant global presence operating in the world's largest economies, with internationally recognized brands which have stood for financial strength and integrity for more than a century.

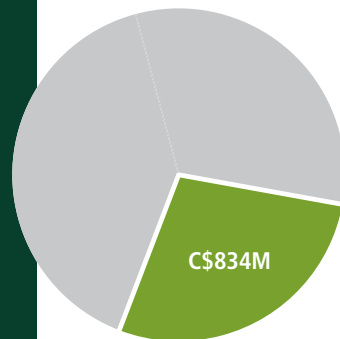
### IN ASIA

Manulife Financial has operated in Asia since 1897, beginning in Hong Kong. Today, as a pan-Asian insurer, we have insurance and asset management operations in 10 markets, including Hong Kong, the Philippines, Singapore, Indonesia, Taiwan, China, Japan, Vietnam, Malaysia, and Thailand. We offer a diverse portfolio of protection, savings and wealth management products and services to meet the needs of individuals and corporate customers. We distribute our products through a multi-channel network, including more than 50,000 tied agents, bank partners, independent agents, and financial advisors.



### IN CANADA

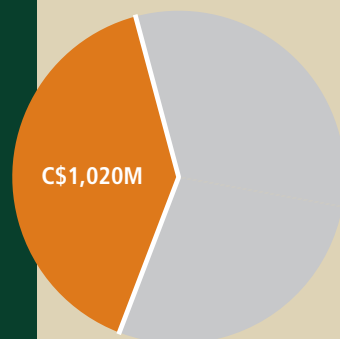
Serving one in five Canadians, our Canadian Division is one of the leading financial services organizations in Canada. Our portfolio includes a full range of protection and savings products and services available through a diversified distribution base, meeting the needs of a broad marketplace. Our individual insurance products are aimed at middle- and upper-income individuals and business owners. Group life, health, disability, and retirement products are marketed to Canadian employers. Our individual wealth management product offerings include mutual funds, fixed and variable annuities, guaranteed investment certificates, high-interest savings accounts, and banking products.



### IN THE UNITED STATES

Our U.S. Insurance operation provides life and long-term care insurance products and services to select markets. John Hancock in the U.S. offers a broad range of personal and family oriented wealth management products and services focused on individuals and business markets, as well as institutional oriented products for employee benefit plan funding solutions.

We distribute our products through a multi-channel network, including brokerage general agents, producer groups, banks, wirehouses and broker dealers as well as John Hancock Financial Network ("JHFN"), a national network of independent career agencies across the U.S.



<sup>1</sup> Non-GAAP measure. The Chair of the Board's Message and the Message to Shareholders from the CEO also include non-GAAP measures. See "Performance and Non-GAAP Measures" on page 78. <sup>2</sup> For more information on net income (loss) excluding notable items, see page 79. <sup>3</sup> Market Capitalization as of December 31, 2011. <sup>4</sup> "Targeted Growth Products" in Insurance exclude Universal Life with No-Lapse Guarantees, Guaranteed Non-Par Whole Life and Long-Term Care insurance in the U.S.,

# AN INTERNATIONAL, DIVERSIFIED BUSINESS

With market-leading positions in Asia, Canada and the United States, we leverage a diverse business platform that offers a range of financial products in both developed and developing markets around the world.

Our international network of employees, agents and distribution partners offers financial protection and wealth management products and services to millions of clients. We also provide asset management services to institutional customers.

- 4th largest North American Insurer<sup>3</sup>
- 10th largest Global Insurer<sup>3</sup>
- Operating in 3 Key Geographies
- Founded in 1887
- 26,400 Employees Worldwide

## ■ Products and Services

- Individual life insurance
- Group life and health
- Hospital coverage
- Mutual funds
- Variable & fixed annuities
- Group retirement
- Operating in 10 countries and territories
- Recently announced plans to expand into an 11th territory, Cambodia, during 2012

- Started Asia Operations in 1897
- 7,407 Employees
- 50,179 Agents

## ■ Sales Rank Data<sup>6</sup>

- #2 Hong Kong Pension
- #3 China Insurance
- #3 Vietnam Insurance
- #5 Philippines Insurance
- #6 Japan Variable Annuities
- #7 Singapore Insurance
- #8 Hong Kong Insurance
- #8 Indonesia Insurance

## ■ Products and Services

- Individual life insurance
- Living benefits insurance
- Group life and health
- Mutual funds
- Variable & fixed annuities
- Guaranteed investment certificates
- Group retirement
- High-interest savings accounts
- Mortgages
- Investment loans
- Travel insurance

- Founded in 1887

- 8,612 Employees

## ■ Sales Rank Data<sup>6</sup>

- #1 Defined Contribution Group Pensions
- #2 Individual Fixed Annuities
- #2 Individual Insurance
- #2 Individual Segregated Funds
- #3 Group Benefits

## ■ Products and Services

- Individual life insurance
- Long-term care
- Mutual funds
- Annuities
- 529 College Savings plans
- 401(k) Retirement Savings plans

- Manulife started U.S. operations in 1903
- John Hancock was founded in 1862, and merged with Manulife in 2004
- 6,301 Employees

## ■ Sales Rank Data<sup>6</sup>

- #1 Small Case 401(k)
- #6 Mutual Funds
- #6 Individual Life Insurance
- #7 Fixed Products

<i>C\$ millions, unless stated and per share data</i>	2011	2010	% change <sup>7</sup>
Funds under Management <sup>1</sup> (billion)	\$499.7	\$477.0	3%
Insurance Sales <sup>1</sup>			
Targeted Growth Products <sup>4</sup>	\$2,289	\$2,048	11 %
Products Not Targeted for Growth <sup>4</sup>	\$218	\$482	(52%)
Wealth Management Sales <sup>1</sup>			
Targeted Growth Products <sup>5</sup>	\$30,517	\$28,028	11%
Products Not Targeted for Growth <sup>5</sup>	\$4,132	\$6,083	(32%)
Net income (loss) excl. the direct impact of equity markets and interest rates <sup>1</sup>	\$1,193	(\$660)	–
Net income (loss) to common shareholders	\$44	(\$1,742)	–
Earnings (loss) per common share <sup>1</sup>	\$0.02	(\$0.99)	–
Return on Common Shareholder Equity <sup>1</sup>	0.2%	(7.3%)	–
Book Value per Share <sup>1</sup>	\$12.44	\$12.76	(3%)

<i>C\$ millions, unless stated</i>	2011	2010	% change <sup>7</sup>
Funds under Management <sup>1</sup> (billion)	\$71.4	\$67.7	1%
Insurance Sales <sup>1</sup>			
Targeted Growth Products <sup>4</sup>	\$1,230	\$1,066	13%
Products Not Targeted for Growth <sup>4</sup>	–	–	–
Wealth Management Sales <sup>1</sup>			
Targeted Growth Products <sup>5</sup>	\$3,716	\$3,177	17%
Products Not Targeted for Growth <sup>5</sup>	\$415	\$1,353	(71%)
Net income excl. the direct impact of equity markets and interest rates <sup>1</sup>	\$1,111	\$954	16%

<i>C\$ millions, unless stated</i>	2011	2010	% change <sup>7</sup>
Funds under Management <sup>1</sup> (billion)	\$122.1	\$114.4	7%
Insurance Sales <sup>1</sup>			
Targeted Growth Products <sup>4</sup>	\$658	\$657	0%
Products Not Targeted for Growth <sup>4</sup>	–	–	–
Wealth Management Sales <sup>1</sup>			
Targeted Growth Products <sup>5</sup>	\$8,877	\$8,258	7%
Products Not Targeted for Growth <sup>5</sup>	\$1,907	\$1,887	1%
Net income excl. the direct impact of equity markets and interest rates <sup>1</sup>	\$898	\$1,244	(28%)

<i>C\$ millions, unless stated</i>	2011	2010	% change <sup>7</sup>
Funds under Management <sup>1</sup> (billion)	\$280.9	\$261.0	5%
Insurance Sales <sup>1</sup>			
Targeted Growth Products <sup>4</sup>	\$401	\$325	28%
Products Not Targeted for Growth <sup>4</sup>	\$218	\$482	(53%)
Wealth Management Sales <sup>1</sup>			
Targeted Growth Products <sup>5</sup>	\$17,924	\$16,593	12%
Products Not Targeted for Growth <sup>5</sup>	\$1,810	\$2,843	(33%)
Net income excl. the direct impact of equity markets and interest rates <sup>1</sup>	\$1,035	\$1,378	(25%)

which collectively are referred to as "Products not targeted for growth" <sup>5</sup> Wealth products targeted for growth exclude variable annuities across all geographies (other than InvestmentPlus and Manulife PensionBuilder in Canada) and book value fixed deferred annuities in the U.S. which are not targeted for growth. <sup>6</sup> Sales Rank data for 2011 Q3 YTD. See "Manulife Financial – Financial Strength Fact Sheet" and "John Hancock Fact Sheet" for further disclosures, both available at manulife.com. <sup>7</sup> Percent change for Funds Under Management and sales of insurance and wealth management are presented on a constant currency basis.



**GAIL COOK-BENNETT**  
CHAIR OF THE BOARD

## **CHAIR OF THE BOARD'S MESSAGE**

### **TO MY FELLOW SHAREHOLDERS**

Manulife enters 2012 as a stronger and fundamentally different company than it was shortly after the onset of the global financial crisis. At that time, Manulife initiated a major transformation designed to reduce risk and reposition its businesses for continued growth in an environment characterized by volatile equity markets and low interest rates.

As CEO Donald Guloien reports in his accompanying message, Manulife has significantly reduced its risk profile; achieved its business mix repositioning; moved its hedging and risk mitigation programs well ahead of plan; and maintained its capital strength.



At the same time, management has continued to deliver strong growth in our targeted product areas and geographies. In particular, Manulife has continued to expand its presence in Asia, where it operates in 10 countries and territories including eight of the region's fastest-growing economies. In North America, the Company delivered diversified year-over-year growth in Canada across its asset management and insurance business lines, and successfully repositioned its operations in the United States. This overall level of growth is a considerable achievement, especially given the contemporaneous transformation of the Company's business mix and risk profile.

Manulife's financial performance reflects the positive changes management has made. While 2011 net income attributed to shareholders of \$129 million was disappointing in absolute terms, it represented a positive swing of approximately \$1.8 billion over 2010. Critically, these results reflect significantly reduced exposure to equity market volatility and low interest rates. Moreover, these reduced exposures provide some protection against potential longer-term macroeconomic headwinds.

Asia is an area of long-term opportunity for Manulife and a priority for the Board. This is evident in a number of ways, ranging from our financial results to our approach to Board composition. In 2011, Asia contributed 34 per cent of Manulife's net income, excluding notable items. This is a significant contribution and compares well to the 30 per cent and 36 per cent from Canada and the U.S., respectively. Clearly, Asia is of central importance to the Company's long-term prospects.

From a governance perspective, Manulife's Board has long had a practice of meeting in Asia, just as we do more regularly in the U.S. In 2010, we held our first Board meeting in mainland

China and made a commitment to have a group of directors tour our Asia operations at least annually. To this end, five members of the Board travelled this past September to Hong Kong, the Philippines and Vietnam to meet with our partners, local leadership and employees. Such visits deepen Board members' understanding of Manulife's businesses in these markets and provide greater opportunity to engage directly with management.

In the last three years, we have added four directors with deep business ties to Asia, as well as other skills that align to Manulife's strategic, geographic, business and financial goals.

In 2011, Manulife welcomed three new directors:

Tsun-yan Hsieh, a resident of Singapore, brings extensive international business experience, having spent over 30 years with McKinsey & Co., where he founded the McKinsey Center for Asian Leadership. He brings a deep understanding of organizational dynamics and leadership development;

Sheila Fraser adds a wealth of financial and management experience having served as Auditor General of Canada, and before that for 18 years as a partner at Ernst and Young;

Andrea Rosen has extensive senior executive experience and a deep knowledge of the financial services industry having served as Vice-Chair with TD Bank Financial Group and President of TD Canada Trust.

Your directors are also committed to ensuring that Manulife has a long-term strategy that will enable it to grow and create value for shareholders well beyond the Company's stated 2015 objectives. This focus is supported by the appointment in 2011 of a Chief Strategy Officer, and by the Board's

oversight of management's attention to developing leaders with the capabilities required to support the Company's strategy.

Good governance is essential to long-term success. We try to adhere to best practices relevant to our Company, and to conduct our oversight and compliance duties with care and attention. What really counts, in our view, is open and engaged debate among directors who are informed about our businesses and who bring broad diversity of perspective and thinking. We believe this leads to more active oversight and sound decision-making.

We are pleased that Manulife has long been ranked at or near the top in corporate governance practices in Canada, and were honoured again this year by our second place ranking by one of the nation's leading newspapers in an annual review of corporate governance at Canadian public companies.

In closing, I would like to recognize President and Chief Executive Officer Donald Guloien and his senior management team for their strong leadership, as well as Manulife's employees for their efforts and the very significant progress they continue to make toward Manulife's goals and objectives.

After three years of exemplary service, Linda Bammann will be stepping down from the Board in May. The Board appreciates Linda's significant contributions. Finally, I thank my fellow directors, for their commitment, diligence and engagement on behalf of our fellow shareholders.

**Gail Cook-Bennett**  
Chair of the Board



**DONALD A. GULOIEN**  
PRESIDENT AND CHIEF EXECUTIVE OFFICER

## MESSAGE TO SHAREHOLDERS FROM THE CEO

### **2011 WAS A YEAR OF IMPORTANT ACHIEVEMENTS FOR MANULIFE FINANCIAL**

Despite challenges posed by financial markets, regulatory risks, and global economic uncertainty, we pursued our long-term strategic plans with precision and resilience. We faced up to our challenges, overcame obstacles, invested in future growth, and seized opportunities. We remained focused on our vision to become the most professional financial services organization in the world, providing strong, reliable, trustworthy and forward-thinking solutions for our clients' most significant financial decisions.

We achieved our three-year product mix repositioning. Our hedging programs eliminated most, but not all, of the equity market and interest rate risk during volatile markets. We are generating growth through less-risky and higher-return businesses. And our businesses in Asia, Canada and the United States contributed almost equally to our operating results.





In 2011, our net income attributed to shareholders was \$129 million. While clearly not at a level that I find satisfactory, it is a significant improvement over a net loss of \$1.66 billion last year. Excluding the negative impact of a goodwill impairment charge and actuarial basis changes, our net income would have been \$1.55 billion. We are moving in the right direction.

At the same time, we are still dealing with the macro issues that made 2011 an exceptionally challenging period for businesses: a fragile recovery in the U.S., very serious economic concerns in Europe, the unprecedented easing of interest rates by central banks, and highly volatile equity markets were just some of the headwinds confronted by all global insurers.

Faced with these challenges, capital preservation is key. We entered 2012 in a strong financial position with reduced equity market and interest rate sensitivity, a healthier mix of new business, and a capital ratio for The Manufacturers Life Insurance Company at a comfortable 216 per cent.

Our strategy to reposition our business and create a foundation for sustainable growth is succeeding. In our key geographies of Asia, Canada and the U.S., we worked hard to reposition our product mix to focus on the sales of higher-return, lower-risk products. We made the tough choice to lead the market on increasing prices of some products, and we are pleased with how we have been able to work with our distributors to redesign products to be more viable in low interest rate environments.

In the current uncertain investment climate, our Investment Division managed to generate strong performance for our general account, avoiding risk concentration with a diversified, high-quality portfolio and maintaining a disciplined approach to

extending credit. At the end of 2011, funds under management reached a record \$500 billion.

Our businesses are established in four of the top 10 economies in the world, including the three largest ones – in the United States, China and Japan. Our other principal operations are located in eight of Asia's fastest-growing countries and territories, and our direct exposure to the struggling economies of Europe is nominal. Manulife's positioning for the future is excellent though our success is still tied to economic growth and the return of financial markets and interest rates to more normal levels.

#### **DIVISIONAL RESULTS**

Looking more closely at our business performance in 2011, we delivered strong top-line growth according to our highest priorities of:

- Developing our Asian opportunity to the fullest.
- Growing our non-guarantee-dependent wealth and asset management businesses in the U.S., Canada and Asia.
- Continuing to build our balanced Canadian franchise.
- Continuing to grow higher ROE and lower-risk U.S. businesses.

Sales performance for products targeted for growth was solid. For the full year, overall sales of insurance products targeted for growth increased 11 per cent compared to 2010, and were up 35 per cent from 2009. Overall sales of wealth products targeted for growth increased 11 per cent compared to 2010, and were up 40 per cent from 2009. Since 2009, mutual fund sales in the U.S. and Canada grew 91 per cent and 293 per cent, respectively.

Our results continue to show compelling evidence of the importance of our Asian operations. Insurance

sales in Asia in 2011 were, for the second consecutive year, greater than targeted insurance sales in the rest of our company, up 13 per cent compared to 2010 and up 63 per cent compared to 2009. Wealth sales in Asia for products targeted for growth also increased by 17 per cent over 2010 and 59 per cent over 2009.

Consistent with our strategy of diversifying our sales channels, we expanded our Asian bancassurance relationships, adding six new arrangements, including a strategic partnership with PT Bank Danamon Indonesia. Across the region, we have a record high of over 50,000 agents, 18 per cent more than in 2010.

In Canada, we saw solid sales results throughout 2011. Sales of individual wealth products targeted for growth were \$7.9 billion, 8 per cent higher than in 2010. This growth reflected record mutual fund deposits and record new loan volumes at Manulife Bank. In October 2011, we took the controversial yet necessary step to increase prices of our Universal Life products to be aligned with their risk profile. No one takes pleasure in raising prices, but our actions were necessary to reflect the cost of these products in the current low interest rate environment, and most of our competitors subsequently followed our lead.

In the U.S., full year sales of targeted for growth insurance products in 2011 increased 28 per cent over 2010, and sales of wealth products targeted for growth increased 12 per cent compared to 2010. Notably, John Hancock Mutual Funds had the sixth-highest net sales in the U.S. non-proprietary market segment. We also successfully repositioned our insurance product portfolio to reduce interest rate risk in 2011, and took the difficult steps to increase prices in our Long-Term Care business.

# 2014



Manulife Asset Management, which manages assets for institutional and retail clients, had a solid year reporting assets under management of more than \$210 billion. Our strength has attracted industry attention and we now have 58 Five- and Four-star Morningstar rated funds, our best showing ever.

#### **MANULIFE IS WELL-POSITIONED AND STRONG**

When looking back, I am pleased to see several achievements that should give shareholders and customers confidence in our financial stability and strength.

As noted earlier, the rigorous work and decisions to reposition our product mix have given us the wherewithal to better meet the demands of the competitive environment, economic climate, and regulatory requirements.

Beginning in 2009, we have taken steps to increase reserves by \$6.6 billion (post-tax) in response to lower interest rates, reviews of in-force business experience, and other factors. We have also strengthened our balance sheet by writing off close to \$4 billion in goodwill during this time. Normally, strengthening reserves and balance sheet write-offs would reduce capital, but we bolstered our capital ratios through a number of transactions to help offset these actions.

We are in a strong financial position and have a comfortable capital ratio that reflects our financial strength and gives us the flexibility to pursue

strategic objectives that yield sustainable growth. We continue to remain ahead of our timetable on hedging, having already achieved our year-end 2012 goal for equity markets hedging and 93 per cent of our goal for 2014. We have also achieved our 2014 goal for interest rate hedging.

#### **MANULIFE IS PURSUING SUSTAINABLE GROWTH IN ALL THE RIGHT AREAS**

We are making progress toward our objective of \$4 billion in earnings and 13 per cent return on equity by 2015. That said, it is an ambitious goal, and there are many potential risks ahead, including continued economic instability, equity market volatility, prolonged low interest rates, regulatory changes, and additional basis changes. The task in front of our team is clear: We will need a combination of smart management and excellent execution, but hitting our target would be made easier with a more positive economic environment.

Our commitment to provide value to our customers continues to drive the design and innovation of our wealth and insurance products. Taking into account the range of risks and outcomes and the valuable embedded options in favour of our customers, these products have to be priced appropriately to provide realistic economic returns for our shareholders.

**“Our results continue to show compelling evidence of the importance of our Asian operations.”**

Each of our businesses has competitive strengths, and we are committed to building them further.

In Asia, our operational footprint across 10 countries and territories remains a strategic differentiator. We are continuing to see customers recognize the strength and stability of Manulife

when choosing a wealth management or insurance provider or partner.

I am excited about the momentum of our performance and our potential for this region. Today, we are building our success on the increasing presence of the Manulife Financial brand and our growing distribution capabilities through our agency network and bancassurance partners. But the Asian economic growth story is just unfolding and we are poised to leverage the power of the rising middle class across the region. Asia is home to approximately 25 per cent of the world’s middle-class population today, but the OECD sees this figure doubling in the next 14 years. Furthermore, by 2030, Asian consumers are expected to lead the world and be responsible for more than 40 per cent of global consumption.

The market is clearly more mature in Canada, where we are building on a competitive franchise with a solid product line. Our deep roots here as a life insurance company have allowed us to make positive strides toward creating a broadly based, diversified financial services company. We offer Canadian consumers competitive and successful mutual funds and lending products through a multi-channel distribution network.

In the U.S., Manulife is well positioned for growth, as we pursue a balanced mix of sales in insurance and wealth products. Our competitive position in important distribution channels, consumer awareness of the John Hancock brand, and our customer service are key differentiators for us as we look to capitalize on the continued and considerable demand for retirement, mutual fund and insurance products.

We continue to expect that our Investment operations will generate high-quality returns as a key foundation of our sustainable growth model. Manulife Asset Management and John Hancock Asset Management are also succeeding as boutique investment businesses with global capabilities.

The foundations of our business performance are our talented people and our brands, and we continue to invest in their future.



# 2011

Across our Company, we are committed to attracting, developing and engaging high-performing, high-potential talent. This commitment was recognized when one of Canada's leading national newspapers named Manulife as one of the top 100 employers in the country. I am proud to know that our businesses throughout Asia and the U.S. operate with the same fine principles.

In all three of our principal geographies, we launched campaigns focused on growing, enhancing and promoting our brand. We are leveraging our strength as one company operating under two firmly established brands of Manulife Financial and John Hancock, celebrating their 125th and 150th anniversaries, respectively.

## GOING FORWARD

Clearly, there are many reasons to be positive about Manulife's potential as a company and as an investment. We are financially strong and stable. We were a leader in repositioning our business model to respond to challenging market conditions, and I am confident that we will be amongst the first companies to benefit. We have the flexibility to pursue strategic and organic opportunities. We are pursuing sustainable growth strategies across a geographically diversified business portfolio. And we are investing in our future through active management of our people and our brand.

Yet my optimism is tempered by some of the challenges posed by regulatory uncertainty in our industry. I am proud to be the CEO of a leading Canadian company, and I know first-hand that respect for the prudence and stability of the Canadian government and the Canadian financial services industry has made us attractive to many knowledgeable people around the world. But I fear that overly conservative Canadian accounting and capital standards are further tilting an uneven playing field, depicting Canadian insurers as weaker than we really are and lessening our ability to compete in some areas.

The impact of this goes beyond the technical and esoteric. When Manulife's financial performance is viewed through the lens of U.S. generally accepted accounting principles, our company earned \$3.8 billion in 2011, a stark contrast to the \$129 million reported under Canadian rules. If the intent of highly conservative mark-to-market accounting principles used in Canada is to ensure companies are transparent about the value of their assets and obligations, policymakers cannot be insensitive to the resulting volatility.

If we must find a silver lining, it might be this: Canadian accounting and capital regimes may have depressed earnings and exaggerated capital issues, but our company is well-fortified for both macro shocks and a prolonged low interest rate environment. As a result, we have repriced and redesigned our products globally, well ahead of many of our peers.

Canada and Canadian financial companies have weathered recent crises well – as well or better than most in the world – and part of the reason is because of our high capital and regulatory standards. We want to celebrate these strengths, but our shareholders should not be penalized by them.

We began 2011 knowing that it would not be easy to complete our strategy. I am proud of the

work we have done and excited by our future possibilities. Without question, there is more significant work ahead of us, but we have the right team driving the right strategies that will result in growth and stability.

I am grateful for the tremendous support and counsel of Manulife's Board of Directors and our Chair, Gail Cook-Bennett. Equally important, I know the results reported here could not be achieved without the integrity, professionalism and dedication of our senior executives around the world. They have proven themselves as leaders and among the best in their business. I also want to thank and acknowledge our employees, agents, distribution partners, and all of Manulife's policyholders and clients.

Finally, I want to thank our shareholders for your continued confidence in our strategy and ability to succeed. As a result of your commitment and trust, we are positioning Manulife so it will be a leader for years to come.



**Donald A. Guloien**  
President and Chief Executive Officer

## PRIORITIES DRIVING PERFORMANCE OBJECTIVES

PRIORITIES	PERFORMANCE OBJECTIVES
Growth	Increase Net Income to \$4 billion in 2015
Maintain strong capital/ financial strength	Maintain capital levels that are adequate to meet policyholder obligations and to support strong financial strength ratings
Improve ROE	Improve ROE to 13 per cent by 2015 (objective pending further clarity on evolving capital rules) Products and strategic investments generally being made at >14 per cent target
Manage risk	Shift business mix away from products containing higher risk (particularly interest rate and/or equity risk) without clearly adequate return Hedge or reinsure exposures to reduce capital and earnings at risk
Continue to offer a quality value proposition to clients	Continue to deliver on solutions for our clients' most significant financial decisions

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### Caution regarding forward-looking statements

This document contains forward-looking statements within the meaning of the “safe harbour” provisions of Canadian provincial securities laws and the U.S. Private Securities Litigation Reform Act of 1995. The forward-looking statements in this document include, but are not limited to, statements with respect to our 2015 management objectives for earnings and return on equity, management objectives with respect to hedging equity markets and interest rate risks and potential future changes related to fixed income URR assumptions if current low interest rates persist. The forward-looking statements in this document also relate to, among other things, our objectives, goals, strategies, intentions, plans, beliefs, expectations and estimates, and can generally be identified by the use of words such as “may”, “will”, “could”, “should”, “would”, “likely”, “suspect”, “outlook”, “expect”, “intend”, “estimate”, “anticipate”, “believe”, “plan”, “forecast”, “objective”, “seek”, “aim”, “continue”, “goal”, “restore”, “embark” and “endeavour” (or the negative thereof) and words and expressions of similar import, and include statements concerning possible or assumed future results. Although we believe that the expectations reflected in such forward-looking statements are reasonable, such statements involve risks and uncertainties, and undue reliance should not be placed on such statements and they should not be interpreted as confirming market or analysts expectations in any way. Certain material factors or assumptions are applied in making forward-looking statements, including in the case of our 2015 management objectives for earnings and return on equity, the assumptions described under “Key Planning Assumptions and Uncertainties” and actual results may differ materially from those expressed or implied in such statements. Important factors that could cause actual results to differ materially from expectations include but are not limited to: the factors identified in “Key Planning Assumptions and Uncertainties”; general business and economic conditions (including but not limited to the performance, volatility and correlation of equity markets, interest rates, credit and swap spreads, currency rates, investment losses and defaults, market liquidity and creditworthiness of guarantors, reinsurers and counterparties); changes in laws and regulations; changes in accounting standards; our ability to execute strategic plans and changes to strategic plans; downgrades in our financial strength or credit ratings; our ability to maintain our reputation; impairments of goodwill or intangible assets or the establishment of valuation allowances against future tax assets; the accuracy of estimates relating to morbidity, mortality and policyholder behavior; the accuracy of other estimates used in applying accounting policies and actuarial methods; our ability to implement effective hedging strategies and unforeseen consequences arising from such strategies; our ability to source appropriate assets to back our long dated liabilities; level of competition and consolidation; our ability to market and distribute products through current and future distribution channels; unforeseen liabilities or asset impairments arising from acquisitions and dispositions of businesses; the realization of losses arising from the sale of investments classified as available for sale; our liquidity, including the availability of financing to satisfy existing financial liabilities on their expected maturity dates when required; obligations to pledge additional collateral; the availability of letters of credit to provide capital management flexibility; accuracy of information received from counterparties and the ability of counterparties to meet their obligations; the availability, affordability and adequacy of reinsurance; legal and regulatory proceedings, including tax audits, tax litigation or similar proceedings; our ability to adapt products and services to the changing market; our ability to attract and retain key executives, employees and agents; the appropriate use and interpretation of complex models or deficiencies in models used; political, legal, operational and other risks associated with our non-North American operations; acquisitions and our ability to complete acquisitions including the availability of equity and debt financing for this purpose; the disruption of or changes to key elements of the Company’s or public infrastructure systems; environmental concerns; and our ability to protect our intellectual property and exposure to claims of infringement. Additional information about material factors that could cause actual results to differ materially from expectations and about material factors or assumptions applied in making forward-looking statements may be found in the body of this document under “Risk Management and Risk Factors” and “Critical Accounting and Actuarial Policies” in the Management’s Discussion and Analysis and in the “Risk Management” note to the consolidated financial statements as well as under “Risk Factors” in our most recent Annual Information Form and elsewhere in our filings with Canadian and U.S. securities regulators. We do not undertake to update any forward-looking statements except as required by law.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

This Management's Discussion and Analysis ("MD&A") is current as of March 16, 2012.

## Overview

***Manulife Financial is a leading Canada-based financial services group with principal operations in Asia, Canada and the United States. In 2012, we celebrate 125 years of providing clients strong, reliable, trustworthy and forward-thinking solutions for their most significant financial decisions. Our international network of employees, agents and distribution partners offers financial protection and wealth management products and services to millions of clients. We also provide asset management services to institutional customers. Funds under management<sup>1</sup> by Manulife Financial and its subsidiaries were \$500 billion (US\$491 billion) as at December 31, 2011. The Company operates as Manulife Financial in Canada and Asia and primarily as John Hancock in the United States.***

***Manulife Financial Corporation trades as 'MFC' on the TSX, NYSE and PSE, and under '945' on the SEHK. Manulife Financial can be found on the internet at [manulife.com](http://manulife.com).***

In this document, the terms "Company", "Manulife Financial" and "we" mean Manulife Financial Corporation ("MFC") and its subsidiaries.

In 2011 we completed our three year product mix repositioning in all three of our geographies and strengthened the Manulife Financial and John Hancock brands. We led the market in executing price increases on new products, and in the U.S. we were pleased with our progress on price increases for our in-force Long-Term Care retail business.

We also significantly expanded our equity market and interest rate hedging programs in the first half of the year, which has reduced our earnings sensitivity and our capital sensitivity. Our hedging held us in good stead as these programs mitigated most, but not all, of the risk in the second half of 2011 as financial markets became increasingly volatile. We remained ahead of our timetable on hedging. We have already achieved our year end 2012 equity markets hedging goal and 93 per cent of our 2014 goal. We have also achieved our 2014 interest rate hedging goal.

We closed 2011 in a strong financial position with reduced equity market and interest rate sensitivity, with a Minimum Continuing Capital and Surplus Requirements ("MCCSR") capital ratio for The Manufacturers Life Insurance Company ("MLI") at 216 per cent. While lower than the 249 per cent at the end of 2010, 30 points of the decline was the result of changes in accounting policies, clarifications of regulatory capital policies and the impact of lower interest rates on the amount of regulatory required capital. In addition, during 2011 the sale of our Life Retrocession business and additional third party reinsurance added ten points to our ratio and offset the impact of declines in the ratio from growth in the business and dividends paid to MFC in excess of MLI's net income. The year end ratio should also be considered in context of the significantly reduced earnings sensitivity to changes in interest rates and equity markets.

Against this positive backdrop, financial markets were very unfavourable with lower equity markets, interest rates, and volatility hurting our financial results despite our significant hedging actions. The charges for goodwill impairment and actuarial basis changes further reduced earnings. Manulife Financial Corporation reported net income attributed to shareholders of \$129 million and net income of \$245 million for 2011. In contrast, net income in accordance with U.S. GAAP for 2011 was \$3.8 billion, \$3.5 billion higher than the Canadian version of IFRS.

Company-wide sales<sup>2</sup> of insurance products targeted for growth increased 11 per cent versus 2010 and were up 35 per cent from 2009. Company-wide sales of targeted wealth products increased 11 per cent compared to 2010 and were up 40 per cent from 2009. With the completion of our product repositioning, the categorization of products as "targeted for growth" and "not targeted for growth" will be discontinued in 2012.

In Asia, we remain focused on accelerating growth in some of the world's fastest growing markets where low financial services market penetration combined with high GDP growth affords the Company excellent opportunities. In 2011, we took important steps toward building a diversified multi-channel distribution platform. Highlights include securing strategically important distribution agreements with key bank partners in Hong Kong, Indonesia and China; continued robust growth of our professional agency force throughout the division and innovative brand building campaigns to enhance our strong global brand.

In Canada, we continued to produce solid sales results, despite significant interest rate declines and increased equity market volatility. Several business lines reported record sales for the year including Manulife Mutual Funds, Manulife Bank, Group Benefits small business segment and Affinity travel insurance, while Group Retirement Solutions continued to lead the Defined Contribution pension plan market in sales<sup>3</sup>. With the continued declines in interest rates, Individual Insurance demonstrated its market leadership by introducing further Universal Life price increases in October 2011, with most competitors subsequently following our lead. Across the division, we have reduced the equity and interest rate risk of our new business, and invested in development and growth of businesses with lower required capital and higher return potential.

<sup>1</sup> Funds under management is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

<sup>2</sup> Sales is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

<sup>3</sup> Based on the year ended December 31, 2011 sales survey by LIMRA, an insurance industry organization.

In the U.S., we have successfully executed a focused transformation of our insurance businesses. Driven by the need to address historically low interest rates, global solvency and accounting convergence as well as the impact of the U.S. economy which is slowly emerging from challenging times, over the last few years we have increased product prices, changed product features and introduced new products in order to reduce earnings sensitivity and lower risk profiles. U.S. Wealth Management successfully transitioned its new business mix to higher return fee based businesses with strong growth in both Mutual Funds and 401(k) Retirement Plan Services by capitalizing on our strong and trusted brand name, industry leading distribution excellence and access, broadened product offerings, innovative financial solutions and superior customer service. John Hancock Mutual Funds delivered record sales of \$12.5 billion in 2011, 29 per cent above 2010. We continued to be the third largest manager of assets for Lifestyle and Target Date portfolios<sup>4</sup>.

Manulife Asset Management made major progress in growing and strengthening its third party asset management capabilities and as at December 31, 2011 had 58 Five- and Four-star Morningstar<sup>5</sup> rated funds. Our fixed income franchise is gaining significant recognition globally for its depth and breadth and we added four new high performance equity teams. Our Hancock Natural Resource Group adds to our overall breadth and continues to be the largest provider of timber investments to institutional investors in the world and one of the largest institutional managers of farmlands in the U.S.

Our Investment Division's general fund asset management continues to be a strength of our Company, reflecting our investment philosophy rooted in a disciplined bottom-up approach, not limited to fixed income investments, but rather on developing a diversified blend of assets that are expected to drive superior risk adjusted returns for our stakeholders. This philosophy has resulted in a well-diversified, high quality investment portfolio that in 2011 generated gains of \$965 million.

With this progress we are well positioned to pursue sustainable growth with our focus on selling products that we expect to generate higher returns with lower earnings volatility.

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<sup>4</sup> Source: Strategic Insight. Includes Lifestyle and Lifecycle (Target Date) mutual fund assets and fund-of-funds variable insurance product assets (variable annuity and variable life).

<sup>5</sup> For each fund with at least a three year history, Morningstar calculates a Morningstar Rating based on a Morningstar Risk-Adjusted Return that accounts for variation in a fund's monthly performance (including effects of sales charges, loads and redemption fees), placing more emphasis on downward variations and rewarding consistent performance. The top 10% of funds in each category, the next 22.5%, 35%, 22.5% and bottom 1% receive 5, 4, 3, 2 or 1 star, respectively. The Overall Morningstar Rating for a fund is derived from a weighted average of the performance associated with its three, five and 10 year (if applicable) Morningstar Rating metrics. Past performance is no guarantee of future results. The overall rating includes the effects of sales charges, loads and redemption fees, while the load-waived does not. Load-waived rating for Class A shares should only be considered by investors who are not subject to a front-end sales charge.

# Financial Performance

As at and for the years ended December 31,	2011	2010	2009 <sup>(1)</sup>
Net income (loss) (C\$ millions)			
attributed to shareholders	\$ 129	\$ (1,663)	\$ 1,402
available to common shareholders	\$ 44	\$ (1,742)	\$ 1,338
excluding the direct impact of equity markets and interest rates <sup>(2)</sup>	\$ 1,193	\$ (660)	\$ 549
Earnings (loss) per common share (C\$)			
Basic	\$ 0.02	\$ (0.99)	\$ 0.82
Diluted	\$ 0.02	\$ (0.99)	\$ 0.82
Return on common shareholders' equity <sup>(2)</sup> (% , annualized)	0.2%	(7.3)%	5.2%
U.S. GAAP net income <sup>(2)</sup> (C\$ millions)	\$ 3,765	\$ 1,712	\$ 3,143
Sales <sup>(2)</sup> (C\$ millions)			
Insurance products targeted for growth <sup>(3)</sup>	\$ 2,289	\$ 2,048	\$ 1,766
Wealth products targeted for growth <sup>(4)</sup>	\$ 30,517	\$ 28,028	\$ 24,079
Insurance products <i>not</i> targeted for growth <sup>(3)</sup>	\$ 218	\$ 482	\$ 591
Wealth products <i>not</i> targeted for growth <sup>(4)</sup>	\$ 4,132	\$ 6,083	\$ 12,927
Premiums and deposits <sup>(2)</sup> (C\$ millions)			
Insurance products targeted for growth <sup>(3)</sup>	\$ 18,955	\$ 17,856	\$ 17,747
Wealth products targeted for growth <sup>(4)</sup>	\$ 39,658	\$ 37,328	\$ 35,437
Insurance products <i>not</i> targeted for growth <sup>(3)</sup>	\$ 3,323	\$ 3,880	\$ 5,205
Wealth products <i>not</i> targeted for growth <sup>(4)</sup>	\$ 4,125	\$ 6,042	\$ 12,881
Funds under management <sup>(2)</sup> (C\$ billions)	\$ 500	\$ 477	\$ 439.6
Capital <sup>(2)</sup> (C\$ billions)	\$ 29.0	\$ 28.7	\$ 33.2
MLI's MCCR ratio <sup>(5)</sup>	216%	249%	240%
Sensitivities to equity markets and interest rates			
% of underlying earnings sensitivity to equity market movements offset by hedges <sup>(6)</sup>	60 to 70%	50 to 55%	9 to 12%
Earnings impact of a 1% parallel decline in interest rates <sup>(7)</sup>	\$ (1,000)	\$ (1,800)	\$ (2,200)

<sup>(1)</sup> We adopted IFRS as a replacement of prior Canadian generally accepted accounting principles ("CGAAP") effective January 1, 2010. Where applicable, amounts reflected for 2009 are based on CGAAP prior to the adoption of IFRS.

<sup>(2)</sup> This item is a non-GAAP measure. For a discussion of our use of non-GAAP measures, see "Performance and Non-GAAP Measures" below.

<sup>(3)</sup> Insurance products targeted for growth exclude universal life with lifetime no-lapse guarantees, guaranteed non-par whole life and long-term care insurance in the U.S., which are not targeted for growth.

<sup>(4)</sup> Wealth products targeted for growth exclude variable annuities across all geographies (other than InvestmentPlus and Manulife PensionBuilder in Canada) and book value fixed deferred annuities in the U.S. which are not targeted for growth. InvestmentPlus is a Canadian Division product with a 75% minimum death benefit guarantee and a 75% maturity benefit guarantee at age 100 that is used as an alternative to mutual funds for some customers. PensionBuilder provides an alternative to GICs for some customers. Due to the low risk nature of the guarantees these products are in the products targeted for growth category.

<sup>(5)</sup> The ratios for 2010 and 2009 have been calculated in accordance with CGAAP prior to the adoption of IFRS.

<sup>(6)</sup> Defined as earnings sensitivity to a 10 per cent decline in public equity markets including settlements on reinsurance contracts existing at September 30, 2010, but excluding the dynamic hedging strategy and other hedging activities. The high end of the range assumes that the dynamic hedges completely offset related liability changes and the low end assumes that dynamic hedges offset 80% of the dynamically hedged variable annuity policy liabilities. See "Risk Management and Risk Factors" section.

<sup>(7)</sup> The impact above excludes the impact of market value changes in available-for-sale ("AFS") bonds. The AFS bonds provide a natural economic offset to the interest rate risk arising from our product liabilities, and if included would reduce the impact to \$(200), \$(600) and \$(1,600) for the years ended December 31, 2011, 2010 and 2009.

Net income attributed to shareholders was \$129 million in 2011 and net income excluding the direct impact of equity markets and interest rates was \$1,193 million. As noted above, financial markets were very unfavourable with equity markets, interest rates, and volatility hurting our financial results despite our significant hedging actions. The charges for the goodwill impairment and actuarial basis changes further reduced earnings.

The table below outlines the notable items impacting net income including the components of the direct impact of equity markets and interest rates. Net income excluding the direct impact of equity markets and interest rates is a non-GAAP profitability measure introduced in 2010 and related to our activities to reduce earnings sensitivity to changes in interest rates and equity markets.

### Analysis of Net Income (Loss)

For the years ended December 31,

(C\$ millions)

	2011	2010	2009 <sup>(1)</sup>
<b>Net income (loss) attributed to shareholders</b>	<b>\$ 129</b>	<b>\$ (1,663)</b>	<b>\$ 1,402</b>
<b>Less direct impact of equity markets and interest rates<sup>(2)</sup>:</b>			
Gains (charges) on variable annuity guarantee liabilities not dynamically hedged <sup>(3)</sup>	<b>(1,092)</b>	(30)	2,871
Gains (charges) on general fund equity investments supporting policy liabilities and on fee income	<b>(214)</b>	133	361
Gains (losses) on macro equity hedges <sup>(4)</sup>	<b>636</b>	(48)	N/A
Charges on lower fixed income reinvestment rates assumed in the valuation of policy liabilities, excluding ultimate reinvestment rate assumptions	<b>(281)</b>	(1,293)	(2,247)
Gains on sale of AFS bonds and interest rate swaps in the surplus segment	<b>324</b>	544	–
Charges due to lower fixed income ultimate reinvestment rate (“URR”) assumptions used in the valuation of policy liabilities	<b>(437)</b>	(309)	(132)
<b>Direct impact of equity markets and interest rates</b>	<b>\$ (1,064)</b>	<b>\$ (1,003)</b>	<b>\$ 853</b>
<b>Net income (loss) excluding the direct impact of equity markets and interest rates<sup>(5)</sup></b>	<b>\$ 1,193</b>	<b>\$ (660)</b>	<b>\$ 549</b>
<b>Other notable items:</b>			
Earnings impact of the difference between the net increase in variable annuity liabilities that are dynamically hedged and the performance of the related hedge assets <sup>(3),(6)</sup>	<b>\$ (1,153)</b>	\$ (180)	\$ –
Changes in actuarial methods and assumptions (excluding URR changes)	<b>(751)</b>	(1,766)	(1,154)
Goodwill impairment charge	<b>(665)</b>	(2,330)	–
Expected cost of macro equity hedges <sup>(4)</sup>	<b>(408)</b>	(34)	N/A
Net impact of P&C reinsurance claims related to the earthquake in Japan	<b>(151)</b>	–	–
Investment gains (losses) related to fixed income trading, non-fixed income returns, credit experience and asset mix changes	<b>965</b>	271	(1,267)
Favourable impact on policy liabilities related to activities to reduce interest rate exposures	<b>471</b>	416	–
Gain on sale of Life Retrocession business	<b>303</b>	–	–
Tax related items	<b>–</b>	237	125

<sup>(1)</sup> Where applicable, amounts reflected for 2009 are based on CGAAP prior to the adoption of IFRS.

<sup>(2)</sup> The direct impact of equity markets and interest rates is relative to our policy liability valuation assumptions and includes changes to the interest rate assumptions. We also include gains and losses on the sale of AFS bonds as management may have the ability to partially offset the direct impacts of changes in interest rates reported in the liability segments.

<sup>(3)</sup> The breakdown between hedged and unhedged is not available in 2009. All variable annuity guarantee experience in 2009 is presented in “Gains (charges) on variable annuity guarantee liabilities not dynamically hedged”.

<sup>(4)</sup> The 2011 net gain from macro equity hedges was \$228 million and consisted of a \$408 million (2010 – \$34 million) charge related to the estimated expected cost of the macro equity hedges relative to our long-term valuation assumptions and a gain of \$636 million (2010 – loss of \$48 million) because actual markets underperformed our valuation assumptions.

<sup>(5)</sup> Net income (loss) excluding the direct impact of equity markets and interest rates is a non-GAAP measure. See “Performance and Non-GAAP Measures” below.

<sup>(6)</sup> Our variable annuity guarantee dynamic hedging strategy is not designed to completely offset the sensitivity of policy liabilities to all risks associated with the guarantees embedded in these products for a number of reasons including provisions for adverse deviation, fund performance, the portion of interest rate risk that is not hedged, realized equity market and interest rate volatilities and changes to policyholder behaviour. See “Risk Management and Risk Factors” section below for further details.

**In 2011, the direct impact of equity markets and interest rates was a charge of \$1,064 million.** Triple digit declines in risk free rates in North America resulted in a charge from interest movements of \$394 million. This included a charge of \$437 million from lower ultimate reinvestment rates used in actuarial reserves and a \$281 million charge from lower fixed income reinvestment rates, partially offset by \$324 million of gains from the sale of available-for-sale (“AFS”) bonds and from derivative positions. The direct impact of equity markets was a loss of \$670 million, with broad declines in Canadian and Japanese markets, while the U.S. S&P 500 was flat.

**Net income excluding the direct impact of equity markets and interest rates** was balanced across our three major operating divisions in 2011.

Net income (loss) excluding the direct impact of equity markets and interest rates:

For the years ended December 31,

(C\$ millions)

	2011	2010	2009 <sup>(1)</sup>
Asia Division	<b>\$ 1,111</b>	\$ 954	\$ 1,111
Canadian Division	<b>898</b>	1,244	1,067
U.S. Division	<b>1,035</b>	1,378	63
Corporate and Other segment <sup>(2)</sup>	<b>(1,851)</b>	(4,236)	(1,692)
<b>Total</b>	<b>\$ 1,193</b>	<b>\$ (660)</b>	<b>\$ 549</b>

<sup>(1)</sup> Where applicable, amounts reflected for 2009 are based on CGAAP prior to the adoption of IFRS.

<sup>(2)</sup> Corporate and Other includes the following notable items other than the direct impact of equity markets and interest rates: charges related to changes in actuarial methods and assumptions excluding ultimate reinvestment rates (2011 – \$751 million, 2010 – \$1,766 million); goodwill impairment (2011 – \$665 million, 2010 – \$2,330 million); expected cost of macro hedges (2011 – \$408 million, 2010 – \$34 million); net impact of P&C reinsurance claims related to the 2011 earthquake in Japan of \$151 million; partially offset by the gain on sale of the Life Retrocession business in 2011 of \$303 million. These items net to \$1,672 million for 2011 and \$4,130 million for 2010.



**Other notable items in 2011 included:**

As a result of the adverse market conditions we reported a net charge of \$1.2 billion on variable annuity liabilities that are dynamically hedged which included a \$0.5 billion charge for strengthening provisions for adverse deviation. The remaining \$0.7 billion related to the difference between the \$2.3 billion of gains on the dynamic hedge assets and the \$3.0 billion post tax increase in the best estimate policy liabilities. This difference was driven by unfavourable realized equity and interest rate volatilities and their correlations, the difference in performance of the underlying funds hedged and the hedge instruments, and charges related to the portion of the interest rate risk that was not hedged. Excluding the strengthening of liabilities related to provisions for adverse deviation, an item intentionally not hedged, the dynamic hedging program mitigated almost 75 per cent of the increase in the best estimate liability. In addition, as noted in the table above, the gain on equity macro hedges also mitigated equity related risks, and overall our hedging program operated as expected.

Changes in actuarial methods and assumptions resulted in a net charge of \$1,188 million to shareholder earnings of which \$437 million relates to updates to the URR noted above and the remaining \$751 million includes:

- \$475 million charge as a result of the update to U.S. Life mortality which increased expected mortality for older issue and older attained ages,
- \$733 million benefit from updates to other mortality assumptions as well as the implementation of mortality and morbidity improvements across North American business units,
- \$309 million charge related to updates to lapses and other policyholder behaviour assumptions for segregated fund business,
- \$327 million investment-related charge for updates to guaranteed minimum withdrawal benefit commutation rates and other non-fixed income updates (including future acquisitions), and
- \$373 million charge for updates to lapse assumptions for certain insurance businesses, updates to expense factors including letter of credit costs, and a number of offsetting model refinements related to projections of both asset and liability cash flows.

The charge of \$1,188 million is discussed in detail below under “Critical Accounting and Actuarial Policies – Review of Actuarial Methods and Assumptions”.

In 2011 we reported a \$665 million (US\$650 million) goodwill impairment charge. This was the remaining amount of the goodwill allocated to our U.S. Life Insurance business. In the fourth quarter of 2011 we updated our 2012 business plan including in-force and new business embedded values. We use these measures in determining the recoverable amount of our businesses in our annual goodwill impairment testing typically completed during the fourth quarter. The current economic environment, including the persistent low interest rates, impacted the recoverable amounts of our life insurance businesses, principally in the U.S., for IFRS goodwill impairment testing purposes.

The 2011 net gain from macro equity hedges was \$228 million and consisted of a \$408 million charge related to the estimated expected cost of the macro equity hedges relative to our long-term valuation assumptions and a gain of \$636 million because actual markets underperformed our valuation assumptions. The macro hedge program is outlined in the “Risk Management and Risk Factors” section below.

In the first quarter of 2011 our property and casualty reinsurance business reported a net charge of \$151 million from claims related to the earthquake in Japan.

Investment related gains in 2011 were \$965 million and related to asset mix changes, fixed income trading, non-fixed income returns and credit experience. We reported a gain of \$369 million related to the impact on policy liabilities from the increase in expected yield driven by investing in more non-fixed income investments than had been assumed in the policy liability assumptions and \$211 million of gains related to current year returns on non-fixed income investments in excess of those assumed in the valuations. We also reported a net gain of \$122 million from normal course fixed income trading activities over the year. Net credit experience for the year was positive, with impairments almost the same as recoveries and the impact of downgrades at less than the allowance for credit assumed in the policy liabilities.

The \$471 million gain for de-risking activities reflects the impact of lower risk margins required in the valuation of policy liabilities as a result of the improved match between the asset and liability cash flows.

We completed the reinsurance transaction to sell our Life Retrocession business to Pacific Life Insurance Company, based in the United States, in the third quarter. The transaction was effective July 1, 2011 and under IFRS we reported a gain of \$303 million. As previously announced, the reduction in on-going annual earnings from the sale will not be material to our consolidated financial results.

**For the year ended December 31, 2010**, we reported a net loss attributed to shareholders of \$1,663 million on an IFRS basis and a loss of \$660 million excluding the direct impact of equity markets and interest rates. The loss included a charge for goodwill impairment of \$2.3 billion and charges of \$1.8 billion for changes in actuarial methods and assumptions, excluding the impact of updating the ultimate reinvestment rate assumption. Notable tax related items of \$237 million included the release of provisions on tax years that were closed.

**For the year ended December 31, 2009**, we reported net income attributed to shareholders of \$1,402 million and earnings excluding the direct impact of equity markets and interest rates was \$549 million, both on a Canadian GAAP basis. The significant increase in equity markets in 2009 resulted in non-cash gains of \$2,871 million related to the segregated fund and variable annuity guarantees and \$361 million on general fund equity investments supporting policy liabilities and on fee income. These gains were significantly offset by the \$2,379 impact from the decline in interest rates. Other notable items included charges for changes in actuarial methods and assumptions of \$1,154 million (excluding the URR impact), credit related impairments of \$256 million and downgrade charges captured in the valuation of policy liabilities of \$216 million, other than temporary impairments and realized losses on AFS equities of \$257 million, and \$625 million of charges related to the decline in value, relative to the growth assumptions in our policy liabilities, of real estate, timber and agriculture holdings. The tax related items in 2009 related to the Japan variable annuity business and closure of uncertain tax positions, partially offset by an increase in tax related provisions on leveraged lease investments.

#### **Earnings (Loss) per Common Share and Return on Common Shareholders' Equity<sup>6</sup>**

Net income per common share for 2011 was \$0.02, compared to a net loss of \$0.99 in 2010. Return on common shareholders' equity for 2011 was 0.2 per cent, compared to minus 7.3 per cent for 2010. Return on common shareholders' equity is calculated excluding Accumulated Other Comprehensive Income (Loss) ("AOCI") on AFS securities and cash flow hedges.

**Sales as well as premiums and deposits<sup>7</sup>** ("P&D") were in line with our strategy of accelerating the growth of products that have favourable return on capital and with lower risk profiles while at the same time pulling back or eliminating products that give rise to earnings sensitivity or produce low returns on capital employed. To measure progress on these goals, we separately report on the sales and P&D of product lines we are targeting to grow from those that are not targeted for growth. With the completion of the product repositioning, sales and P&D of products not targeted for growth now represent a relatively small portion of overall sales and P&D, and the categorization of products "targeted for growth" and "not targeted for growth" will be discontinued in 2012.

#### **Sales<sup>8</sup>**

Total Company insurance sales for products we are targeting to grow (all insurance products in Asia and Canada, and insurance products in the U.S. other than universal life products with lifetime no-lapse guarantees, guaranteed non-par whole life and long-term care products) were almost \$2.3 billion in 2011, an 11 per cent increase over 2010.

- In Asia, sales were US\$1.2 billion, an increase of 13 per cent over 2010, with 6 of our 10 businesses achieving record full year sales driven by distribution expansion and product development.
- Canadian Insurance exceeded \$650 million in 2011 sales, consistent with 2010 levels as record sales were achieved in the Affinity travel business and Group Benefits' small case market while repositioning activities resulted in a moderate decline in Individual Insurance sales relative to record 2010 sales.
- In the U.S. Insurance segment, we are continuing to reposition the business to adapt to the low interest rate environment and focus on a business mix favouring higher return and more capital efficient products. Insurance sales of products we are targeting to grow exceeded US\$400 million, an increase of 28 per cent over 2010.

Total Company insurance sales of products not targeted for growth (the U.S. products outlined above) totaled \$218 million for the year, a year over year decline of 52 per cent.

Total insurance sales for the full year 2011 were \$2.5 billion, a decrease of one per cent compared to full year 2010.

Total Company wealth sales for products we are targeting to grow (all wealth products except variable annuity ("VA") and book value fixed deferred annuity products. Manulife PensionBuilder and InvestmentPlus VA products are included in products we are targeting to grow due to their low risk profile) exceeded \$30 billion in 2011, an 11 per cent increase over 2010.

- In the U.S., wealth sales were over US\$18 billion and represented an increase of 12 per cent over 2010 driven by mutual fund sales of over \$12 billion, a new record.
- In Canada, wealth sales of \$8.9 billion represented an increase of seven per cent over 2010 as record mutual fund sales and increased bank volumes were partially offset by lower sales of fixed products.
- In Asia, wealth sales for products we are targeting to grow were \$3.8 billion, an increase of 17 per cent over 2010 despite the adverse impact of market volatility.

Total Company wealth sales of products not targeted for growth totaled \$4.1 billion in 2011, a decline of 32 per cent from 2010 on a constant currency basis.

<sup>6</sup> Return on common shareholders' equity is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

<sup>7</sup> Premiums and deposits is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

<sup>8</sup> Growth in sales is stated on a constant currency basis. Constant currency basis is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

Total wealth sales for the full year 2011 were \$34.6 billion, an increase of four per cent compared to full year 2010.

## Sales

For the years ended December 31,

(C\$ millions)

	2011	2010	2009
Insurance products targeted for growth	\$ 2,289	\$ 2,048	\$ 1,766
Insurance products not targeted for growth <sup>(1)</sup>	218	482	591
Wealth products targeted for growth	30,517	28,028	24,079
Wealth products not targeted for growth <sup>(2)</sup>	4,132	6,083	12,927

<sup>(1)</sup> JH Life universal life with lifetime no-lapse guarantees and guaranteed non-par whole life products as well as products in JH Long-Term Care.

<sup>(2)</sup> Wealth products targeted for growth exclude variable annuities across all geographies (other than InvestmentPlus and Manulife PensionBuilder in Canada) and book value fixed deferred annuities in the U.S. which are not targeted for growth. InvestmentPlus is a Canadian Division product with a 75% minimum death benefit guarantee and a 75% maturity benefit guarantee at age 100 that is used as an alternative to mutual funds for some customers. PensionBuilder provides an alternative to GICs for some customers. Due to the low risk nature of the guarantees these products are in the products targeted for growth category.

## Premiums and Deposits<sup>9</sup>:

Total Company P&D for insurance products we are targeting to grow increased to \$19.0 billion in 2011, an increase of seven per cent over 2010. The increase was 16 per cent in Asia, 12 per cent in the U.S. and two per cent in Canada.

Total Company P&D for insurance products we are not targeting to grow declined 11 per cent to \$3.3 billion.

Total Company P&D for wealth products we are targeting to grow increased to \$40 billion in 2011, an increase of ten per cent over 2010. For reasons similar to sales, the increase was 15 per cent in Asia, nine per cent in the U.S. and ten per cent in Canada.

Total Company P&D for wealth products we are not targeting to grow (VA and book value deferred fixed annuities) declined 31 per cent from 2010 to \$4.1 billion in 2011.

## Premiums and Deposits

For the years ended December 31,

(C\$ millions)

	2011	2010	2009 <sup>(1)</sup>
Insurance products targeted for growth	\$ 18,955	\$ 17,856	\$ 17,747
Insurance products not targeted for growth <sup>(2)</sup>	3,323	3,880	5,205
Wealth products targeted for growth	39,658	37,328	35,437
Wealth products not targeted for growth <sup>(3)</sup>	4,125	6,042	12,881
<b>Total premiums and deposits</b>	<b>\$ 66,061</b>	<b>\$ 65,106</b>	<b>\$ 71,270</b>

<sup>(1)</sup> 2009 amounts shown are based on CGAAP prior to the adoption of IFRS.

<sup>(2)</sup> JH Life universal life with lifetime no-lapse guarantees and guaranteed non-par whole life products as well as products in JH Long-Term Care.

<sup>(3)</sup> Wealth products targeted for growth exclude variable annuities across all geographies (other than InvestmentPlus and Manulife PensionBuilder in Canada) and book value fixed deferred annuities in the U.S. which are not targeted for growth. InvestmentPlus is a Canadian Division product with a 75% minimum death benefit guarantee and a 75% maturity benefit guarantee at age 100 that is used as an alternative to mutual funds for some customers. PensionBuilder provides an alternative to GICs for some customers. Due to the low risk nature of the guarantees these products are in the products targeted for growth category.

**Total funds under management** as at December 31, 2011 were \$500 billion, an increase of \$23 billion over December 31, 2010. The increase was driven by \$10 billion of investment returns, \$7 billion of net positive policyholder cash flows and \$10 billion due to the weaker Canadian dollar. These items were partially offset by \$4 billion of expenses, commissions, taxes and other movements.

## Funds under Management

As at December 31,

(C\$ millions)

	2011	2010	2009 <sup>(4)</sup>
General Fund	\$ 226,520	\$ 201,222	\$ 187,470
Segregated Funds excluding Institutional Advisory Accounts <sup>(1),(2)</sup>	193,807	196,868	188,229
Mutual Funds, Institutional Advisory Accounts and Other <sup>(1),(2),(3)</sup>	79,325	78,867	63,918
<b>Total funds under management</b>	<b>\$ 499,652</b>	<b>\$ 476,957</b>	<b>\$ 439,617</b>

<sup>(1)</sup> Segregated fund assets, mutual fund assets and other funds are not available to satisfy the liabilities of the Company's general fund.

<sup>(2)</sup> As at December 31, 2010, we transferred \$6,614 million from segregated funds to mutual funds resulting from a restructuring of our Hong Kong pension business.

<sup>(3)</sup> Other funds represent pension funds, pooled funds, endowment funds and other institutional funds managed by the Company on behalf of others.

<sup>(4)</sup> 2009 amounts shown are based on CGAAP prior to the adoption of IFRS.

## Capital<sup>10</sup>

Total capital was \$29.0 billion as at December 31, 2011 compared to \$28.7 billion as at December 31, 2010, an increase of \$0.3 billion. Contributing factors included: \$0.5 billion increase from impact of the weaker Canadian dollar, \$0.4 billion of preferred shares issued and \$0.2 billion of earnings, partially offset by cash dividends of \$0.7 billion and a \$0.2 billion decrease in unrealized gains on AFS securities. The \$0.55 billion of MLI subordinated debt capital issued in the fourth quarter offset \$0.55 billion of MLI subordinated debt capital redeemed in the first quarter.

<sup>9</sup> Growth in P&D is stated on a constant currency basis. Constant currency basis is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

<sup>10</sup> Capital is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

## Public equity risk and Interest rate risk reduction plans

We have established risk reduction plans designed to reduce our exposure to public equity risk and interest rate risk through a combination of time-scheduled and market-trigger based actions. The plans established a goal of executing additional hedges so that approximately 60 per cent of our underlying earnings sensitivity to public equity market movements is offset by hedges by the end of 2012 and approximately 75 per cent of our underlying earnings sensitivity to public equity market movements is offset by hedges by the end of 2014. In addition, we established goals to reduce our interest rate exposures, as measured by the sensitivity of shareholders' net income to a 100 basis point decline in interest rates, to \$1.65 billion as at year end 2012 and to \$1.1 billion as at year end 2014. As of December 31, 2011 we are ahead of our timetable on hedging having already achieved our year end 2012 equity markets hedging goal and 93 per cent of our 2014 goal. We have also achieved our 2014 interest rate hedging goal.

For further details please see "Risk Management and Risk Factors – Market Risk" section below.

## Fourth Quarter Financial Highlights

For the quarters ended December 31,

(C\$ millions, except per share amounts)

	2011	2010	2009 <sup>(1)</sup>
Net income (loss) attributed to shareholders	\$ (69)	\$ 1,796	\$ 868
Diluted earnings (loss) per share	\$ (0.05)	\$ 0.96	\$ 0.51
Return on common shareholders' equity (annualized)	(1.6)%	32.3%	13.1%

<sup>(1)</sup> 2009 amounts shown are based on CGAAP prior to the adoption of IFRS.

## Net Income (Loss) Attributed to Shareholders

In the fourth quarter of 2011, we reported a net loss attributed to shareholders of \$69 million, which included a goodwill impairment charge on our JH Life insurance business of \$665 million. This non-cash charge was driven by the outlook for continued low interest rates over the medium term and our actions to reduce interest rate risk.

Excluding the notable items identified in the table below, fourth quarter 2011 earnings declined by \$262 million compared to fourth quarter 2010. This decline can be categorized into three approximately equal groups:

- Gains in fourth quarter 2010 that did not recur,
- One-time charges in fourth quarter 2011, and
- Operating items including costs associated with the hedging of additional in-force variable annuity guaranteed value, lower fee income due to market declines and higher new business strain.

The 2010 one-time gains included income from our Life Retrocession business sold in 2011 and tax related items. The one-time charges in fourth quarter 2011 included U.S. based severance costs and industry assessments, a historical correction to our deferred tax balance and a reversal of a gain incorrectly reported in third quarter.

In the fourth quarter of 2010, we reported net income attributed to shareholders of \$1,796 million which included \$824 million of gains related to the direct impact of equity markets and interest rates. Net income also included gains on the dynamically hedged variable annuity business, favourable investment experience and tax gains related to releasing provisions for closed tax years.

The table below outlines the notable items impacting net income in the fourth quarters of 2010 and 2011, including the components of the direct impact of equity markets and interest rates.

## Analysis of Net Income (Loss)

For the quarters ended December 31,

(C\$ millions)

	2011	2010
<b>Net income (loss) attributed to shareholders</b>	<b>\$ (69)</b>	<b>\$ 1,796</b>
<b>Less direct impact of equity markets and interest rates<sup>(1)</sup>:</b>		
Gains on variable annuity guarantee liabilities not dynamically hedged	234	274
Gains on general fund equity investments supporting policy liabilities and on fee income	56	117
Losses on macro equity hedges <sup>(2)</sup>	(250)	(48)
Gains on fixed income reinvestment rates assumed in the valuation of policy liabilities	122	516
Losses on sale of AFS bonds and interest rate swaps in the surplus segment	(9)	(35)
<b>Direct impact of equity markets and interest rates</b>	<b>\$ 153</b>	<b>\$ 824</b>
<b>Net income (loss) excluding the direct impact of equity markets and interest rates<sup>(3)</sup></b>	<b>\$ (222)</b>	<b>\$ 972</b>
<b>Other notable items:</b>		
Goodwill impairment charge	\$ (665)	\$ –
Earnings impact of the difference between the net increase in variable annuity liabilities that are dynamically hedged and the performance of the related hedge assets <sup>(4)</sup>	(193)	184
Expected cost of macro equity hedges <sup>(2)</sup>	(97)	(34)
Changes in actuarial methods and assumptions	2	(54)
Investment gains (losses) primarily related to fixed income trading, favourable credit experience and asset mix changes	279	(115)
Favourable impact on policy liabilities related to activities to reduce interest rate exposure	–	174
Tax related items	–	103

<sup>(1)</sup> The direct impact of equity markets and interest rates is relative to our policy liability valuation assumptions and includes changes to the interest rate assumptions. We also include gains and losses on the sale of AFS bonds as management may have the ability to partially offset the direct impacts of changes in interest rates reported in the liability segments.

(footnotes continue on following page)

- <sup>(2)</sup> The fourth quarter 2011 net loss from macro equity hedges was \$347 million and consisted of a \$97 million charge related to the estimated expected cost of the macro equity hedges relative to our long-term valuation assumptions and a loss of \$250 million because actual markets overperformed our valuation assumptions.
- <sup>(3)</sup> Net income (loss) excluding the direct impact of equity markets and interest rates is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.
- <sup>(4)</sup> Our variable annuity guarantee dynamic hedging strategy is not designed to completely offset the sensitivity of policy liabilities to all risks associated with the guarantees embedded in these products for a number of reasons including provisions for adverse deviation, fund performance, the portion of interest rate risk that is not hedged, realized equity market and interest rate volatilities and changes to policyholder behavior. See "Risk Management and Risk Factors" section below for further details.

### Earnings (Loss) per Share and Return on Common Shareholders' Equity

The loss per common share for the fourth quarter of 2011 was \$0.05 compared to earnings of \$1.00 per share for the fourth quarter of 2010. Return on common shareholders' equity was (1.6) per cent for the fourth quarter of 2011 (fourth quarter of 2010 – 32.3 per cent).

### Premiums and Deposits

Fourth quarter 2011 premiums and deposits for insurance products targeted for growth were \$4.9 billion, in line with the fourth quarter of 2010, on a constant currency basis. Strong growth across Asia and in Canadian Affinity markets was offset by lower premiums in the Reinsurance segment following the sale of the Life Retrocession business.

Fourth quarter 2011 premiums and deposits for wealth products targeted for growth were \$9.1 billion, seven per cent lower on a constant currency basis than the fourth quarter of 2010. The Institutional Advisory business, Group Retirement Solutions in Canada and foreign annuities in Japan all reported strong growth but this was offset as North American mutual fund sales slowed due to market volatility while the low interest rate environment resulted in lower fixed product sales. Also, fourth quarter 2010 premiums and deposits were boosted by fund launches in Asia.

For insurance products not targeted for growth the decline in premiums and deposits for the full year was 11 per cent.

For the wealth products not targeted for growth (variable annuities across all geographies – other than InvestmentPlus and PensionBuilder in Canada – and book value fixed deferred annuities in the U.S.), full year premiums and deposits declined by 31 per cent.

### Premiums and Deposits

For the quarters ended December 31,  
(C\$ millions)

	2011	2010	2009 <sup>(1)</sup>
Insurance products targeted for growth	\$ 4,892	\$ 4,757	\$ 4,437
Insurance products not targeted for growth <sup>(2)</sup>	857	972	2,124
Wealth products targeted for growth	9,138	9,706	8,101
Wealth products not targeted for growth <sup>(3)</sup>	1,030	1,284	1,873
<b>Total premiums and deposits</b>	<b>\$ 15,917</b>	<b>\$ 16,719</b>	<b>\$ 16,535</b>

<sup>(1)</sup> 2009 amounts shown are based on CGAAP prior to the adoption of IFRS.

<sup>(2)</sup> JH Life universal life with lifetime no-lapse guarantees and guaranteed non-par whole life products as well as products in JH Long-Term Care.

<sup>(3)</sup> Wealth products targeted for growth exclude variable annuities across all geographies (other than InvestmentPlus and Manulife PensionBuilder in Canada) and book value fixed deferred annuities in the U.S. which are not targeted for growth. InvestmentPlus is a Canadian Division product with a 75% minimum death benefit guarantee and a 75% maturity benefit guarantee at age 100 that is used as an alternative to mutual funds for some customers. PensionBuilder provides an alternative to GICs for some customers. Due to the low risk nature of the guarantees these products are in the products targeted for growth category.

# Performance by Division

## Asia Division

*Manulife Financial has operated in Asia since 1897, beginning in Hong Kong. Today, as a pan-Asian insurer, we have insurance and asset management operations in ten markets. In addition to Hong Kong we operate in the Philippines, Singapore, Indonesia, Taiwan, China, Japan, Vietnam, Malaysia, and Thailand.*

*We offer a diverse portfolio of protection, savings and wealth management products and services to meet the needs of individuals and corporate customers. To reach our customers we distribute our products through a multi-channel network, including more than fifty thousand tied agents, bank partners, independent agents, and financial advisors.*

In 2011, Asia Division contributed 16 per cent of the Company's total premiums and deposits and, as at December 31, 2011, accounted for 14 per cent of the Company's funds under management.

### Financial Performance

Asia Division's net loss attributed to shareholders for 2011 was US\$62 million compared to net income of US\$689 million in 2010. Net income attributed to shareholders excluding the direct impact of equity markets and interest rates was US\$1,124 million in 2011, an increase of US\$193 million compared to US\$931 million in 2010. The table that follows outlines other notable items impacting both years. Excluding these items, net income attributed to shareholders increased by US\$57 million over 2010 driven by growth in in-force business, higher new business margins, the strengthening of the Yen and other local currencies compared to the U.S. dollar, partially offset by higher expenses related to growth initiatives and IT systems enhancements.

On a Canadian dollar basis, the net loss attributed to shareholders for 2011 was \$48 million compared to net income of \$712 million reported a year earlier.

The table below outlines the net income (loss) attributable to shareholders for Asia Division for 2011, 2010 and 2009 as well as the direct impact of equity markets and interest rates and the impact of other notable items.

### Analysis of Net Income (Loss)

For the years ended December 31,

(\$ millions)	Canadian \$			US \$		
	2011	2010	2009 <sup>(1)</sup>	2011	2010	2009 <sup>(1)</sup>
<b>Net income (loss) attributed to shareholders</b>	<b>\$ (48)</b>	\$ 712	\$ 2,169	<b>\$ (62)</b>	\$ 689	\$ 1,912
<b>Less direct impact of equity markets and interest rates<sup>(2)</sup>:</b>						
Gains (charges) on variable annuity guarantee liabilities not dynamically hedged <sup>(3),(4)</sup>	<b>(877)</b>	(208)	934	<b>(901)</b>	(208)	837
Gains (charges) on general fund equity investments supporting policy liabilities and on fee income	<b>(120)</b>	30	133	<b>(123)</b>	28	120
Charges on lower fixed income reinvestment rates assumed in the valuation of policy liabilities	<b>(162)</b>	(64)	(9)	<b>(162)</b>	(62)	(11)
<b>Direct impact of equity markets and interest rates</b>	<b>\$ (1,159)</b>	\$ (242)	\$ 1,058	<b>\$ (1,186)</b>	\$ (242)	\$ 946
<b>Net income excluding the direct impact of equity markets and interest rates<sup>(5)</sup></b>	<b>\$ 1,111</b>	\$ 954	\$ 1,111	<b>\$ 1,124</b>	\$ 931	\$ 966
<b>Other notable items:</b>						
Earnings impact of the difference between the net increase in variable annuity liabilities that are dynamically hedged and the performance of the related hedge assets <sup>(3),(4),(6)</sup>	<b>\$ (31)</b>	\$ (18)	\$ –	<b>\$ (31)</b>	\$ (18)	\$ –
Favourable impact on policy liabilities related to activities to reduce interest rate exposures	<b>63</b>	58	–	<b>64</b>	57	–
Investment gains (losses) related to fixed income trading, favourable credit experience and asset mix changes	<b>141</b>	(1)	(12)	<b>141</b>	(1)	(7)
Tax related item	<b>–</b>	–	208	<b>–</b>	–	167

<sup>(1)</sup> 2009 amounts shown are based on CGAAP prior to the adoption of IFRS.

<sup>(2)</sup> The direct impact of equity markets and interest rates is relative to our policy liability valuation assumptions and includes changes to the interest rate assumptions.

<sup>(3)</sup> The breakdown between hedged and unhedged is not available in 2009. All variable annuity guarantee experience in 2009 is presented in "Gains (charges) on variable annuity guarantee liabilities not dynamically hedged".

<sup>(4)</sup> The amount of variable annuity guaranteed value that was dynamically hedged at the end of 2011 was 12 per cent.

<sup>(5)</sup> Net income (loss) excluding the direct impact of equity markets and interest rates is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

<sup>(6)</sup> Our variable annuity guarantee dynamic hedging strategy is not designed to completely offset the sensitivity of policy liabilities to all risks associated with the guarantees embedded in these products for a number of reasons including provisions for adverse deviation, fund performance, the portion of interest rate risk that is not hedged, realized equity market and interest rate volatilities and changes to policyholder behavior. See "Risk Management and Risk Factors" section below for further details.



## Sales

**Asia Division's insurance sales** of US\$1.2 billion were 13 per cent higher than 2010, on a constant currency basis. New product launches and expanded agency and bank distribution capacity helped deliver record full year sales in six of our 10 operations. In Japan, full year sales of US\$690 million were up 13 per cent over 2010 due to the continued expansion of the Managing General Agent ("MGA") channel and growth in Increasing Term and Cancer product sales. Sales in Hong Kong were US\$209 million, an increase of eight per cent over 2010, as a result of growth in our agency distribution as well as growth in bank channel sales. Sales in our other countries totaled US\$345 million, up 19 per cent compared to 2010. Strong sales results were reported in Vietnam, the Philippines, Singapore and Indonesia while results in Malaysia and China fell short of prior year.

**Asia Division's wealth sales targeted for growth (excluding variable annuities)** of US\$3.8 billion were 17 per cent higher than prior year on a constant currency basis driven by new fund launches in Manulife TEDA and in Taiwan, as well as a new Australian dollar denominated fixed annuity product launched in Japan late in the year. Offsetting these successes were declines in our Hong Kong and Indonesia businesses, largely the result of market volatility and consumer sentiment which adversely impacted investment linked and mutual fund sales.

## Sales

For the years ended December 31, (\$ millions)	Canadian \$			US \$		
	2011	2010	2009	2011	2010	2009
Insurance products targeted for growth	\$ 1,230	\$ 1,066	\$ 778	\$ 1,244	\$ 1,036	\$ 685
Wealth products targeted for growth	3,716	3,177	2,505	3,767	3,100	2,168

## Premiums and Deposits

Premiums and deposits for products targeted for growth in 2011 were US\$10 billion, up 15 per cent over 2010 on a constant currency basis. Premiums and deposits for insurance products of US\$5 billion were 16 per cent higher than prior year driven by higher new business sales and in-force business growth across all regions. Despite volatile markets, premiums and deposits of wealth management products targeted for growth (excluding variable annuities) of US\$4.6 billion were 14 per cent higher than prior year largely driven by successful fund launches in Manulife TEDA and Taiwan, as well as successful launch of the Australian dollar denominated fixed annuity product in Japan.

## Premiums and Deposits

For the years ended December 31, (\$ millions)	Canadian \$			US \$		
	2011	2010	2009 <sup>(1)</sup>	2011	2010	2009 <sup>(1)</sup>
Insurance products targeted for growth	\$ 5,311	\$ 4,512	\$ 4,139	\$ 5,365	\$ 4,384	\$ 3,640
Wealth products targeted for growth	4,584	4,057	3,425	4,644	3,953	2,973
Wealth products not targeted for growth (VA)	408	1,310	1,744	413	1,265	1,496
<b>Total premiums and deposits</b>	<b>\$ 10,303</b>	<b>\$ 9,879</b>	<b>\$ 9,308</b>	<b>\$ 10,422</b>	<b>\$ 9,602</b>	<b>\$ 8,109</b>

<sup>(1)</sup> 2009 amounts shown are based on CGAAP prior to the adoption of IFRS.

## Funds under Management

Funds under management as at December 31, 2011 were US\$70 billion consistent with December 31, 2010 on a constant currency basis. Net policyholder cash inflows of US\$4.3 billion across the territories were mostly offset by the impact of the declines in equity markets.

## Funds under Management

As at December 31, (\$ millions)	Canadian \$			US \$		
	2011	2010	2009 <sup>(1)</sup>	2011	2010	2009 <sup>(1)</sup>
General funds	\$ 34,757	\$ 29,077	\$ 24,469	\$ 34,172	\$ 29,240	\$ 23,377
Segregated funds	23,524	24,026	27,218	23,130	24,159	26,007
Mutual and other funds	13,109	14,557	5,547	12,889	14,638	5,299
<b>Total funds under management</b>	<b>\$ 71,390</b>	<b>\$ 67,660</b>	<b>\$ 57,234</b>	<b>\$ 70,191</b>	<b>\$ 68,037</b>	<b>\$ 54,683</b>

<sup>(1)</sup> 2009 amounts shown are based on CGAAP prior to the adoption of IFRS.

## Strategic Direction

Asia Division remains focused on accelerating growth in some of the world's fastest growing markets where low market penetration combined with high GDP growth affords the Company excellent opportunities. Our growth strategy is based on expanding our professional agency force, focusing on alternative channel distribution, growing our wealth and asset management businesses and building on the strength of our brand across Asia. It also includes expanding product offerings to capitalize on existing markets and reach new market segments, particularly in the wealth management space, where we can leverage our asset management capabilities.

In 2011, we took important steps toward building a diversified multi-channel distribution platform. Highlights include securing strategically important distribution agreements with key bank partners in Hong Kong, Indonesia and China; continued robust growth of our professional agency force with accelerated growth in our Asia Other businesses; and innovative brand building campaigns to enhance our strong global brand. The investments we have made in 2011, combined with continued focus on implementing our pan-Asian strategy, provide a solid foundation for future growth.

In Hong Kong, our brand recognition is supported by our 1.6 million customers, and a professionally trained agency force of more than 5,000. During 2011, we extended and expanded our bancassurance strategic partnership with CITIC Bank International. Our growth plans include increasing our agency force through both new and experienced agent recruits, further expanding our bancassurance distribution network through new partnerships, and broadening our relationships in the independent financial advisory and broker market by enhancing our wholesale capability. In 2011, we launched a mobile device financial planning application and sophisticated new point of sale software, evidence of our commitment to meet the changing needs and expectations of our customers. In the pension space, we continue to leverage our extensive distribution network, comprehensive fund choices and customer service focus to further grow our strong market position. In addition, we are well positioned to capitalize on the expected regulatory changes to the Mandatory Provident Fund which will allow individuals to choose their pension asset manager.

In Japan, we continue to execute a growth strategy based on diversified product offerings and broad distribution capabilities. In 2011, we achieved our fourth consecutive year of record insurance sales despite the tremendous challenges posed by the Great Eastern Japan Earthquake in March 2011. The MGA channel continued to achieve strong sales in the corporate market and successfully expanded into the retail market. We launched a new medical product in the captive agency channel, complementing our existing Universal Life medical rider. In addition, a new Australian dollar denominated fixed annuity product has enjoyed significant initial success. Our plans include expanding our Mutual Fund business by building enhanced management capabilities, greater fund breadth and increased brand recognition.

Other Asia Territories' operations achieved strong sales growth in 2011 and are an increasingly important contributor to our overall results. In Indonesia, the signing of a distribution partnership in October 2011 with PT Bank Danamon Indonesia was a major strategic achievement and a significant step towards delivering our growth objectives. We intend to build on our success in 2011 by continuing strategic initiatives to accelerate agency recruitment and development, increase the scale of our partnership distribution, explore new alternative distribution opportunities and strengthen our brand. We also received notice that we will be awarded an insurance license in Cambodia and we will commence operations in 2012.

In China, Manulife Sinochem is now licensed in 12 provinces and 49 cities (2010 – 45 cities) and has the broadest geographic footprint of any foreign joint venture insurance company in China. We will strive to continue to grow our business through expanding our professional agency force, leveraging recently signed bancassurance relationships, and capitalizing on new pension and mutual fund opportunities.

# Canadian Division

*Serving one in five Canadians, our Canadian Division is one of the leading financial services organizations in Canada. Our portfolio includes a full range of protection and savings products and services available through a diversified distribution base, meeting the needs of a broad marketplace. Our individual life and living benefits insurance products are aimed at middle and upper-income individuals and business owners. Our Affinity Markets business offers life, health and specialty products, such as travel insurance, through alternative distribution channels, as well as direct to customer marketing. Group life, health, disability and retirement products and services are marketed to Canadian employers. Our individual wealth management product offerings include mutual funds, fixed and variable annuities, guaranteed investment certificates and high interest savings accounts. In addition, through Manulife Bank of Canada and Manulife Trust Company, we offer a variety of lending products including fixed and variable rate mortgages, most notably our innovative Manulife One product, and investment loans.*

In 2011, Canadian Division contributed 26 per cent of the Company's total premiums and deposits and, as at December 31, 2011, accounted for 25 per cent of the Company's funds under management.

## Financial Performance

Canadian Division's net income attributed to shareholders for 2011 was \$910 million compared to \$1,085 million in 2010. Net income excluding the direct impact of equity markets and interest rates was \$898 million in 2011, a decline of \$346 million compared to \$1,244 million in 2010. The \$346 million decline in net income excluding the direct impact of equity markets and interest rates was significantly impacted by a \$291 million charge related to the impact of the volatile markets on our dynamically hedged variable annuity block of business and a significantly lower release of tax provisions upon closing prior years' tax filings. Other earnings pressures in 2011 included the cost of hedging a greater proportion of our variable annuity guarantees and an increase in new business strain resulting from the lower interest rate environment. Partially offsetting these items were gains of \$150 million in 2011 related to our interest rate hedging activities and higher fee income from the growth in our wealth management businesses.

The table below outlines the net income attributed to shareholders for Canadian Division for full year 2011, 2010 and 2009 as well as the direct impact of equity markets and interest rates and the impact of other notable items.

## Analysis of Net Income (Loss)

For the years ended December 31,  
(C\$ millions)

	2011	2010	2009 <sup>(1)</sup>
<b>Net income attributed to shareholders</b>	<b>\$ 910</b>	<b>\$ 1,085</b>	<b>\$ 1,703</b>
<b>Less direct impact of equity markets and interest rates<sup>(2)</sup>:</b>			
Gains (charges) on variable annuity guarantee liabilities not dynamically hedged <sup>(3),(4)</sup>	(39)	(16)	285
Gains (charges) on general fund equity investments supporting policy liabilities and on fee income	(80)	20	94
Gains (charges) on changes in fixed income reinvestment rates assumed in the valuation of policy liabilities	131	(163)	257
<b>Direct impact of equity markets and interest rates</b>	<b>\$ 12</b>	<b>\$ (159)</b>	<b>\$ 636</b>
<b>Net income excluding the direct impact of equity markets and interest rates<sup>(5)</sup></b>	<b>\$ 898</b>	<b>\$ 1,244</b>	<b>\$ 1,067</b>
<b>Other notable items:</b>			
Earnings impact of the difference between the net increase in variable annuity liabilities that are dynamically hedged and the performance of the related hedge assets <sup>(3),(4),(6)</sup>	\$ (278)	\$ 13	\$ –
Favourable impact on policy liabilities related to activities to reduce interest rate exposures	150	64	–
Investment gains (losses) primarily related to fixed income trading, favourable credit experience and asset mix changes	192	125	(6)
Tax related gains <sup>(7)</sup>	65	186	64

<sup>(1)</sup> 2009 amounts shown are based on Canadian GAAP prior to the adoption of IFRS.

<sup>(2)</sup> The direct impact of equity markets and interest rates is relative to our policy liability valuation assumptions and includes changes to the interest rate assumptions.

<sup>(3)</sup> The breakdown between hedged and unhedged is not available in 2009. All variable annuity guarantee experience in 2009 is presented in "Gains (charges) on variable annuity guarantee liabilities not dynamically hedged".

<sup>(4)</sup> The amount of variable annuity guaranteed value that was dynamically hedged increased from 43 per cent at the end of 2009 to 78 per cent at the end of 2010 and to 80 per cent at the end of 2011.

<sup>(5)</sup> Net income excluding the direct impact of equity markets and interest rates is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

<sup>(6)</sup> Our variable annuity guarantee dynamic hedging strategy is not designed to completely offset the sensitivity of policy liabilities to all risks associated with the guarantees embedded in these products for a number of reasons including provisions for adverse deviation, fund performance, the portion of interest rate risk that is not hedged, realized equity market and interest rate volatilities and changes to policyholder behaviour. See "Risk Management and Risk Factors" section for further details.

<sup>(7)</sup> Tax related gains are tax provisions that are released when they become statute-barred. 2011 gain is excluded from total company notable items due to materiality.

## Sales

In 2011, we produced solid sales results and demonstrable progress in our product repositioning strategy against a backdrop of significant interest rate declines and increased equity market volatility. Through product re-design and re-pricing, we have been reducing the equity and interest rate risk of our new business, while continuing to invest in the development and growth of businesses with lower required capital and higher return potential. We are seeing the desired impact of these actions with a lower proportion of our overall sales from guaranteed, long duration products in 2011.

Sales of wealth products targeted for growth of \$8.9 billion in 2011 grew seven per cent relative to 2010, driven by a 45 per cent increase in mutual fund retail deposits to a record \$2.0 billion, reflecting consumer demand for funds in fixed income and balanced fund categories where our fund management performance is strong. As a result, Manulife was the second fastest growing mutual fund organization in Canada based on assets under management of companies reporting to The Investment Funds Institute of Canada (IFIC)<sup>11</sup>. Sales of our low risk variable annuity products increased 27 per cent from 2010 to \$831 million, driven by the fourth quarter launch of Manulife PensionBuilder, a variable annuity product with no equity exposure as the underlying investments are in fixed income funds. Manulife Bank posted record lending volumes of \$4.7 billion for the year with assets reaching a record \$20 billion at December 31, 2011. Our Group Retirement Solutions unit continued to hold the #1 market position for defined contribution sales in the Canadian group retirement industry in 2011<sup>12</sup>. However, activity across the industry was down and our group retirement sales volumes of just over \$900 million for the year were consistent with 2010 levels. The growth across our wealth businesses was tempered by reduced sales of fixed rate products in the low interest rate environment.

Sales of insurance products targeted for growth of \$658 million in 2011 were consistent with 2010 levels. The Direct Response TV advertising campaign for our Affinity Markets CoverMe program drove higher direct health and dental sales. Affinity Markets also had record travel insurance sales in 2011. Our repositioning activities resulted in a moderate decline in Individual Insurance sales relative to 2010, reflecting the effect of price increases on Universal Life and Term to 100 products. Group Benefits sales were marginally above 2010, with record sales in the small case market segment.

## Sales

For the years ended December 31,  
(C\$ millions)

	2011	2010	2009
Insurance products targeted for growth	\$ 658	\$ 657	\$ 634
Wealth products targeted for growth	8,877	8,258	7,607
Wealth products not targeted for growth	1,907	1,887	3,013

## Premiums and Deposits

Premiums and deposits for the Division of \$17.3 billion in 2011 grew five per cent from \$16.6 billion in 2010, mainly due to strong sales of wealth products targeted for growth. The primary contributors of the year-over-year increase were a 45 per cent rise in mutual fund deposits, increases in group retirement deposits from sales and a growing in-force block of plan participants, and growth in low risk variable annuity products. These increases were dampened by a decline in sales of fixed rate products. Growth in the insurance businesses contributed modestly to the year-over-year increase.

## Premiums and Deposits

For the years ended December 31,  
(C\$ millions)

	2011	2010	2009 <sup>(1)</sup>
Insurance products targeted for growth	\$ 9,125	\$ 8,944	\$ 8,779
Wealth products targeted for growth	6,306	5,755	5,125
Wealth products not targeted for growth	1,907	1,887	3,013
<b>Total premiums and deposits</b>	<b>\$ 17,338</b>	<b>\$ 16,586</b>	<b>\$ 16,917</b>

<sup>(1)</sup> 2009 amounts shown are based on CGAAP prior to the adoption of IFRS.

## Funds under Management

Funds under management for the Division grew to a record \$122.1 billion as at December 31, 2011, a seven per cent increase from \$114.4 billion as at December 31, 2010. The increase reflects business growth across the division, driven by Manulife Bank and the wealth management businesses. The market value of funds under management was also increased by the impact of lower interest rates which outweighed the negative impact from equity market declines.

## Funds under Management

As at December 31,  
(C\$ millions)

	2011	2010	2009 <sup>(1)</sup>
General fund	\$ 73,857	\$ 66,407	\$ 59,898
Segregated funds	40,826	40,773	36,258
Mutual and other funds	17,708	16,760	14,563
Less mutual funds held by segregated funds	(10,333)	(9,546)	(8,055)
<b>Total funds under management</b>	<b>\$ 122,058</b>	<b>\$ 114,394</b>	<b>\$ 102,664</b>

<sup>(1)</sup> 2009 amounts shown are based on CGAAP prior to the adoption of IFRS.

<sup>11</sup> Based on IFIC report of Mutual fund assets for top 30 Fund Companies in Canada as at December 31, 2011.

<sup>12</sup> Based on quarterly sales survey by LIMRA, an insurance industry organization, for the year ended 2011.

## Strategic Direction

Our vision is to be the premier broad-based financial services organization in Canada with a reputation for providing strong, reliable, trustworthy and forward-thinking solutions to support our customers' most significant financial decisions. Continued focus on our core competencies of product leadership, distribution excellence and service value has made us a market leader in many of our businesses.

The aging of Canada's baby boomer generation<sup>13</sup> and the increasing focus of employers and governments on reducing the cost of benefits creates opportunities for products and services focused on income growth and safety of investments, inter-generational wealth transfer and managing health care costs. These are all areas in which we excel. We will continue to focus on this target market, enhancing our life, living benefits, banking and savings products to meet the evolving needs of the Canadian population.

The business environment continues to be very competitive and challenged by global economic uncertainty and evolving regulatory oversight. We are targeting accelerated growth in business lines consistent with the Company's goals of efficient use of capital and optimizing risk-adjusted returns, which align with consumer demographics. This includes our wealth management businesses, particularly Manulife Mutual Funds and Group Retirement Solutions, Manulife Bank; small employer Group Benefits and our specialty marketing insurance unit, Affinity Markets. Growth opportunities for permanent life insurance products are expected to continue as they provide a tax efficient means of wealth transfer and business succession over the long term.

We are focused on maintaining a strong, disciplined risk management culture. Over the past three years, we have made substantial progress in moderating our exposure to market risk through a combination of hedging of equity and interest rate exposures, as well as product re-pricing and re-design. As a result of these actions, we expect to see a declining proportion of insurance and VA sales from guaranteed, long duration products. We have also used reinsurance opportunistically to manage our insurance lapse and mortality/morbidity exposures, resulting in lower capital requirements.

We will continue to build on our reputation for product leadership. In 2011, Individual Insurance launched our new Synergy product, the first of its kind in Canada, combining life, disability and critical illness coverage into a single policy. In 2010 and again in 2011, we led the market in increasing Universal Life prices in response to the continuing low interest rate environment. Group Benefits continues to develop alternative benefit offerings to support employers in providing cost effective options to their employees.

We continue to expand our individual wealth management portfolio to offer a diverse choice of high-performing options for our customers. We are keenly focused on enhancing our mutual fund performance and diversifying our fund offerings, and in 2011 launched 26 new mutual funds, many in categories where we were under-represented. In the group retirement market, we are working closely with governments and industry representatives to participate in the development of the new Pooled Registered Pension Plan (PRPP) which is aimed at Canadians who do not have access to a workplace pension plan.

We remain focused on expanding our strong distribution capabilities. With over 70,000 licensed advisors and 600 Manulife sales professionals supporting them, we serve one in five Canadians. We will continue to nurture our relationships with our advisors and to expand relationships across product lines. Key to success is our commitment to providing competitive products and services to meet customers' diverse needs, as well as efficient support to advisors to help their businesses thrive. We will continue to invest in the industry-leading professional value-added services provided by our tax and estate planning teams, as well as the channel and product wholesaler teams who market our product and sales solutions to advisors.

Service quality is important in all our businesses, supporting both sales growth and customer retention. We closely monitor customer and advisor feedback to proactively improve their service experience. We continue to invest in modernizing our infrastructure, launching innovative e-services and expanding capacity in our high growth businesses. We also continue to make efficiency improvements across the Division through increased automation of customer touch-points, system enhancements, elimination of legacy systems and pursuit of outsourcing and off-shoring opportunities.

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<sup>13</sup> Based on Investor Economics 2011 Household Balance Sheet Report.

# U.S. Insurance

*Our U.S. Insurance operation provides life and long-term care insurance products and services to select markets. John Hancock Life offers a broad portfolio of innovative insurance products, including universal, variable, whole and term life insurance designed to provide estate, business and retirement solutions designed for high net worth and emerging affluent markets. John Hancock Long-Term Care provides products offering support and financial resources that help cover the cost of long-term care in the event of an illness, accident, or through the normal effects of aging, giving you choice and control over where you receive care and providing care advisory services and provider discounts. These products are designed for the middle income to affluent markets.*

*We distribute our life and long-term care insurance products through a multi-channel network, including brokerage general agents, producer groups, banks, wirehouses and broker-dealers as well as John Hancock Financial Network ("JHFN"), a national network of independent career agencies comprised of nearly 1,700 financial representatives across the U.S., offering insurance and wealth management solutions to individuals, families and businesses. Additionally, the International Group Program ("IGP") offers international employee benefits management to multinational corporations and their affiliates through a global network of life insurance companies, called "Network Partners".*

In 2011, U.S. Insurance contributed 11 per cent of the Company's total premiums and deposits and, as at December 31, 2011, accounted for 18 per cent of the Company's funds under management.

## Financial Performance

U.S. Insurance reported net income attributed to shareholders of US\$1,090 million for 2011 compared to a net loss of US\$271 million for 2010. Net income excluding the direct impact of equity markets and interest rates was US\$1,216 million in 2011, an increase of US\$605 million compared to US\$611 million in 2010. The table below outlines the notable items impacting both years. Excluding these items, net income attributable to shareholders increased US\$111 million compared to 2010 primarily due to lower new business strain as a result of actions taken to reposition our product portfolio.

On a Canadian dollar basis, the net income attributed to shareholders for 2011 was \$1,085 million compared to a net loss of \$281 million in 2010.

The table below outlines the net income (loss) attributable to shareholders for U.S. Insurance for full year 2011, 2010 and 2009 as well as the direct impact of equity markets and interest rates and the impact of other notable items. See "Goodwill and Intangible Assets" for discussion of goodwill impairment charge recorded in our Corporate and Other segment.

## Analysis of Net Income (Loss)

For the years ended December 31, (\$ millions)	Canadian \$			US \$		
	2011	2010	2009 <sup>(1)</sup>	2011	2010	2009 <sup>(1)</sup>
<b>Net income (loss) attributed to shareholders</b>	<b>\$ 1,085</b>	\$ (281)	\$ (2,576)	<b>\$ 1,090</b>	\$ (271)	\$ (2,288)
<b>Less direct impact of equity markets and interest rates<sup>(2)</sup>:</b>						
Gains (charges) on general fund equity investments supporting policy liabilities and on fee income	(24)	44	89	(27)	43	83
Charges on lower fixed income reinvestment rates assumed in the valuation of policy liabilities	(95)	(957)	(2,112)	(99)	(925)	(1,870)
<b>Direct impact of equity markets and interest rates</b>	<b>\$ (119)</b>	\$ (913)	\$ (2,023)	<b>\$ (126)</b>	\$ (882)	\$ (1,787)
<b>Net income (loss) excluding the direct impact of equity markets and interest rates<sup>(3)</sup></b>	<b>\$ 1,204</b>	\$ 632	\$ (553)	<b>\$ 1,216</b>	\$ 611	\$ (501)
<b>Other notable items:</b>						
Favourable impact on policy liabilities related to activities to reduce interest rate exposures	\$ 217	\$ 322	\$ –	\$ 223	\$ 313	\$ –
Investment gains (losses) primarily related to fixed income trading, favourable credit experience and asset mix changes	490	(95)	(818)	488	(96)	(727)

<sup>(1)</sup> 2009 amounts shown are based on Canadian GAAP prior to the adoption of IFRS.

<sup>(2)</sup> The direct impact of equity markets and interest rates is relative to our policy liability valuation assumptions and includes changes to the interest rate assumptions.

<sup>(3)</sup> Net income (loss) excluding the direct impact of equity markets and interest rates is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

## Sales

Over the last few years in response to historically low interest rates we have focused on repositioning our insurance product portfolio to reduce interest rate risk and earnings sensitivity through product re-design and re-pricing. To measure progress on these goals, we separately report on the sales and premiums and deposits of product lines we are targeting to grow from those that are not targeted for growth. As evidenced by our 2011 sales results, we have successfully executed a focused transformation of our insurance businesses.



Sales for 2011 for insurance products targeted for growth were US\$404 million, US\$88 million or 28 per cent higher than 2010. Sales for 2011 for products not targeted for growth were US\$221 million, 53 per cent lower than 2010. U.S. insurance products not targeted for growth include JH Life universal life with lifetime no-lapse guarantees and guaranteed non-par whole life products as well as products in JH Long-Term Care.

## Sales

For the years ended December 31, (\$ millions)	Canadian \$			US \$		
	2011	2010	2009	2011	2010	2009
Insurance products targeted for growth	\$ 401	\$ 325	\$ 354	\$ 404	\$ 316	\$ 313
Insurance products not targeted for growth <sup>(1)</sup>	218	482	591	221	468	523

<sup>(1)</sup> JH Life universal life with lifetime no-lapse guarantees and guaranteed non-par whole life products as well as products in JH Long-Term Care.

## Premiums and Deposits

The insurance business has both first year and renewal premiums and while the repositioning of sales mix to targeted for growth products impacts premiums and deposits, it will be over a longer time frame. Premiums and deposits for 2011 for insurance products targeted for growth were US\$4.2 billion, US\$0.5 billion or 12 per cent higher than 2010. Premiums and deposits for 2011 for insurance products not targeted for growth were US\$3.4 billion, 11 per cent lower than 2010.

## Premiums and Deposits

For the years ended December 31, (\$ millions)	Canadian \$			US \$		
	2011	2010	2009 <sup>(1)</sup>	2011	2010	2009 <sup>(1)</sup>
Insurance products targeted for growth	\$ 4,153	\$ 3,837	\$ 4,169	\$ 4,195	\$ 3,729	\$ 3,664
Insurance products not targeted for growth <sup>(2)</sup>	3,324	3,880	5,206	3,358	3,769	4,659
<b>Total premiums and deposits</b>	<b>\$ 7,477</b>	<b>\$ 7,717</b>	<b>\$ 9,375</b>	<b>\$ 7,553</b>	<b>\$ 7,498</b>	<b>\$ 8,323</b>

<sup>(1)</sup> 2009 amounts shown are based on CGAAP prior to the adoption of IFRS.

<sup>(2)</sup> JH Life universal life with lifetime no-lapse guarantees and guaranteed non-par whole life products as well as products in JH Long-Term Care.

## Funds under Management

Funds under management as at December 31, 2011 were US\$90.1 billion, up 21 per cent from December 31, 2010. The increase is due to the impact of lower interest rates on the market value of funds under management.

## Funds under Management

As at December 31, (\$ millions)	Canadian \$			US \$		
	2011	2010	2009 <sup>(1)</sup>	2011	2010	2009 <sup>(1)</sup>
General fund	\$ 79,133	\$ 61,706	\$ 55,227	\$ 77,811	\$ 62,041	\$ 52,768
Segregated funds	12,471	12,197	11,431	12,262	12,263	10,922
<b>Total funds under management</b>	<b>\$ 91,604</b>	<b>\$ 73,903</b>	<b>\$ 66,658</b>	<b>\$ 90,073</b>	<b>\$ 74,304</b>	<b>\$ 63,690</b>

<sup>(1)</sup> 2009 amounts shown are based on Canadian GAAP prior to the adoption of IFRS.

## Strategic Direction

We have successfully completed the three year repositioning of our insurance product portfolio. Driven by the need to address historically low interest rates, global solvency and accounting convergence as well as the impact of the U.S. economy which is slowly emerging from challenging times, over the last few years we have increased product prices, changed product features and introduced new products in order to reduce earnings sensitivity and lower risk profiles.

The Life business has successfully completed its strategy to reposition its new business product portfolio while maintaining its industry leading distribution franchise. Following on product changes in 2010, the continued success was driven by the launch in 2011 of new innovative universal life insurance products. As a result sales of insurance products targeted for growth in 2011 increased 28 per cent compared to 2010, and represented 84 per cent of our overall Life sales.

Life intends to build on this success going forward with new products that expand our portfolio, meet our risk tolerances and leverage our strong distribution relationships. This includes our entry into the rapidly growing indexed universal life insurance market which provides clients the potential to participate in equity market returns.

Life expects to continue to support efforts of its key distribution partners to grow and expand their markets. A significant focus is to drive growth and penetration in large financial institutions where our distribution partners operate as life insurance sales specialists. We will implement product enhancements, simplify new business processing and provide sales support and advanced case design expertise to support our distributors' growth in sales in this channel.

Long-Term Care's focus continues to be on the execution of an in-force premium rate increase and the transitioning of the current product portfolio. We are seeking an average premium increase of 40 per cent on 75 per cent of our in-force business or approximately 800,000 policyholders subject to state acceptance. Securing state approvals for in-force premium rate increases is a top priority of the business, with approvals granted by more than half of the states at year end.

Long-term care products are designed to meet the needs of consumers arising from major gaps in U.S. social programs. At the same time, the long-term care industry has been challenged by low interest rates, in-force rate increases and limited market penetration. While our focus has been on limiting the sales of our current product portfolio, we are working on new long-term care products with improved risk profiles and adjustability in light of the low interest rate environment, while also addressing affordability of coverage and filling a hole in consumers' retirement planning. In line with this direction, we will continue to focus on managing and retaining distribution relationships that are critical to the success of our future product direction.

JHFN remains a valuable asset and this was never more evident than during the recent market and economic challenges. JHFN has maintained a number two ranking and greater than 15 per cent share of sales in each of our insurance businesses, demonstrating strong support of our repositioning efforts. We continue to invest in this enterprise that provides meaningful and diversified distribution opportunities.

# U.S. Wealth Management

U.S. Wealth Management offers a broad range of personal and family oriented wealth management products and services focused on individuals and business markets, as well as institutional oriented products for employee benefit plan funding solutions. U.S. Wealth Management has asset management based business lines as well as fixed and variable annuity businesses.

- John Hancock Wealth Asset Management ("Wealth Asset Management") which consists of John Hancock Retirement Plan Services ("Retirement Plan Services") and John Hancock Mutual Funds ("Mutual Funds") operations are business lines focused on growth. Retirement Plan Services provides 401(k) plans to small and medium-sized businesses. Mutual Funds offers a variety of mutual funds, privately managed accounts and 529 College Savings plans.
- Our two annuity businesses are John Hancock Variable Annuities ("Variable Annuities"), which offers variable annuity products sold mainly to middle and upper-income individuals, and John Hancock Fixed Products ("Fixed Products"). Fixed Products provides fixed deferred annuities and fixed guaranteed income payout annuities to individuals, as well as a variety of spread based products and fee based products to institutional clients.

In 2011, U.S. Wealth Management contributed 42 per cent of the Company's total premiums and deposits and, as at December 31, 2011, accounted for 38 per cent of the Company's funds under management.

## Financial Performance

U.S. Wealth Management reported a net loss attributed to shareholders of US\$459 million for 2011 compared to net income of US\$859 million for 2010. Net loss excluding the direct impact of equity markets and interest rate was US\$167 million in 2011, a decrease of US\$893 million compared to net income of US\$726 million in 2010. The table below outlines the notable items impacting both years. Excluding these items, net income attributable to shareholders declined by US\$114 million compared to 2010. The decline was driven by the costs associated with the hedging of additional in-force variable annuity guaranteed value, the impact of lower sales of fixed annuities and higher acquisition costs related to higher sales of mutual funds. Partially offsetting these was higher fee income in Wealth Asset Management from higher average assets under management.

On a Canadian dollar basis, the net loss attributed to shareholders for 2011 was \$447 million compared to net income of \$882 million reported a year earlier.

The table below outlines the net income (loss) attributable to shareholders for U.S. Wealth Management for full year 2011, 2010 and 2009 as well as the direct impact of equity markets and interest rates and the impact of other notable items.

## Analysis of Net Income (Loss)

For the years ended December 31, (\$ millions)	Canadian \$			US \$		
	2011	2010	2009 <sup>(1)</sup>	2011	2010	2009 <sup>(1)</sup>
<b>Net income (loss) attributed to shareholders</b>	<b>\$ (447)</b>	\$ 882	\$ 1,901	<b>\$ (459)</b>	\$ 859	\$ 1,765
<b>Less direct impact of equity markets and interest rates<sup>(2)</sup>:</b>						
Gains (charges) on variable annuity guarantee liabilities not dynamically hedged <sup>(3),(4)</sup>	<b>(136)</b>	210	1,639	<b>(144)</b>	201	1,509
Gains on general fund equity investments supporting policy liabilities and on fee income	<b>10</b>	40	45	<b>10</b>	39	42
Charges on lower fixed income reinvestment rates assumed in the valuation of policy liabilities	<b>(152)</b>	(114)	(399)	<b>(158)</b>	(107)	(351)
<b>Direct impact of equity markets and interest rates</b>	<b>\$ (278)</b>	\$ 136	\$ 1,285	<b>\$ (292)</b>	\$ 133	\$ 1,200
<b>Net income (loss) attributed to shareholders, excluding the direct impact of equity markets and interest rates<sup>(5)</sup></b>	<b>\$ (169)</b>	\$ 746	\$ 616	<b>\$ (167)</b>	\$ 726	\$ 565
<b>Other notable items:</b>						
Earnings impact of the difference between the net increase in variable annuity liabilities that are dynamically hedged and the performance of the related hedge assets <sup>(3),(4),(6)</sup>	<b>\$ (844)</b>	\$ (175)	\$ –	<b>\$ (857)</b>	\$ (167)	\$ –
Impact on policy liabilities related to activities to reduce interest rate exposures	<b>41</b>	(28)	–	<b>42</b>	(28)	–
Investment gains (losses) primarily related to fixed income trading, favourable credit experience and asset mix changes	<b>111</b>	286	(145)	<b>119</b>	278	(96)

(footnotes for table on following page)

(1) 2009 amounts shown are based on CGAAP prior to the adoption of IFRS.

(2) The direct impact of equity markets and interest rates is relative to our policy liability valuation assumptions and includes changes to the interest rate assumptions.

(3) The breakdown between hedged and unhedged is not available in 2009. All variable annuity guarantee experience in 2009 is presented in "Gains (charges) on variable annuity guarantee liabilities not dynamically hedged".

(4) The amount of variable annuity guaranteed value that was dynamically hedged or reinsured increased from 42 per cent at the end of 2009 to 62 per cent at the end of 2010 and to 76 per cent at the end of 2011.

(5) Net income (loss) excluding the direct impact of equity markets and interest rates is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

(6) Our variable annuity guarantee dynamic hedging strategy is not designed to completely offset the sensitivity of policy liabilities to all risks associated with the guarantees embedded in these products for a number of reasons including provisions for adverse deviation, fund performance, the portion of interest rate risk that is not hedged, realized equity market and interest rate volatilities and changes to policyholder behavior. See "Risk Management and Risk Factors" section below for further details.

## Sales

Over the last few years in response to increased equity market volatility and declines in interest rates we have reduced the equity and interest rate risk of our wealth management new business through product re-design and re-pricing, while continuing to invest in the growth of fee based products with lower capital requirements and higher return potential.

Sales for 2011 of wealth products targeted for growth were US\$18.1 billion, US\$2.0 billion or 12 per cent higher than 2010 due to a 29 per cent increase in mutual fund sales. Sales of wealth products not targeted for growth were US\$1.8 billion for 2011, 33 per cent lower than 2010 as a result of actions taken to de-risk products.

## Sales

For the years ended December 31, (\$ millions)	Canadian \$			US \$		
	2011	2010	2009	2011	2010	2009
Wealth products targeted for growth	\$ 17,924	\$ 16,593	\$ 13,967	\$ 18,131	\$ 16,118	\$ 12,372
Wealth products not targeted for growth (VA and book value deferred fixed annuities)	1,810	2,843	8,130	1,836	2,759	6,961

## Premiums and Deposits

Premiums and deposits include new business as well as recurring deposits from the 401(k) business. Premiums and deposits for 2011 of wealth products targeted for growth were US\$26.3 billion, US\$2.2 billion or nine per cent higher than 2010 due to US\$2.0 billion in sales and US\$0.2 billion of higher renewal deposits. Premiums and deposits for 2011 of wealth products not targeted for growth were US\$1.8 billion, the same as sales noted above.

## Premiums and Deposits

For the years ended December 31, (\$ millions)	Canadian \$			US \$		
	2011	2010	2009 <sup>(1)</sup>	2011	2010	2009 <sup>(1)</sup>
Wealth products targeted for growth	\$ 25,953	\$ 24,815	\$ 22,383	\$ 26,259	\$ 24,098	\$ 19,709
Wealth products not targeted for growth (VA and book value deferred fixed annuities)	1,810	2,843	8,129	1,836	2,760	6,961
<b>Total premiums and deposits</b>	<b>\$ 27,763</b>	<b>\$ 27,658</b>	<b>\$ 30,512</b>	<b>\$ 28,095</b>	<b>\$ 26,858</b>	<b>\$ 26,670</b>

(1) 2009 amounts shown are based on CGAAP prior to the adoption of IFRS.

## Funds under Management

Funds under management were US\$186.1 billion as at December 31, 2011, down one per cent from December 31, 2010. Over the last twelve months net sales of US\$4.4 billion in Wealth Asset Management and positive investment returns were more than offset by surrender and benefit payments in JH Variable Annuities and JH Fixed Products.

## Funds under Management

As at December 31, (\$ millions)	Canadian \$			US \$		
	2011	2010	2009 <sup>(1)</sup>	2011	2010	2009 <sup>(1)</sup>
General fund	\$ 35,875	\$ 33,107	\$ 35,482	\$ 35,275	\$ 33,287	\$ 33,903
Segregated funds	117,110	120,021	113,440	115,153	120,673	108,389
Mutual funds	32,268	30,184	25,044	31,728	30,347	23,929
Other funds	4,028	3,742	3,477	3,960	3,762	3,322
<b>Total funds under management</b>	<b>\$ 189,281</b>	<b>\$ 187,054</b>	<b>\$ 177,443</b>	<b>\$ 186,116</b>	<b>\$ 188,069</b>	<b>\$ 169,543</b>

(1) 2009 amounts shown are based on CGAAP prior to the adoption of IFRS.

## **Strategic Direction**

U.S. Wealth Management successfully transitioned its new business mix to higher return fee based businesses with strong growth in both Mutual Funds and 401(k) Retirement Plan Services by capitalizing on our strong and trusted brand name, industry leading distribution excellence and access, broadened product offerings, innovative financial solutions and superior customer service.

Mutual Funds' success in growing sales and market share is attributable to our maturing distribution organization, a diverse product line-up offering strong investment performance and our strong brand. Building on this success, we plan to enhance investment options through new product offerings managed by both John Hancock Asset Management and non-affiliated investment managers; and to further broaden and diversify our investment management platform. In addition, we plan to expand our support to both retail and institutional distributors. Our retail distribution support includes national wirehouse firms, financial planners and regional/financial institutions. Our institutional distribution capacity includes Defined Contribution Investment Only, Registered Investment Advisors and managed money platforms.

Retirement Plan Services' focus has been on its core 401(k) small plan market segment, where it has very strong market share. Our plans include maintaining our strong position in this market segment and growing in the mid-market segment with the launch of a new mutual fund based product. Growth plans also include further penetration of existing distribution relationships; continuously enhancing the available investment management offerings, particularly our industry leading Lifestyle risk tolerance and target date portfolios; and providing superior customer service capabilities. In 2007, we introduced a 401(k) roll-over service center, educating our customers on their options during employment transitions with the goal of increasing customer retention. We plan on increasing the service scope of this successful business line.

Our annuity businesses will continue to provide secured retirement income solutions across a broad array of variable and fixed product offerings. However, given the current difficult macro-economic conditions and our desired risk profile, we will manage this line of business conservatively. Providing excellent service, particularly as more of our annuity clients are entering the income phase of their life, will be a primary focus. We will continue to seek opportunistic growth in our structured settlement business when strong risk adjusted returns are available.

# Corporate and Other

*Corporate and Other is comprised of the earnings on assets backing capital, net of amounts allocated to operating divisions, Investment Division's external asset management business (Manulife Asset Management), our Property and Casualty Reinsurance business, our run-off reinsurance business lines, settlement costs for macro equity hedges, changes in actuarial assumptions and other non-operating items. Also included are the results of the Life Retrocession business prior to its sale in 2011.*

On July 18, 2011, the Company entered into an agreement with Pacific Life Insurance Company ("Pacific Life") to sell its Life Retrocession business. The reinsurance transaction closed on August 31, 2011 and resulted in an after-tax gain of \$303 million. As a result of this transaction, the Company's remaining reinsurance operations no longer constitute a separate reportable segment. Therefore, the results of our Property and Casualty and run-off operations are included in the Corporate and Other segment and our International Group Program business is included in the U.S. Insurance segment. Previously reported segmented information has been restated to reflect these changes.

As at December 31, 2011 Corporate and Other accounted for five per cent of the Company's premiums and deposits and five per cent of the Company's funds under management.

## Financial Performance

Corporate and Other reported a net loss attributed to shareholders of \$1,371 million in 2011 compared to a net loss of \$4,061 million in 2010.

The net loss in 2011 included gains of \$480 million related to the direct impact of equity markets and interest rates. These gains included experience gains from the macro equity hedges and realized gains on AFS bonds and interest rate swaps. Other notable items netted to a loss of \$1,641 million and included charges related to changes in actuarial methods and assumptions, impairment of JH Life's goodwill and the expected cost of the macro equity hedges, partially offset by the gain on the sale of the Life Retrocession business.

The net loss of \$4,061 million in 2010 included gains of \$175 million related to the direct impact of equity markets and interest rates, a charge of \$1,766 million for changes in actuarial methods and assumptions, a goodwill impairment charge of \$2,330 million and \$35 million of other notable items.

The charges related to changes in actuarial methods and assumptions are outlined in the Critical Accounting and Actuarial Policies section below.

Excluding the notable items above, year over year earnings declined by \$105 million, primarily due to lower earnings following the sale of our Life Retrocession business and a decline in realized gains on our AFS equity portfolio.

The table below outlines the net loss attributable to shareholders for Corporate and Other for full year 2011, 2010 and 2009 including the direct impact of equity markets and interest rates as well as other notable items.

## Analysis of Net Income (Loss)

For the years ended December 31,

(C\$ millions)

	2011	2010	2009 <sup>(1)</sup>
<b>Net loss attributed to shareholders</b>	<b>\$ (1,371)</b>	<b>\$ (4,061)</b>	<b>\$ (1,795)</b>
<b>Less direct impact of equity markets and interest rates<sup>(2)</sup>:</b>			
Gains (charges) on variable annuity guarantee liabilities not dynamically hedged	(40)	(16)	13
Gains (losses) on macro equity hedges <sup>(5)</sup>	636	(48)	N/A
Charges on fixed income reinvestment rates assumed in the valuation of policy liabilities excluding URR assumptions	–	(1)	–
Gains (losses) on lower fixed income reinvestment rates assumed in the valuation of policy liabilities, excluding ultimate reinvestment rates	(3)	5	16
Gains on sale of AFS bonds and interest rate swaps in the surplus segment	324	544	–
Charges on lower fixed income URR assumptions assumed in the valuation of policy liabilities	(437)	(309)	(132)
<b>Direct impact of equity markets and interest rates</b>	<b>\$ 480</b>	<b>\$ 175</b>	<b>\$ (103)</b>
<b>Net loss excluding the direct impact of equity markets and interest rates<sup>(3)</sup></b>	<b>\$ (1,851)</b>	<b>\$ (4,236)</b>	<b>\$ (1,692)</b>
<b>Other notable items:</b>			
Changes in actuarial methods and assumptions (excluding URR changes)	\$ (751)	\$ (1,766)	\$ (1,154)
Goodwill impairment charge <sup>(4)</sup>	(665)	(2,330)	–
Expected cost of macro equity hedges <sup>(5)</sup>	(408)	(34)	–
Investment gains (losses) primarily related to fixed income trading, favourable credit experience and asset mix changes	31	(44)	(286)
Gain on sale of Life Retrocession business	303	–	–
Net impact of P&C reinsurance claims related to the earthquake in Japan	(151)	–	–
Tax related items	–	43	(187)

(footnotes for table on following page)



<sup>(1)</sup> 2009 amounts shown are based on CGAAP prior to the adoption of IFRS.

<sup>(2)</sup> The direct impact of equity markets and interest rates is relative to our policy liability valuation assumptions and includes changes to the interest rate assumptions. We also include gains and losses on the sale of AFS bonds as management may have the ability to partially offset the direct impacts of changes in interest rates reported in the liability segments.

<sup>(3)</sup> Net income (loss) excluding the direct impact of equity markets and interest rates is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

<sup>(4)</sup> See Goodwill and Intangible Assets section outlined in the Critical Accounting Policies below for details related to goodwill.

<sup>(5)</sup> The net gain from macro equity hedges in 2011 was \$228 million and consisted of a \$408 million charge related to the estimated expected cost of the macro equity hedges relative to our long-term valuation assumptions and a gain of \$636 million because actual markets underperformed our valuation assumptions.

## Premiums

Premiums were \$366 million for 2011, down 35 per cent from \$566 million reported in 2010, due to the sale of our Life Retrocession business. Property and Casualty Reinsurance premiums were higher in 2011 than in the prior year due to the reinstatement premiums resulting from the Japan earthquake and tsunami losses.

### Premiums

For the years ended December 31, (\$ millions)	Canadian \$			US \$		
	2011	2010	2009 <sup>(1)</sup>	2011	2010	2009 <sup>(1)</sup>
Life Retrocession	\$ 253	\$ 491	\$ 574	\$ 259	\$ 477	\$ 504
Property and Casualty Reinsurance	113	75	84	114	72	74
<b>Total premiums</b>	<b>\$ 366</b>	<b>\$ 566</b>	<b>\$ 658</b>	<b>\$ 373</b>	<b>\$ 549</b>	<b>\$ 578</b>

<sup>(1)</sup> 2009 amounts shown are based on CGAAP prior to the adoption of IFRS.

## Funds under Management

Funds under management of \$25.3 billion as at December 31, 2011 included assets managed by Manulife Asset Management on behalf of institutional clients of \$22.5 billion (2010 – \$23.2 billion) and \$2.8 billion (2010 – \$10.7 billion) of the Company's own funds. The decline in the latter of \$7.9 billion largely relates to a derivatives reporting adjustment booked in the Corporate and Other segment. The operating divisions report derivative positions on a net basis; the Corporate and Other segment includes the adjustment to gross up the balance sheet derivative assets and liabilities. Excluding this derivative adjustment, the \$1.1 billion increase in funds under management reflects the impact of declining interest rates in the year, resulting in higher bond values, partially offset by an increase in assets allocated to the operating divisions.

### Funds under Management

As at December 31, (C\$ millions)	2011	2010	2009 <sup>(1)</sup>
General fund	\$ 2,898	\$ 10,924	\$ 12,394
Segregated funds – elimination of amounts held by the Company	(124)	(148)	(118)
Institutional advisory accounts	22,545	23,170	23,342
<b>Total funds under management</b>	<b>\$ 25,319</b>	<b>\$ 33,946</b>	<b>\$ 35,618</b>

<sup>(1)</sup> 2009 amounts shown are based on CGAAP prior to the adoption of IFRS.

## Strategic Direction

Our Property and Casualty Reinsurance business provides substantial retrocessional capacity for a very select clientele in the property and aviation reinsurance markets. The property catastrophe market experienced a series of major natural catastrophes in 2011 and the year ended as the worst year in history for insured and economic losses, which also triggered losses for our Property and Casualty Reinsurance business. As a result, the Company anticipated a hardening of the retrocession market, which materialized late in 2011 for January 1, 2012 renewals and new business. The Company was able to take advantage of this opportunity to selectively increase business by meeting the existing and increasing needs of its core clients. The Company continues to monitor its exposure to natural catastrophes and manages such exposures in relation to the overall balance sheet risk and volatility.

The strategic direction for our Manulife Asset Management business is included in the Investment Division section that follows.

# Investment Division

*The Investment Division has two major mandates – managing the invested assets of the Company’s general fund and Manulife Asset Management, a leading global asset management business.*

*For the general fund we manage a broad range of investments including public and private bonds, public and private equities, mortgages, real estate, oil and gas, infrastructure, timberland and farmland properties. Our investment philosophy for the general fund is rooted in a bottom-up approach to developing an asset mix that matches the needs of our policyholder liabilities.*

*As the asset management arm of the Company, Manulife Asset Management’s mission is to manage comprehensive investment strategies and deliver strong investment performance to retail and institutional investors. We partner with Manulife’s and John Hancock’s Wealth Management groups to provide their retail clients with superior investment products. We also offer investment solutions directly to institutional clients, such as pension plans, foundations, endowments and financial institutions. Operating a global network in 17 countries and territories, with more than 300 investment professionals, our business model combines the asset manager empowerment of a boutique environment with the resources and risk management rigour of a global asset manager backed by a financial services leader.*

## General Fund

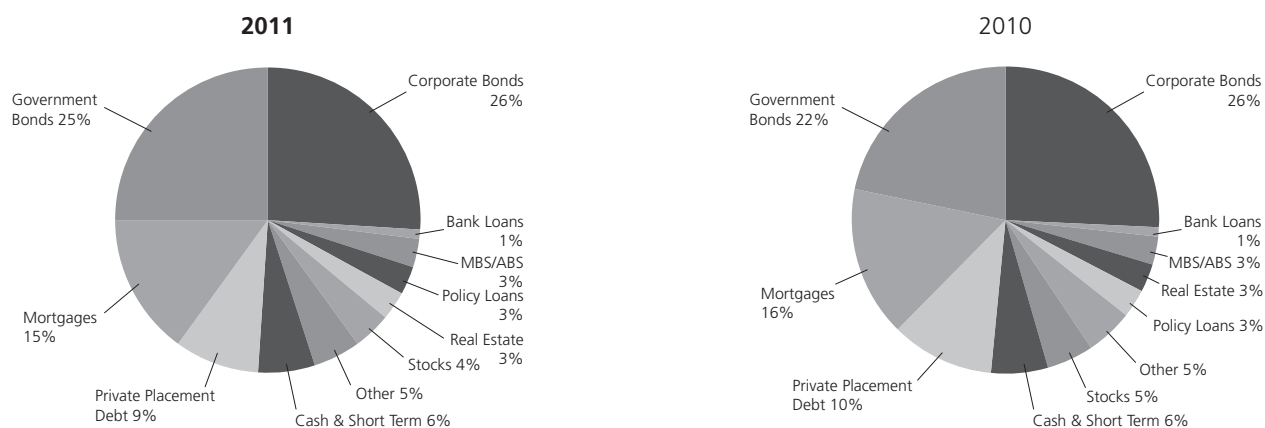
### General Fund Investment Philosophy

As noted above, our investment philosophy is rooted in a bottom-up approach which is not limited to fixed income investments, but rather on developing a diversified blend of assets that are expected to drive superior risk adjusted returns for our stakeholders. Our risk management strategy with respect to investments is outlined in the Risk Management section below. This diversification strategy has historically produced superior returns while reducing overall risk. We use a disciplined approach across all of our segments, and we do not chase yield in the riskier end of the fixed income market. This philosophy has resulted in a well-diversified, high quality investment portfolio.

### General Fund Assets

As at December 31, 2011 our general fund invested assets totaled \$226.5 billion compared to \$201.2 billion at the end of 2010. The asset strategies are diversified by class, geography and sector. In 2011, as part of the interest rate sensitivity reduction activities, we extended the duration of our fixed income portfolio. As outlined in the charts below, our government bond weighting has increased, and for the most part, this increase has been focused on the longer end of the maturity spectrum.

The following charts show the asset class composition as at December 31, 2011 and December 31, 2010.

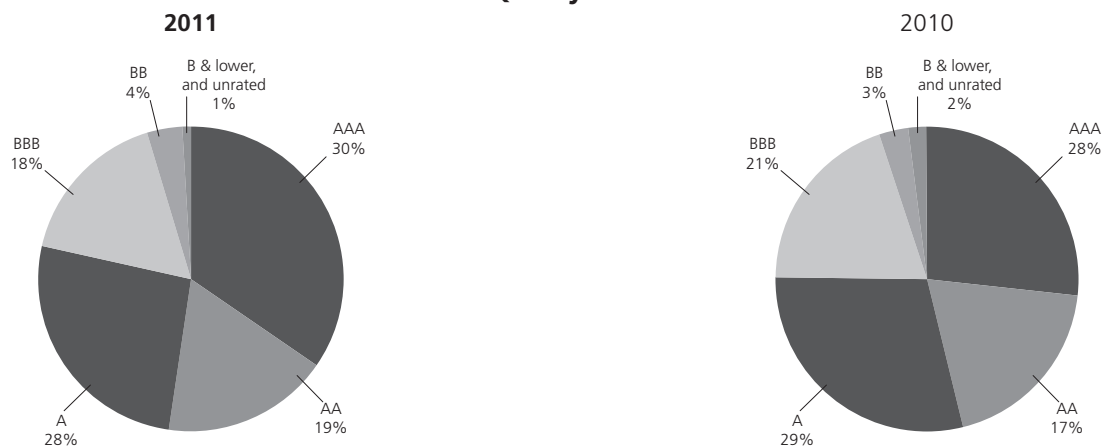


### Public Bonds and Private Placement Debt

The Company’s public bond and private placement debt portfolio of \$140.8 billion at December 31, 2011 (2010 – \$121.1 billion) was 95 per cent investment grade and 77 per cent was A or higher rated (2010 – 95 and 74 per cent, respectively). The percentage of AAA-rated public bonds and private placement debt increased to 30 per cent (2010 – 28 per cent), largely attributable to the interest rate de-risking actions. In addition, the private placement debt holdings provide diversification benefits (issuer, industry and geography), and because they often provide stronger covenants and collateral than public bonds, they also provide better credit protection and potentially higher recoveries in the event of default.

The following charts provide information on the credit quality of these assets as at December 31, 2011 and December 31, 2010.

### Public Bonds and Private Placement Debt – Credit Quality



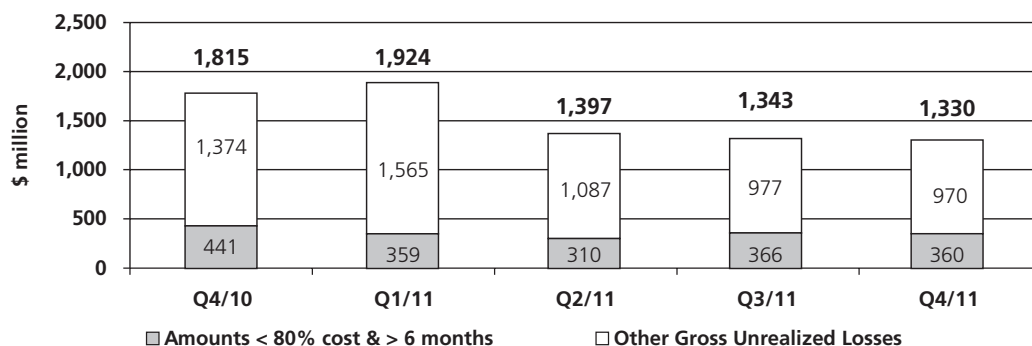
This high quality portfolio is also diversified by sector, industry, duration, issuer and geography.

### Public Bonds and Private Placement Debt – Diversification

As at December 31, Per cent of carrying value	2011			2010		
	Public	Private placement debt	Total	Public	Private placement debt	Total
Government and agency	47	11	42	42	10	37
Financial	16	10	15	18	10	17
Telecommunications	2	–	2	2	–	2
Utilities	11	33	14	11	30	14
Energy	6	9	6	7	9	7
Industrial	4	10	5	4	10	5
Securitized (MBS/ABS)	5	–	4	7	1	6
Consumer (non-cyclical)	4	12	5	3	12	5
Consumer (cyclical)	1	6	2	2	7	2
Basic materials	2	8	3	2	9	3
Technology	1	–	1	1	1	1
Media and internet	1	1	1	1	1	1
<b>Total per cent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Total carrying value (C\$ billions)</b>	<b>\$ 120.5</b>	<b>\$ 20.3</b>	<b>\$ 140.8</b>	<b>\$ 101.5</b>	<b>\$ 19.6</b>	<b>\$ 121.1</b>

As at December 31, 2011, gross unrealized losses on our public bond and private placement debt holdings were \$1.3 billion or one per cent of the amortized cost of these holdings (2010 – \$1.8 billion or two per cent). Of this amount, \$360 million (2010 – \$441 million) relates to bonds trading below 80 per cent of cost for more than six months. Securitized assets represented \$355 million of the gross unrealized losses and \$253 million of the amounts trading below 80 per cent of cost for more than six months (2010 – \$403 million and \$345 million, respectively). The following chart shows the decline in gross unrealized losses from December 31, 2010 to December 31, 2011.

### Public Bonds and Private Placement Debt – Gross Unrealized Losses



After adjusting for bonds held in the participating policyholder and other pass-through segments, as well as the provisions for credit included in the policy liabilities, the potential impact to shareholders' pre-tax earnings for bonds trading at less than 80 per cent for greater than six months was approximately \$218 million as at December 31, 2011.

## Securitized Assets

As at December 31, 2011, the Company had \$5.7 billion of both public and private securitized assets representing three per cent of total invested assets (2010 – \$6.8 billion and three per cent).

Residential Mortgage Backed Securities (“RMBS”) as at December 31, 2011 were \$407 million (2010 – \$482 million) of which \$192 million were sub-prime and \$77 million were Alt-A holdings and originations were concentrated in the years 2005 and prior.

Commercial Mortgage Backed Securities (“CMBS”) holdings at December 31, 2011 were \$3.4 billion (2010 – \$4.6 billion), with approximately 89 per cent of holdings rated AAA, of which approximately 98 per cent are in the most senior class. By vintage or year of origination, 89 per cent of the CMBS holdings were from years 2005 and prior.

Asset Backed Securities (“ABS”) holdings as at December 31, 2011 were \$1.9 billion (2010 – \$1.7 billion) and were both highly rated and well diversified by sector.

The following table outlines the securitized holdings by type and asset quality.

As at December 31, (C\$ millions), Carrying value	2011				2010
	RMBS	CMBS	ABS	Total	Total
AAA	\$ 83	\$ 3,022	\$ 1,357	\$ 4,462	\$ 5,285
AA	64	19	56	139	286
A	16	110	174	300	272
BBB	36	64	211	311	361
BB & below	208	195	119	522	583
<b>Total public and private securitized assets</b>	<b>\$ 407</b>	<b>\$ 3,410</b>	<b>\$ 1,917</b>	<b>\$ 5,734</b>	<b>\$ 6,787</b>

## Mortgages

As at December 31, 2011, mortgages represented 15 per cent (2010 – 16 per cent) of invested assets with 60 per cent of the mortgage portfolio invested in Canada (2010 – 59 per cent) and 40 per cent in the United States (2010 – 41 per cent). The overall portfolio is also diversified by geographic region, property type and borrower. 32 per cent (2010 – 34 per cent) of the total mortgage portfolio is insured by CMHC, Canada’s AAA rated government backed national housing agency, with 71 per cent (2010 – 84 per cent) of residential mortgages insured and nine per cent (2010 – 15 per cent) of commercial mortgages insured.

The following table shows the distribution of the carrying value of the mortgage portfolio by property type.

## Mortgages

As at December 31, (C\$ millions)	2011		2010	
	Carrying value	% of total	Carrying value	% of total
Commercial				
Multi family residential	\$ 3,459	10	\$ 3,393	10
Retail	5,816	17	5,903	18
Office	5,688	16	5,483	17
Industrial	2,888	8	3,184	10
Other commercial	2,197	6	1,758	5
	<b>\$ 20,048</b>	<b>57</b>	<b>\$ 19,721</b>	<b>60</b>
Manulife Bank single residential	13,434	38	11,482	35
Agriculture	1,541	5	1,634	5
<b>Total mortgages</b>	<b>\$ 35,023</b>	<b>100</b>	<b>\$ 32,837</b>	<b>100</b>

Commercial mortgages have been conservatively underwritten and accounted for 57 per cent (2010 – 60 per cent) of total mortgages. Geographically, 37 per cent are in Canada and 63 per cent in the United States. We are well diversified by property type and largely avoid risky segments of the market such as hotels, construction loans and second liens. As noted in the table below, the mortgages have low loan-to-value ratios, high debt-service coverage ratios and only a few loans in arrears.

## Non-CMHC Insured Commercial Mortgages<sup>(1),(2)</sup>

As at December 31,	2011		2010	
	Canada	U.S.	Canada	U.S.
Loan-to-Value ratio <sup>(3)</sup>	61%	65%	64%	64%
Debt-Service Coverage ratio <sup>(3)</sup>	1.48x	1.58x	1.47x	1.57x
Average duration	2.9 years	5.1 years	3.2 years	4.9 years
Average loan size (C\$ millions)	\$ 4.8	\$ 10.3	\$ 4.5	\$ 9.4
Loans in arrears <sup>(4)</sup>	0.08%	0.70%	0.00%	0.11%

<sup>(1)</sup> CMHC is Canada Mortgage and Housing Corporation, Canada’s national housing agency.

<sup>(2)</sup> Excludes Manulife Bank commercial mortgage loans.

<sup>(3)</sup> LTV and DSC are based on re-underwritten cash flows.

<sup>(4)</sup> Arrears defined as over 90 days past due in Canada and over 60 days past due in the U.S.

## Real Estate

As at December 31, 2011, three per cent of the Company's invested assets were held in real estate, with a carrying value of \$7.5 billion (2010 – three per cent and \$6.4 billion). The portfolio is diversified by geographic region, with 56 per cent located in the U.S., 38 per cent in Canada and six per cent in Asia (2010 – 56 per cent, 37 per cent and seven per cent, respectively). The fair value of the portfolio was \$7.9 billion as at December 31, 2011 (2010 – \$6.7 billion). The high quality portfolio has virtually no leverage and is mostly premium urban office towers, concentrated in cities with stable growth and highly diverse economies in North America and Asia. The portfolio is well positioned with an average occupancy rate of 94.2 per cent (2010 – 93.3 per cent) and an average lease term of 5.7 years (2010 – 5.7 years). The following table shows the distribution of the carrying value and fair value of the real estate portfolio by property type.

### Real Estate

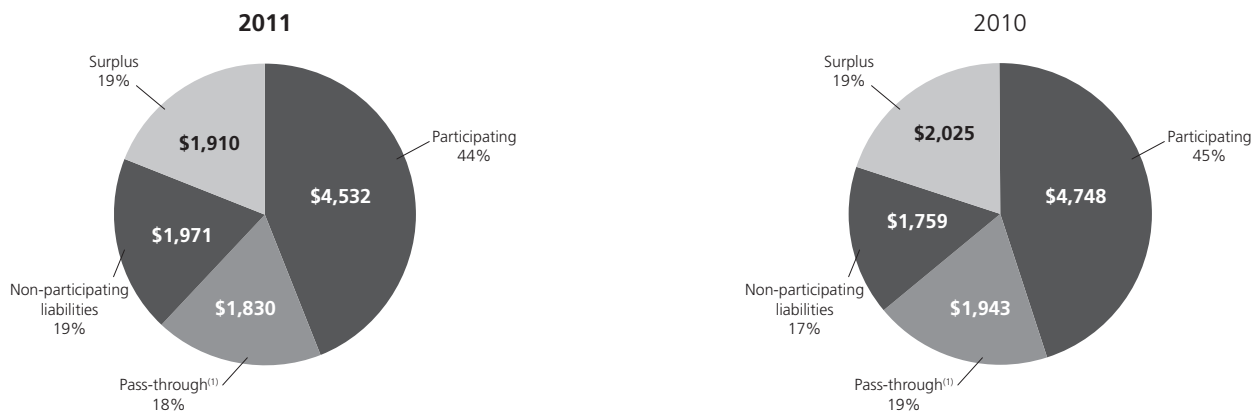
As at December 31, (C\$ millions)	2011			2010		
	Fair value	Carrying value	% of total carrying value	Fair value	Carrying value	% of total carrying value
Office	\$ 5,296	\$ 5,296	71	\$ 4,320	\$ 4,320	68
Industrial	585	585	8	572	572	9
Company use	1,260	831	11	1,207	822	13
Other	754	754	10	639	639	10
<b>Total real estate</b>	<b>\$ 7,895</b>	<b>\$ 7,466</b>	<b>100</b>	<b>\$ 6,738</b>	<b>\$ 6,353</b>	<b>100</b>

## Public Stocks

As at December 31, 2011, public stock holdings of \$10.2 billion represented four per cent (2010 – \$10.5 billion and five per cent) of invested assets. The composition of holdings by segment is outlined below. The portfolio is diversified by industry sector and issuer. Geographically, 34 per cent (2010 – 35 per cent) is held in Canada, 29 per cent (2010 – 28 per cent) is held in the U.S. and the remaining 37 per cent (2010 – 37 per cent) is held in Asia, Europe and Other. Of the total portfolio, 65 per cent is actively managed with the remaining 35 per cent indexed (2010 – 64 and 36 per cent, respectively).

### Public Stocks – by segment

(C\$ millions, unless otherwise stated)



<sup>(1)</sup> Equities denoted as pass-through are held by the Company to support the yield credited on equity-linked investment funds for Canadian universal life products.

## Other Investments

As at December 31, 2011, other investments represented five per cent (2010 – five per cent) of invested assets. The investments include private equity and mezzanine, power and infrastructure, leases, oil and gas, timberland, farmland, affordable housing and other. Our alternative assets provide enhanced yields and provide a good match against our long duration liabilities, offering diversification to traditional equity and bond markets. The following table shows the distribution of the carrying value of the other investments portfolio by sector and/or asset type.

## Other Investments

As at December 31, (C\$ millions)	2011		2010	
	Carrying value	% of total	Carrying value	% of total
Private equity and mezzanine debt	\$ 1,474	13	\$ 1,343	14
Power and infrastructure	2,507	23	2,157	22
Leases	2,560	23	2,424	25
Oil and gas	1,292	12	895	9
Timberland	1,527	14	1,374	14
Farmland	762	7	589	6
Affordable housing	470	4	517	5
Other	487	4	433	5
<b>Total other investments</b>	<b>\$ 11,079</b>	<b>100</b>	<b>\$ 9,732</b>	<b>100</b>

## Other Notable Items

As at December 31, 2011, European public and private bond net exposure represented three per cent of fixed income assets or two per cent of total invested assets. Excluding par and pass-through segments and reflecting the cumulative impact of downgrades reflected in our policy liability valuation, our net sovereign, banks and other financials exposure to Ireland, Italy and Spain was limited to \$47 million. We do not have any investments in Greece or Portugal. As at December 31, 2011, we had \$147 million invested in Ireland (\$33 million in financials and \$114 million in other corporate investments), \$14 million in Italian sovereigns and \$79 million in Spain's corporate bonds. Other European exposures totaled \$14 million of sovereigns, \$1,155 million from the financial sector and \$2,742 million from other sectors. The split by country was France – \$701 million, U.K. – \$896 million, Germany – \$302 million and other parts of Europe – \$2,012 million.

The Company began writing credit default swaps ("CDS") in 2011. As outlined in the Risk Management and Risk Factors section the Company does not employ leverage in its CDS program and therefore, does not write CDS protection in excess of its government bond holdings. As at December 31, 2011, we had \$219 million notional outstanding of CDS protection sold. All CDS decisions follow the same rigorous underwriting standards as our cash bond portfolio and we believe the addition of this asset class allows us to better diversify our overall credit portfolio. Additionally, the Company does not take on any material credit or liquidity risk with its securities lending programs. The Company has avoided highly structured and complex instruments, such as Structured Investment Vehicles, Constant Proportion Debt Obligations, U.S. Home Equity Lines of Credit and Synthetic Securities that have resulted in significant losses to other institutions.

## Manulife Asset Management

### Assets Under Management

Assets managed by Manulife Asset Management grew by \$2.3 billion to \$211.4 billion as at December 31, 2011 compared to December 31, 2010. Assets managed for external clients grew by \$1.7 billion to \$178.1 billion during the same period.

On the retail side, our wealth management partners continued to deliver strong gross sales across the globe, mainly in our industry-leading fixed income and asset allocation products. We also launched several innovative products around the world, including Taiwan's first Chinese Renminbi-backed bond fund and a new diversified alternative asset class product in the U.S.

Institutional sales for our Public Markets investment teams were up significantly this year as we began to reap the benefits of the investments we have made in the business in recent years. Particular success was seen in the U.S., where we won several large and high profile public mandates and made further inroads with consultants and institutional investors. In Asia, we further solidified our presence by becoming an early entrant in the institutional offshore Chinese Renminbi bond market in Hong Kong and by attracting significant sub-advisory mandates from a Japanese fund house. Our alternative managers had modest net redemptions in 2011 as we found only limited attractive value opportunities to put new capital to work in a disciplined manner.

### Assets Under Management

As at December 31, (C\$ millions)	2011	2010 <sup>(2)</sup>	2009 <sup>(3)</sup>
Managed on behalf of Operating Divisions <sup>(1)</sup>	\$ 158,583	\$ 157,314	\$ 82,146
Managed on behalf of Institutional clients	19,540	19,113	18,595
<b>Total Manulife Asset Management assets managed for external clients<sup>(4)</sup></b>	<b>\$ 178,123</b>	<b>\$ 176,427</b>	<b>\$ 100,741</b>
Managed on behalf of General Fund	33,323	32,689	28,450
<b>Total Manulife Asset Management assets under management<sup>(4)</sup></b>	<b>\$ 211,446</b>	<b>\$ 209,116</b>	<b>\$ 129,191</b>

<sup>(1)</sup> Includes 49 per cent share of Manulife TEDA Fund Management Company Ltd., based on the joint venture ownership structure.

<sup>(2)</sup> Includes the addition of \$60,753 of asset allocation funds from our U.S. Wealth Management business, as we consolidated management of all asset allocation assets under Manulife Asset Management.

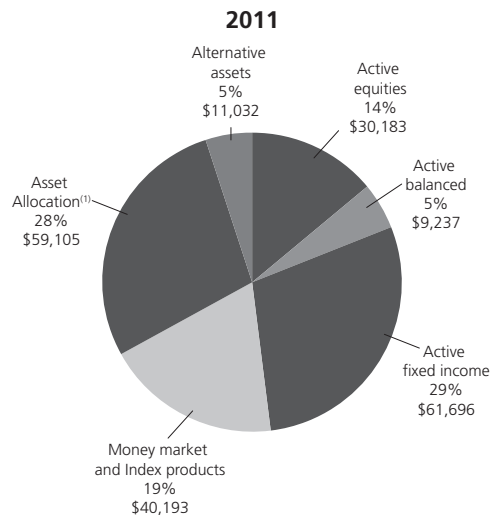
<sup>(3)</sup> 2009 amounts shown are based on CGAAP prior to the adoption of IFRS.

<sup>(4)</sup> An additional \$4,356 in assets were managed for external clients by Investment Division affiliates in addition to Manulife Asset Management assets as at December 31, 2011. Similarly, assets for 2009 and 2010 have been adjusted to exclude external assets not managed by Manulife Asset Management.



## Assets Under Management – Manulife Asset Management

(C\$ millions, unless otherwise stated)



<sup>(1)</sup> Asset Allocation excludes \$30,149 internally managed underlying funds already included in the other asset categories to avoid double-counting.

### Strategic Direction

Manulife Asset Management is a key component of the Company's overall growth strategy. We expect to continue to drive growth by partnering with our wealth management affiliates to deliver best in class performance and products to retail investors in all of the markets in which we operate. Our strategy also includes leveraging our long term performance records, extensive footprint and global infrastructure to distribute our investment solutions directly into the institutional market.

Over the past few years we have expanded and strengthened our investment capabilities and service organization, to provide a deeper commercial platform from which to distribute our strategies and services. In 2011 we continued to focus on providing strong and consistent risk-adjusted performance to our clients, achieving 58 Five and Four-star Morningstar<sup>14</sup> rated funds, our highest posting ever. Our global fixed income franchise is gaining significant recognition globally for its depth and breadth. We further reinforced our strong equity capabilities by establishing four new high performance investment teams to collectively manage U.S. large cap growth, U.S. large cap core value, U.S. all cap, international value and Canadian core equity strategies. We also continue to hold a leadership position in alternative investments through our Hancock Natural Resource Group, as the largest provider of timber investment management services to institutional clients in the world and one of the largest institutional managers of farmland in the U.S.<sup>15</sup> In addition, we continue to be a leader in asset allocation products, with a \$90 billion suite of target date, target risk, liability-driven investment and customized solutions for both retail and institutional investors.

Since changing our group name to Manulife Asset Management in December 2010, and a comprehensive brand campaign, we have gained significant traction in reinforcing what makes us different: our boutique investment teams backed by the resources of a global leader. With a more closely tied name, including the John Hancock Asset Management brand used when providing investment management services to John Hancock products, we are able to leverage and support the strong brands of our wealth partners.

Building on our proven ability to establish and integrate new investment management teams, organically and through new team acquisitions, we expect to further expand and strengthen our investment capabilities. By leveraging our brand, global footprint, breadth and depth of our institutional presence, and the strength of our retail wealth management distribution and service platforms, we intend to continue to make the growth of Manulife Asset Management a cornerstone of our wealth and asset management growth strategy.

<sup>14</sup> For each fund with at least a three year history, Morningstar calculates a Morningstar Rating based on a Morningstar Risk-Adjusted Return that accounts for variation in a fund's monthly performance (including effects of sales charges, loads and redemption fees), placing more emphasis on downward variations and rewarding consistent performance. The top 10% of funds in each category, the next 22.5%, 35%, 22.5% and bottom 10% receive 5, 4, 3, 2 or 1 star, respectively. The Overall Morningstar Rating for a fund is derived from a weighted average of the performance associated with its three, five and 10 year (if applicable) Morningstar Rating metrics. Past performance is no guarantee of future results. The overall rating includes the effects of sales charges, loads and redemption fees, while the load-waived does not. Load-waived rating for Class A shares should only be considered by investors who are not subject to a front-end sales charge.

<sup>15</sup> 2011 Pensions & Investments Databook, December 26, 2011.

# Risk Management and Risk Factors

## Overview

Manulife Financial is a financial institution offering insurance, wealth and asset management products and services, which subjects the Company to a broad range of risks. We manage these risks within an enterprise-wide risk management framework. Our goal is to strategically optimize risk taking and risk management to support long-term revenue, earnings and capital growth. We seek to achieve this by capitalizing on business opportunities that are aligned with the Company's risk taking philosophy, risk appetite and return expectations; by identifying, measuring and monitoring key risks taken; and by executing risk control and mitigation programs.

The enterprise risk management ("ERM") framework sets out policies and standards of practice related to risk governance, risk identification, risk measurement, risk monitoring, and risk control and mitigation. With an overall goal of effectively executing risk management activities, we continuously invest to attract and retain qualified risk professionals, and to build, acquire and maintain the necessary processes, tools and systems.

Risk taking activities are managed against an overall risk appetite, which defines the amount and type of risks we are willing to assume. Our risk appetite reflects the Company's financial condition, risk tolerance and business strategies. The quantitative component of our risk appetite establishes total Company targets defined in relation to economic capital, regulatory capital required, and earnings at risk. We have further established targets for each of our principal risks to assist us in managing levels of exposures and risk profiles that are well diversified across risk categories. To facilitate the alignment of business strategies and plans with the Company's overall risk management objectives, targets for certain principal risks are cascaded down to our operating divisions.

Risk management programs are in place for each of our broad risk categories: strategic, market, liquidity, credit, insurance and operational. These programs incorporate policies and standards of practice that are aligned with those within the enterprise risk management framework, covering:

- Assignment of risk management accountabilities across the organization;
- Philosophy and appetite related to assuming risks;
- Establishment of specific risk targets or limits;
- Delegation of authorities related to risk taking activities;
- Identification, measurement, assessment, monitoring and reporting of risks; and
- Activities related to risk control and mitigation.

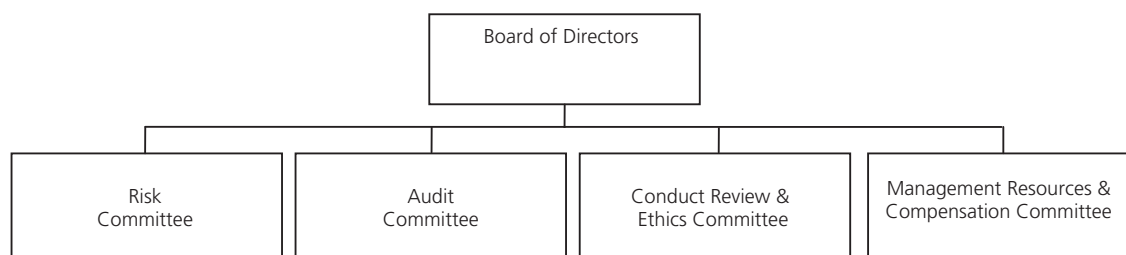
## Risk Governance

The Board of Directors oversees the implementation by management of appropriate systems to identify and manage the principal risks of the Company's business and periodically reviews and approves our enterprise risk policy, our risk taking philosophy and overall risk appetite.

The Chief Executive Officer ("CEO") is directly accountable to the Board of Directors for all risk taking activities and risk management practices, and is supported by the Company's Chief Risk Officer ("CRO") as well as by the Executive Risk Committee ("ERC"). Together, they shape and promote our risk culture and guide risk taking throughout our global operations and strategically manage our overall risk profile. The ERC, along with other executive-level risk oversight committees, establishes risk policies, guides risk taking activity, monitors significant risk exposures and sponsors strategic risk management priorities throughout the organization. The Board and executive-level risk oversight committees and key elements of their mandates are presented below.

Corporate Risk Management ("CRM"), under the direction of the CRO, establishes and maintains our enterprise risk management framework and oversees the execution of individual risk management programs across the enterprise. CRM seeks to ensure a consistent enterprise-wide assessment of risk, risk-based capital and risk-adjusted returns.

## Board of Directors & Board Committees



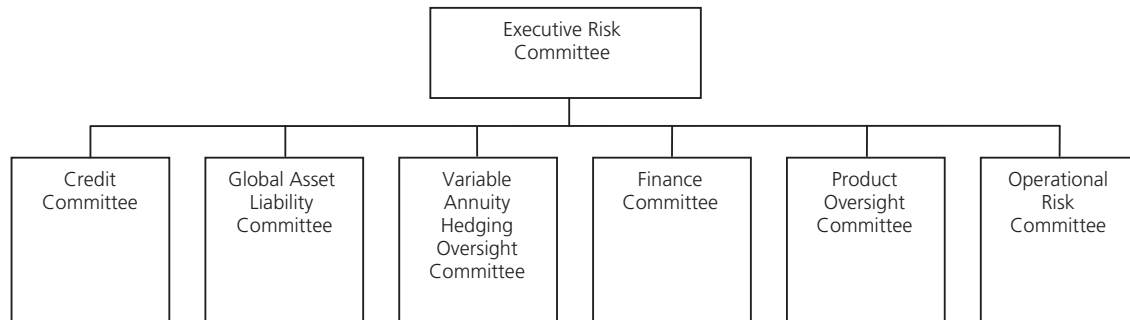
**Risk Committee** – This committee is responsible for assisting the Board in its oversight of the Company's management of its principal risks. The committee also assesses, reviews and approves policies, procedures and controls in place to manage risks and reviews the Company's compliance with risk policies.

**Audit Committee** – This committee is responsible for assisting the Board in its oversight role with respect to the quality and integrity of financial information, the effectiveness of the Company’s internal controls over financial reporting and the effectiveness of the Company’s compliance with legal and regulatory requirements.

**Conduct Review and Ethics Committee** – This committee oversees activities and risks related to conflicts of interest, confidentiality of information, customer complaints and related party transactions.

**Management Resources and Compensation Committee** – This committee oversees the Company’s global human resources strategy, policies, programs with a special focus on management succession, development and compensation and risk management relating to these programs.

**Executive Committees**



**Executive Risk Committee** – The ERC approves risk policies and oversees the execution of our enterprise risk management program. The committee monitors our overall risk profile, including key and emerging risks and guides risk-taking activities. As part of these activities, the ERC monitors material risk exposures, and sponsors strategic risk management priorities including overseeing risk reduction plans. The ERC also reviews and assesses the impact of business strategies, opportunities and initiatives on our overall risk position.

**Credit Committee** – The Credit Committee establishes credit risk policies and oversees credit risk management. The Credit Committee monitors our overall credit risk profile, key and emerging risk exposures and risk management activities and ensures compliance with credit risk policies. The committee also approves large individual credits and investments.

**Global Asset Liability Committee (“GALCO”)** – The GALCO establishes market and liquidity risk policies and oversees related market and liquidity risk and asset liability management programs and practices. The committee monitors our overall market risk profile, key and emerging risk exposures and risk management activities as well as compliance with related policies. GALCO also approves target investment strategies.

**Variable Annuity Hedging Oversight Committee (“VAHOC”)** – The VAHOC oversees global variable annuity dynamic hedging operations. The committee reviews and approves hedging strategies and operational policies and procedures. VAHOC also oversees hedge program performance and effectiveness and monitors compliance with related policies.

**Finance Committee** – The Finance Committee oversees our capital management policy framework and provides direction on strategic issues affecting our capital, solvency and balance sheet management. The committee monitors the adequacy and efficiency of the Company’s solvency position for consolidated and local entities on an actual and projected basis, recommending appropriate actions. It reviews capital stress testing, sensitivity analyses and approves principles of capital allocation to the businesses.

**Product Oversight Committee (“POC”)** – The POC establishes and oversees the execution of product design and pricing policies and insurance risk policies, as well as risk management standards of practice with regards to risks covered by these policies. As such, the POC oversees insurance risk and retention management and monitors product design, new product pricing, and insurance risk exposures and trends. The POC delegates approval of new product initiatives, new business reinsurance arrangements and material insurance underwriting initiatives to the CRO and officers in Product and Insurance Risk Management.

**Operational Risk Committee (“ORC”)** – The ORC establishes, reviews and approves policies related to operational risk. The committee oversees operational risk management and monitors operational risk exposures and trends.

**Risk Management Culture**

A strong risk culture and a common approach to risk management are integral to our risk management practices. Our governance framework is centered on the “three lines of defense” model.

As the first line of defense, businesses are accountable for the risks within their unit including the day to day management of the risks and related controls. They are responsible for ensuring their business strategies align with the Company’s risk taking philosophy, risk appetite and culture, for thoroughly evaluating and managing risk exposures consistent with our enterprise risk policies and standards of practice, and for delivering returns commensurate with the level of risk assumed. They are supported by global risk managers who are responsible for the design and execution of risk mitigation practices that are consistent with the Company’s policies and specific risk management strategies.

The second line of defense includes Corporate Risk Management, Corporate Actuarial, Corporate Finance, Global Compliance, other corporate functional areas and divisional risk officers. Together this group provides independent oversight of risk taking and risk mitigation activities across the enterprise. Executive-level risk oversight committees, including the ERC, also provide oversight of risk taking and risk mitigation activities.

As the third line of defense, Internal Audit provides independent analysis of whether controls are effective and appropriate relative to the risk inherent in the business, and whether risk mitigation programs and risk oversight functions are effective in managing risks.

### **Risk Identification, Measurement and Assessment**

We have a common approach and process to identify, measure and assess the risks we assume. We evaluate all potential new business initiatives, acquisitions, product offerings, reinsurance arrangements, and investment and financing transactions on a comparable risk-adjusted basis. Business units and functional groups are responsible for identifying and assessing risks arising from business activities on an ongoing basis, as an integral component of business management processes. A standard inventory of risks is used in all aspects of risk identification, measurement and assessment, and monitoring and reporting.

Risk exposures are evaluated using a variety of risk measures, with certain measures used across all risk categories, while others apply only to some risks or a single risk type. Risk measurement includes: simple key risk indicators; stress tests, including sensitivity tests and scenario impact analyses; and stochastic scenario modeling. Qualitative risk assessments are performed for those risk types that cannot be reliably quantified.

We perform a variety of sensitivity tests on earnings, regulatory capital ratios, economic capital, earnings at risk and liquidity that consider significant, but plausible events. Through our Dynamic Capital Adequacy Testing (“DCAT”), we stress test our regulatory capital adequacy over a five year projected timeframe, incorporating both existing and projected new business activities, under a number of plausible adverse scenarios. We also perform other integrated, complex scenario tests to assess key risks and the interaction of these risks.

Economic capital measures the amount of capital needed to meet obligations with a high and pre-defined confidence level. Our earnings at risk metric measures the potential variance from quarterly expected earnings at a particular confidence level. Economic capital and earnings at risk are both determined using internal models and measure enterprise-wide risks and are allocated by risk type and business. Economic capital and earnings at risk provide measures of enterprise-wide risk that can be aggregated, and compared, across business activities and risk types.

### **Risk Monitoring and Reporting**

CRM oversees a formal process for monitoring and reporting on enterprise-wide risk exposures, discusses risk exposures with our various risk oversight committees, and submits requests for approval of any policy exceptions or remedial action plans, as required.

On a quarterly basis, the ERC, Board Risk Committee and Board of Directors review risk reports that present an overview of our overall risk profile and exposures across our principal risks. The reports incorporate both quantitative risk exposure measures and sensitivities and qualitative risk assessments. The reports also highlight key risk management activities and facilitate monitoring compliance with key risk policy targets and limits. The reports present information gathered through a formal risk identification and assessment process involving business unit general managers and their executive teams, as well as corporate executives overseeing global risk management of key risks. The ERC reviews key financial risk exposures and sensitivities at least monthly.

Our Chief Actuary presents the results of the DCAT to the Board of Directors annually. Our Internal Auditor reports the results of internal audits of risk controls and risk management programs to the Audit Committee semi-annually. Management reviews the implementation of key risk management strategies, and their effectiveness, with the Risk Committee annually.

### **Risk Control and Mitigation**

Risk control activities are in place throughout the Company to mitigate risks to within approved risk targets or limits. We believe our controls, which include policies, procedures, systems and processes, are appropriate and commensurate with the key risks faced at all levels across the Company and such controls are an integral part of day to day activity, business management and decision making.

CRM establishes and oversees formal review and approval processes, involving independent individuals, groups or risk oversight committees, for product offerings, insurance underwriting, reinsurance, investment activities and other material business activities, based on the nature, size and complexity of the risk taking activity involved. Authorities for assuming risk at the transaction level are delegated to specific individuals based on their skill, knowledge and experience.

Risk mitigation activities, such as product and investment portfolio management, hedging, reinsurance and insurance protection are used to assist in managing our aggregate risk to within our risk appetite, targets and limits. Internal controls within the business units and corporate functions mitigate our exposure to operational risks.

The following sections describe the key risks and associated risk management strategies for each of our broad risk categories (strategic, market, liquidity, credit, insurance and operational).

### **Strategic Risk**

Strategic risk is the risk of loss resulting from the inability to adequately plan or implement an appropriate business strategy, or to adapt to change in the external business, political or regulatory environment.

## Key Risk Factor Overview

We operate in highly competitive markets and compete for customers with both insurance and non-insurance financial services companies. Customer loyalty and retention, and access to distributors, are important to the Company's success and are influenced by many factors, including our product features, service levels, prices, and our financial strength ratings and reputation. Erosion of our corporate image by adverse publicity, as a result of our business practices or those of our employees, representatives and business partners, may cause damage to our franchise value.

External business, economic, political, tax, legal, regulatory environments and changes to actuarial reserving standards can significantly impact the types, pricing and attractiveness of the products and services we offer. The economic environment may remain volatile and our regulatory environment, particularly in Canada, will continue to evolve, potentially with higher capital requirements which would materially impact our competitiveness. Further, the attractiveness of our product offerings relative to our competitors will be influenced by competitor actions as well as our own, and the requirements of the regulatory regimes we and they operate under. For these and other reasons, there is no certainty that we will be successful in implementing our business strategies or that these strategies will achieve the objectives we target.

## Risk Management Strategy

The CEO and Executive Committee establish and oversee execution of business strategies, and have accountability to identify and manage the risks embedded in these strategies. They are supported by a number of processes:

- Strategic business, risk and capital planning that is reviewed with the Board of Directors;
- Detailed business planning that is executed by divisional management and is reviewed by the CEO, the Chief Financial Officer and the CRO;
- Quarterly operational performance and risk reviews of all key businesses with the CEO and annual reviews with the Board of Directors;
- Risk-based capital attribution and allocation designed to encourage a consistent decision-making framework across the organization; and
- Review and approval of acquisitions and divestitures by the CEO and, where appropriate, the Board of Directors.

The CEO and Executive Committee are ultimately responsible for our reputation; however, our employees and representatives are responsible for conducting their business activities in a manner that upholds our reputation. This responsibility is reinforced by:

- An enterprise-wide reputation risk policy that specifies the oversight responsibilities of the Board and the responsibilities of executive management;
- Communication to and education of all directors, officers, employees and representatives, including our Code of Business Conduct and Ethics;
- Application of a set of guiding principles in conducting all our business activities, designed to protect and enhance our reputation; and
- Reputation risk assessments considered as part of business strategy development and execution.

We regularly review and adapt our business strategies and plans in consideration of changes in the external business, economic, political, and regulatory environments in which we operate. Changes in actuarial reserving standards and changes in the cost of hedging may also cause us to review our business strategies and plans. Key elements of our business strategy include diversifying our business mix, accelerating growth of those products that have a favourable return on capital and better potential outcomes under a range of economic and policyholder behaviour scenarios, and reducing or withdrawing from products with unattractive risk profiles. Our strategy also incorporates a plan to systematically hedge or offset a significant portion of our in-force public equity and interest rate risks over the next few years. These actions will, however, result in costs which will depress income. We have designed our business plans and strategies to align with our risk appetite, capital and financial performance objectives.

The following is a further description of key strategic risk factors.

## General Macro-Economic Risk Factors

Over the past few years, financial markets have been dominated by ongoing uncertainty surrounding the macro environment. In 2011 we saw substantial declines in equity markets and interest rate levels, exceptional equity market volatility and monetary policy actions that lowered long-term treasury rates in the U.S. and interest rates elsewhere, including Canada and Asia. Under the Canadian insurance accounting and regulatory capital regimes, current market conditions are largely reflected in our current period results.

Continued poor or worsening economic conditions could result in further material charges to income and reductions in our capital position, notwithstanding our improved risk profile and strong underlying regulatory capital position.

In 2010, management announced a 2015 net income objective of \$4 billion and a 2015 ROE objective of 13 per cent. While management has not changed our objective, as a result of the deterioration in the economic conditions and global instability, our 2015 objectives no longer include a cushion for further unfavourable conditions. Therefore additional risk factors may result in an inability to achieve such objectives.

For example:

- Actions taken by management to bolster capital and further reduce the Company's risk profile could reduce earnings. In 2011, the Company entered into a third party mortality and lapse reinsurance agreement, which contributed six points to MLI's MCCR but which will reduce future earnings. In 2011 the Company also sold its Life Retrocession business, which generated a gain of \$303 million, increased the MLI MCCR ratio by six points, and is expected to reduce earnings by approximately \$50 million per annum. Additional actions that the Company may take to bolster near-term regulatory capital ratios or accelerate its plans to reduce equity market and interest rate exposures or to increase the amounts hedged could reduce earnings.
- A period of flat equity markets would represent underperformance relative to our long-term valuation assumption and would negatively impact earnings. In addition, as outlined below, there can be no assurance that our dynamic hedging strategy will fully offset the risks arising from the variable annuities being hedged. The publicly traded equity performance risk measures outlined below show the potential impact on net income attributed to shareholders resulting from an immediate 10, 20 and 30 per cent change in market values of publicly traded equities followed by a return to the expected level of growth assumed in the valuation of policy liabilities. Expected long-term annual market growth assumptions for public equities pre-dividends for key markets are based on long-term historical observed experience and are 7.6% per annum in Canada, 8.0% per annum in the U.S., 5.2% per annum in Japan and 9.5% per annum in Hong Kong. Explicit margins for adverse deviation are applied to these assumptions, or implicit margins are determined through stochastic valuation processes, each of which results in lower net yields used in the valuation. Non-fixed income asset return assumptions vary based on asset class but are largely consistent with total returns assumed for public equities.
- A prolonged low interest environment would result in charges related to lower fixed income URR and new business strain.
  - The fixed income URR is based on five and ten year rolling averages of government bond rates and, if current rates persist in 2012, we would expect to take a charge potentially greater than the \$437 million reported in 2011. If the rates persist for the next ten years, the fixed income URR would continue to decline and could result in cumulative after-tax charges over the ten year period of \$2 to \$3 billion of which \$1 to \$2 billion would be expected to be accrued over the four year period ending 2015, under current Canadian Actuarial Standards.
  - In addition, the difference between the current investable returns and the returns used in pricing new business are generally capitalized when new business is written. Lower interest rates result in higher new business strain until products are re-priced or rates increase.
  - Fixed income reinvestment rates other than URR are based on current market rates. The net income sensitivity to changes in current rates is outlined in the section "Interest Rate and Spread Risk" below.
- Other potential consequences of poor economic conditions include:
  - Low interest rates could negatively impact sales.
  - Lower sales volumes could put increased pressure on our ability to maintain operating expense levels within the levels provided for in the policy liability valuation and could result in lower future profit.
  - Lower risk free rates tend to increase the equity hedging costs and under certain market conditions the costs of hedging the benefit guarantees provided in variable annuities may increase or become uneconomic.
  - The re-investment of cash flows into low yielding AFS bonds could result in lower future earnings on surplus.
  - A lower interest rate environment could be correlated with other macro-economic factors including unfavourable economic growth and lower returns on other asset classes.
  - Lower interest rates could contribute to potential impairments of goodwill.
  - A weak or declining economic environment could increase the value of guarantees associated with variable annuities or other embedded guarantees and could contribute to adverse policyholder behaviour experience.

### Regulatory and Capital Risk Factors

MFC is a holding company with no significant operations and its principal assets are the shares of its regulated insurance subsidiaries. These subsidiaries are subject to a wide variety of insurance and other laws and regulations that vary by jurisdiction and are intended to protect policyholders and beneficiaries first and foremost, rather than investors. These laws and regulations include regulatory restrictions which may limit the ability of subsidiary companies to pay dividends or make distributions to MFC.

As a result of the global financial crisis, financial authorities and regulators in many countries are reviewing their capital requirements and considering potential changes. Future regulatory capital, actuarial and accounting changes could have a material adverse effect on the Company's consolidated financial statements and regulatory capital both on transition and going forward. While the impact of these changes remains uncertain, we anticipate that regulators, rating agencies and investors will expect higher levels of capital going forward. These changes could further limit the ability of the insurance subsidiaries to pay dividends or make distributions and could have a significantly adverse effect on MFC's capital mobility, including its ability to pay dividends to shareholders, buy back its shares and service its debt. We may be required to raise additional capital, which could be dilutive to existing shareholders, or to limit the new business we write.



The Office of the Superintendent of Financial Institutions (“OSFI”) has been considering a number of changes, including establishing methodologies for evaluating standalone capital adequacy for Canadian operating life insurance companies, such as MLI, and updates to its regulatory guidance and disclosures for non-operating insurance companies acting as holding companies, such as MFC. OSFI has indicated that MCCSR and internal target capital ratio guidelines, which have not yet been determined, are expected to become applicable to MFC over a two year transition period, which may start as early as 2013. In addition, OSFI is evaluating possible changes to the capital requirements for segregated fund guarantees and for market, credit, insurance and operational risk. Changes in regulatory capital guidelines for banks under the Basel Accord or for European insurance companies under Solvency II may also have implications for Canadian insurance companies. The timing and outcome of these initiatives as well as various initiatives related to International Financial Reporting Standards (“IFRS”) are uncertain, and could have a significantly adverse impact on the Company or on our competitive position relative to that of other Canadian and international financial institutions with which we compete for business and capital.

Some recent examples of regulatory and professional standard developments which could impact our capital position include the following.

- Until the new IFRS standard for insurance contracts is completed and effective, our policyholder liabilities continue to be valued under standards established by the Canadian Institute of Actuaries (“CIA”). The CIA has published a new research paper updating the equity calibration parameters for guaranteed variable annuities and segregated funds. The Canadian Actuarial Standards Board is expected to adopt these revised calibration parameters for valuations on or after October 15, 2012. The CIA is also expecting to publish calibration criteria for fixed income funds in 2012 as well as guidance on the modeling of future realized volatility where a hedging program is in place. Once effective, the new calibration standards will apply both to the determination of actuarial liabilities and required capital and may result in a reduction in MLI’s MCCSR ratio and the Company’s net income.
- The amendments to IAS 19 “Employee Benefits”, effective January 1, 2013 are expected to result in a material reduction in accumulated other comprehensive income (“AOCI”), a component of equity, upon adoption. As at December 31, 2011, the consolidated pre-tax unrecognized net actuarial losses for the Company’s pension and post-employment benefits were \$1,011 million and \$58 million, respectively, which if persisted at the date of adoption is expected to result in a material reduction to our capital ratios and could result in significant ongoing volatility in available capital, if regulatory capital includes this component of AOCI in the future. The actual impact to the Company will be based on actuarial estimates, market conditions and capital requirements that exist at the date of transition.
- In a development concerning U.S. statutory accounting practices potentially affecting U.S. life insurers, including John Hancock, the National Association of Insurance Commissioners (“NAIC”) created a commissioner level working group in the fall of 2011 for the purpose of reviewing a change to actuarial standards for certain universal life (“UL”) products pursuant to Actuarial Guideline 38 (“AG38”). On February 21, 2012 this working group agreed to a bifurcated approach for establishing valuation standards for in-force versus business issued after a yet to be determined date. While this action is viewed as a significant step forward in the effort to resolve the AG38 issue, additional details, questions and approvals remain outstanding. The Company is unable at this time to determine the nature or extent of potential changes or the impact of any such changes to AG38. However, based on our information to-date, it appears that any changes applied retroactively will likely not have a material adverse impact on John Hancock’s statutory capital position.

### **The Dodd-Frank Wall Street Reform and Consumer Protection Act (“Dodd-Frank”)**

Dodd-Frank Title VII creates a new framework for regulation of over-the-counter (“OTC”) derivatives which could affect those activities of the Company which use derivatives for various purposes, including hedging equity market, interest rate and foreign currency exposures. Dodd-Frank will require certain types of OTC derivative transactions to be executed through a centralized exchange or regulated facility and be cleared through a regulated clearinghouse. The legislation could also potentially impose additional costs, including new capital requirements, and additional regulation on the Company.

Derivative transactions executed through exchanges or regulated facilities will attract new incremental margin requirements to fund initial margin, and will require variation margin to be cash settled on a daily basis which increases liquidity risk for the Company. The increase in margin requirements combined with a more restricted list of securities that qualify as eligible collateral could require us to hold larger positions in cash and treasuries, which would reduce income. Conversely, transactions executed through exchanges largely eliminate OTC counterparty credit risk but increase our exposure to the risk of an exchange or clearinghouse defaulting, and increased capital or margin requirements imposed on our OTC derivative counterparties could reduce our exposure to the counterparties’ default. In force derivative transactions will be grandfathered and could migrate to exchanges over time, or the Company may elect to accelerate the migration. We cannot predict the effect of the legislation on our hedging costs, our hedging strategy or its implementation, or whether Dodd-Frank will lead to an increase or decrease in or change in composition of the risks we hedge.

In addition, pursuant to Dodd-Frank, in October 2011, the Financial Stability Oversight Council (“FSOC”) released its second notice of proposed rulemaking outlining the proposed criteria that will inform the FSOC’s designation of non-bank financial institutions as “systemically important” and the procedures the FSOC will use in the designation process. If designated, the largest, most interconnected and highly-leveraged companies would face stricter prudential regulation, including higher capital requirements and more robust consolidated supervision. While the proposed rules specify various quantitative thresholds for use in determining which non-bank financial institutions may be designated, FSOC has left open the possibility that a non-bank financial institution can be below the thresholds and still become subject to a designation as systemically important. The comment period on the FSOC second notice of proposed rulemaking has closed, and FSOC is now reviewing submitted comments. At this stage, OSFI has not announced similar rules. Although there are good arguments why neither MFC nor any of its subsidiaries should be designated as systemically important by the FSOC, OSFI or any other regulator, at this stage we cannot predict the outcome of this regulatory initiative.

## International Financial Reporting Standards (“IFRS”)

In 2010 the International Accounting Standards Board (“IASB”) issued its Insurance Contracts (Phase II) Exposure Draft and the U.S. Financial Accounting Standards Board (“FASB”) issued its Insurance Contract Discussion paper. The insurance contract project is considered a “joint project” whereby the IASB and FASB discuss common research papers. A due process step for joint projects also involves assessing differences reached by the two Boards and determining if they can be resolved. Since 2010, the Boards have redeliberated significant issues based on feedback received on the IASB Exposure Draft and FASB Discussion paper. In 2012 the IASB expects to issue a “Review Draft” or a revised Exposure Draft. The FASB expects to issue an Exposure Draft. The final standards are not expected to be effective until at least 2015.

The insurance contracts accounting policy proposals being considered by the IASB and FASB include the definition of the discount rate used in the measurement of insurance liabilities. The draft proposals contain a discount rate approach that is not consistent with our business model because they do not align the measurement of insurance liabilities with the assets that support the payment of those liabilities. Therefore, the standard as proposed and if implemented may lead to a large initial increase in reported insurance liabilities and potentially our required regulatory capital upon adoption, and may create significant ongoing volatility in our reported results and potentially our regulatory capital, particularly for long duration guaranteed products. This mismatch between the underlying economics of our business and reported results and potentially our capital requirements could have significant unintended negative consequences on our business model which would potentially affect our customers, shareholders and the capital markets.

We, along with other companies in the insurance industry from around the world, provided feedback on the significant non-economic volatility that would result from the proposals. As a result, the IASB and the FASB are considering the use of Other Comprehensive Income to record changes in the discount rate. While this proposal removes volatility from the performance statement (income statement), it does not remove the non-economic volatility from the reported shareholders’ equity.

We believe the accounting rules under discussion, if applied to regulatory capital, could put Canadian insurers at a significant disadvantage relative to their U.S. and global peers, and also to the banking sector in Canada. The insurance industry in Canada is working with OSFI and the federal government with respect to the potential impact of these proposals on Canadian insurance companies, and the industry is urging policymakers to ensure that any future accounting and capital proposals appropriately consider the underlying business model of a life insurance company and, in particular, the implications for long duration guaranteed products which are much more prevalent in North America than elsewhere.

## Ratings Risk Factors

The Company has received security ratings from approved rating organizations on certain of its long-term debt, liabilities for preferred shares and capital instruments and preferred shares qualifying as equity. In addition, the Company and its primary insurance operating subsidiaries have received financial strength/claims paying ratings. Our ratings could be adversely affected if, in the view of the rating organizations, there is deterioration in our financial flexibility, operating performance, or risk profile. Adverse ratings changes could have a negative impact on future financial results.

## Reputation Risk Factors

The Company’s reputation is one of our most valuable assets. Our corporate image may be eroded by adverse publicity, as a result of our business practices or those of our employees, representatives and business partners, potentially causing damage to our franchise value. A loss of reputation is often a consequence of some other risk control failure whether associated with complex financial transactions or relatively routine operational activities. As such, reputation risk cannot be managed in isolation from other risks.

## Market Risk

***Market risk is the risk of loss resulting from market price volatility, interest rate change, credit and swap changes, and from adverse foreign currency rate movements. Market price volatility primarily relates to changes in prices of publicly traded equities and alternative non-fixed income investments.***

## Market Risk Management Strategy Overview

Our overall strategy to manage our market risks incorporates several component strategies, each targeted to manage one or more of the market risks arising from our businesses. At an enterprise level, these strategies are designed to manage our aggregate exposures to market risks against economic capital, regulatory required capital and earnings at risk targets.

The following table outlines our key market risks and identifies the risk management strategies which contribute to managing these risks.

	Publicly Traded Equity Performance Risk	Interest Rate Risk	Alternative Non-Fixed Income Asset Performance Risk	Foreign Exchange Risk
Product Design and Pricing	X	X	X	X
Variable Annuity Guarantee Dynamic Hedging	X	X		X
Macro Equity Risk Hedging	X			X
Asset Liability Management	X	X	X	X
Foreign Exchange Management				X

We have established risk reduction plans designed to reduce our exposure to public equity risk and interest rate risk through a combination of time-scheduled and market-trigger based actions. The plans established a goal of executing additional hedges so that approximately 60 per cent of our underlying earnings sensitivity to public equity market movements is offset by hedges by the end of 2012 and approximately 75 per cent of our underlying earnings sensitivity to public equity market movements is offset by hedges by the end of 2014. In addition, we established goals to reduce our interest rate exposures, as measured by the sensitivity of shareholders' net income to a 100 basis point decline in interest rates, to \$1.65 billion as at year end 2012 and to \$1.1 billion as at year end 2014. As of December 31, 2011, we are ahead of our timetable on hedging having already achieved our year end 2012 equity markets hedging goal and our 2014 interest rate hedging goal.

To reduce public equity risk, we use a combination of variable annuity guarantee dynamic hedging and general macro equity risk hedging strategies. As at December 31, 2011, we estimated that approximately 60 to 70 per cent of our underlying earnings sensitivity to a 10 per cent decline in equity markets would be offset by hedges. The range at December 31, 2010 was 50 to 55 per cent. The lower end of the range assumes that the dynamic hedge assets would cover 80 per cent of the loss from the dynamically hedged variable annuity guarantee liabilities and the upper end of the range assumes the dynamic hedge assets would completely offset the loss from the dynamically hedged variable annuity guarantee liabilities. Our strategies employed for variable annuity guarantee dynamic hedging and macro equity risk hedging expose the Company to additional risks. These risks are outlined in the Market Risk Management Strategies section below.

To reduce interest rate risk, we lengthened the duration of our fixed income investments in both our liability and surplus segments by investing cash and trading shorter term bonds for longer term bonds, and by executing lengthening interest rate swaps. These actions, partially offset by the changes in interest rates and the impact of updates to policyholder liability assumptions during the year, contributed to a net reduction in the sensitivity of net income attributed to shareholders to declines in interest rates. As at December 31, 2011, a 100 basis point parallel decline in interest rates would reduce earnings by approximately \$1.0 billion, compared to \$1.8 billion as at December 31, 2010.

Changes in the market value of fixed income assets held in our surplus segment may provide a natural economic offset to the interest rate risk arising from our product liabilities. In order for there to also be an accounting offset, the Company would need to realize a portion of the available for sale fixed income unrealized gains or losses. It is not certain we would crystallize any of the unrealized gains or losses available.

Other risk reduction actions taken during 2011 include re-pricing of our guaranteed benefit insurance products in Canada and the U.S., and launching new insurance products with lower or limited guarantees. We also launched a lower risk variable annuity product in Japan, an initiative that followed the redesign and re-pricing of our North American variable annuities in 2009. The changes made to our product portfolio are a deliberate shift in our new business to lower risk product lines with higher profit margins.

## **Key Risk Factors**

### **Publicly Traded Equity Performance Risk**

Publicly traded equity performance risk arises from a variety of sources, including guarantees associated with certain variable annuity and segregated fund products, asset based fees, and investments in publicly traded equities supporting both our general fund products and our surplus segment.

Our most significant source of equity risk arises from variable annuity and segregated funds with guarantees, where the guarantees are linked to the performance of the underlying funds. Guaranteed benefits are contingent and only payable upon death, maturity, permitted withdrawal or annuitization. If equity markets decline or even if they increase by an amount lower than that assumed in our actuarial valuation, additional liabilities may need to be established to cover the contingent liabilities, resulting in a reduction in shareholders' net income and regulatory capital ratios. Further, if equity markets do not recover to the amount of the guarantees, by the dates the liabilities are due, the accrued liabilities will need to be paid out in cash. In addition, a sustained flat or a decline in public equity markets would likely reduce asset based fee revenues related to variable annuities and segregated funds with guarantees and related to other wealth and insurance products.

If equity market volatility remains high, the costs of hedging the guarantees would likely increase. Further, the variable annuity dynamic hedging strategy is designed to hedge public equity and bond fund performance and interest rate movements. However, we have chosen to maintain certain risks unhedged (such as the realized market volatility), and therefore higher levels of equity and interest rate volatility will create losses on our dynamically hedged business. For additional risk factors related to our variable annuity guarantee dynamic hedging and macro equity risk hedging strategies, refer to 'Risks Related to Hedging Strategies' below.

Where publicly traded equity investments are used to support policy liabilities, the policy valuation incorporates projected investment returns on these assets. If actual returns are lower than the expected returns, the Company's policy liabilities will increase, reducing net income attributed to shareholders.

Further, for products where the investment strategy applied to future cash flows in the policy valuation includes investing a specified portion of future cash flows in publicly traded equities, a decline in the value of publicly traded equities relative to other assets could require us to change the investment mix assumed for future cash flows, increasing policy liabilities and reducing net income attributed to shareholders. In addition, a reduction in the outlook for expected future returns for publicly traded equities, which could result from a fundamental change in future expected economic growth, would increase policy liabilities and reduce net income attributed to

shareholders. In addition, to the extent publicly traded equities are held as AFS, other than temporary impairments that arise will reduce income.

Expected long-term annual market growth assumptions for public equities pre-dividends are based on long-term historical observed experience and are 7.6% per annum in Canada, 8.0% per annum in the U.S., 5.2% per annum in Japan and 9.5% per annum in Hong Kong. Explicit margins for adverse deviation are applied to these assumptions, or implicit margins are determined through stochastic valuation processes, each of which results in lower net yields used in the valuation.

### **Interest Rate and Spread Risk**

Interest rate and spread risk arises from general fund guaranteed benefit products, general fund adjustable benefit products with minimum rate guarantees, general fund products with guaranteed surrender values, segregated fund products with minimum benefit guarantees and from surplus fixed income investments.

Interest rate and spread risk arises within the general fund primarily due to the uncertainty of future returns on investments to be made as assets mature and as recurring premiums are received and must be reinvested to support longer dated liabilities. Interest rate risk also arises due to minimum rate guarantees and guaranteed surrender values on products where investment returns are generally passed through to policyholders.

A general decline in interest rates, without a change in corporate bond spreads and swap spreads, will reduce the assumed yield on future investments used in the valuation of policy liabilities, resulting in an increase in policy liabilities and a reduction in net income. A general increase in interest rates, without a change in corporate bond spreads and swap spreads, will result in a decrease in policy liabilities and an increase in net income. In addition, decreases in corporate bond spreads and increases in swap spreads will result in an increase in policy liabilities and a reduction in net income. An increase in corporate bond spreads and a decrease in swap spreads will have the opposite impact. The impact of changes in interest rates and in spreads may be partially offset by changes to credited rates on adjustable products that pass through investment returns to policyholders.

For segregated fund and variable annuity products, a sustained increase in interest rate volatility or a decline in interest rates would also likely increase the costs of hedging the benefit guarantees provided.

### **Alternative Non-Fixed Income Asset Performance Risk**

Alternative non-fixed income asset performance risk arises from general fund investments in commercial real estate, timber properties, agricultural properties, oil and gas properties, and private equities.

Where these assets are used to support policy liabilities, the policy valuation incorporates projected investment returns on these assets. Non-fixed income assumptions vary by asset class and generally have a similar impact on policy liabilities as public equities would. If actual returns are lower than the expected returns, the Company's policy liabilities will increase, reducing net income attributed to shareholders. Further, for products where the investment strategy applied to future cash flows in the policy valuation includes investing a specified portion of future policy cash flows in alternative non-fixed income assets, a decline in the value of these assets relative to other assets could require us to change the investment mix assumed for future cash flows, increasing policy liabilities and reducing net income. In addition, a reduction in the outlook for expected future returns for alternative non-fixed income assets, which could result from a fundamental change in future expected economic growth, would increase policy liabilities and reduce net income attributed to shareholders.

### **Foreign Exchange Risk**

Our financial results are reported in Canadian dollars. A substantial portion of our business is transacted in currencies other than Canadian dollars, mainly U.S. dollars, Hong Kong dollars and Japanese yen. If the Canadian dollar strengthens, reported earnings would decline and our reported shareholders' equity would decline. Further, to the extent that the resultant change in available capital is not offset by a change in required capital, our regulatory capital ratios would be reduced. A weakening of the Canadian dollar against the foreign currencies in which we do business would have the opposite effect, and would increase reported Canadian dollar earnings and shareholders' equity, and would potentially increase our regulatory capital ratios.

## **Market Risk Management Strategies**

### **Product Design and Pricing**

Our product design and pricing standards and guidelines are designed with the objective of aligning our product offerings with our risk taking philosophy and tolerances, and in particular, that incremental risk generated from new sales aligns with our strategic risk objectives and risk targets. The specific design features of our product offerings, including level of benefit guarantees, policyholder options, fund offerings and availability restrictions as well as our associated investment strategies help to mitigate the level of underlying risk. We regularly review and modify all key features within our product offerings, including premiums and fee charges with a goal of meeting both profit and risk targets. New product initiatives, new business reinsurance arrangements and material insurance underwriting initiatives must be reviewed and approved by the CRO or key individuals within CRM.

### **Variable Annuity Guarantee Dynamic Hedging Strategy**

The variable annuity dynamic hedging strategy is designed to hedge the sensitivity of variable annuity guarantee policy liabilities and available capital, to both public equity and bond fund performance and interest rate movements. The objective of the dynamic

hedging strategy is to offset as closely as possible, the change in our internally defined economic value of guarantees, with the profit and loss from our hedge asset portfolio. The internal economic value of guarantees moves in close tandem with, but not exactly as, our variable annuity guarantee policy liabilities, as it reflects best estimate liabilities and does not include any liability provisions for adverse deviations.

Our current hedging approach is to short exchange-traded equity index and government bond futures and execute currency futures and lengthening interest rate swaps to hedge sensitivity of policy liabilities to fund performance and interest rate movements arising from variable annuity guarantees. We dynamically rebalance these hedge instruments as market conditions change, in order to maintain the hedged position within established limits. We may consider the use of additional hedge instruments opportunistically in the future.

We employ dynamic hedging for virtually all new variable annuity guarantee business when written, or as soon as practical thereafter, and just over half of our in-force variable annuity guarantee values were dynamically hedged as at December 31, 2011. We intend to initiate dynamic hedging for incremental amounts of in-force business not dynamically hedged as market conditions meet our criteria. Public equity risk arising from business not dynamically hedged is managed through our macro equity risk hedging strategy and interest rate risk arising from variable annuity business not dynamically hedged is managed within our asset liability management strategy. During 2011, we initiated dynamic hedging on an additional \$8.5 billion of in-force variable annuity guarantee value.

Our variable annuity guarantee dynamic hedging strategy is not designed to completely offset the sensitivity of policy liabilities to all risks associated with the guarantees embedded in these products. The profit (loss) on the hedge instruments will not completely offset the underlying losses (gains) related to the guarantee liabilities hedged because:

- Policyholder behaviour and mortality experience are not hedged;
- Provisions for adverse deviation in the policy liabilities are not hedged;
- A portion of interest rate risk is not hedged;
- Fund performance on a small portion of the underlying funds is not hedged due to lack of availability of effective exchange-traded hedge instruments;
- Performance of the underlying funds hedged may differ from the performance of the corresponding hedge instruments;
- Correlations between interest rates and equity markets could lead to unfavourable material second order impacts;
- Unfavourable hedge rebalancing costs can be incurred during periods of high volatility from equity markets, bond markets and/or interest rates. The impact is magnified when these impacts occur concurrently; and
- Not all other risks are hedged.

The risks related to the variable annuity dynamic hedging strategy are described below within 'Risks Related to Hedging Strategies'.

### **Macro Equity Risk Hedging Strategy**

The macro equity risk hedging strategy is designed to hedge a portion of our earnings sensitivity to public equity markets movements arising from the following sources in order to maintain our overall earnings sensitivity to public equity market movements below targeted levels:

- General fund equity holdings backing non-participating liabilities;
- Variable life insurance;
- Variable annuity guarantees not dynamically hedged;
- Unhedged provisions for adverse deviation related to variable annuity guarantees dynamically hedged;
- Variable annuity fees not associated with guarantees; and
- Fees on segregated funds without guarantees, mutual funds and institutional assets managed.

We currently execute our macro equity risk hedging strategy by shorting equity futures and executing currency futures, and rolling them over at maturity. We may consider the use of alternative long maturity instruments opportunistically in the future. The notional value of equity futures contracts that were shorted as part of our macro equity risk hedging strategy as at December 31, 2011 was approximately \$5.6 billion. Management intends to increase the amount of macro equity hedges on a time-scheduled and market-trigger basis. Management also intends to increase the amount of hedges in order to maintain our overall earnings sensitivity to equity market movements below targeted levels should markets decline.

### **Risks Related to Hedging Strategies**

Our variable annuity guarantee dynamic hedging strategy relies on the execution of derivative transactions in a timely manner. Therefore, hedging costs and the effectiveness of the strategy may be negatively impacted if markets for these instruments become illiquid. The Company is also subject to counterparty risks arising from the derivative instruments and to the risk of increased funding and collateral demands which may become significant as equity markets and interest rates increase. The dynamic hedging strategy is highly dependent on complex systems and mathematical models that are subject to error, which rely on forward-looking long-term assumptions that may prove inaccurate, and which rely on sophisticated infrastructure and personnel which may fail or be unavailable at critical times. Due to the complexity of the dynamic hedging strategy there may be additional, unidentified risks that may negatively impact our business and future financial results.

The macro equity risk hedging strategy exposes the Company to risks. The strategy relies on the execution of derivative transactions and the ability to execute may be negatively impacted if markets for these instruments become illiquid. The Company is also subject to the risk of increased funding and collateral demands which may become significant as equity markets increase.



There can be no assurance that the Company's exposure to public equity markets will be reduced to within the year-end 2014 target, or that our exposure to movements in interest rates will remain below the year-end 2014 target.

We may be unable to hedge our existing unhedged business as outlined in our risk reduction plans, or if we do so, we may be required to record a charge to income when we initiate hedging. Under certain market conditions, which include a sustained increase in realized equity and interest rate volatilities, a decline in interest rates, or an increase in the correlation between equity returns and interest rate declines, the costs of hedging the benefit guarantees provided in variable annuities may increase or become uneconomic, in which case we may reduce or discontinue sales of certain of these products. In addition, there can be no assurance that our dynamic hedging strategy will fully offset the risks arising from the variable annuities being hedged.

Policy liabilities and MCCR required capital for variable annuity guarantees are determined using long-term forward-looking estimates of volatilities. These long-term forward-looking volatilities assumed for policy liabilities and required capital meet the Canadian Institute of Actuaries and OSFI calibration standards. To the extent that realized equity or interest rate volatilities in any quarter exceed the assumed long-term volatilities, or correlations between interest rate changes and equity returns are higher, there is a risk that rebalancing will be greater and more frequent, resulting in higher hedging costs.

The level of guarantee claims ultimately paid will be impacted by policyholder longevity and policyholder activity including the timing and amount of withdrawals, lapses and fund transfers. The sensitivity of liability values to equity market and interest rate movements that we hedge are based on long-term expectations for longevity and policyholder activity, since the impact of actual longevity and policyholder experience variances cannot be hedged using capital markets instruments.

### **Asset Liability Management Strategy**

Our asset liability management strategy is designed to help ensure that the market risks embedded in our assets and liabilities held in the Company's general fund are effectively managed and that risk exposures arising from these assets and liabilities are maintained below targeted levels. The embedded market risks include risks related to the level and movement of interest rates and credit spreads, public equity market performance, alternative non-fixed income asset performance and foreign exchange rate movements.

General fund product liabilities are segmented into groups with similar characteristics that are supported by specific asset segments. Each segment is managed to a target investment strategy appropriate for the premium and benefit pattern, policyholder options and guarantees, and crediting rate strategies of the products they support. Similar strategies are established for assets in the Company's surplus account. The strategies are set using portfolio analysis techniques intended to optimize returns, subject to considerations related to regulatory and economic capital requirements, and risk tolerances. They are designed to achieve broad diversification across asset classes and individual investment risks while being suitably aligned with the liabilities they support. The strategies encompass asset mix, quality rating, term profile, liquidity, currency and industry concentration targets.

We employ matching mandates, target return mandates or a combination of both in managing the assets in each segment. Matching mandates invest in fixed income assets such as publicly traded bonds, private debt and mortgages and seek to match the term profile of the liabilities, subject to the assets available in investment markets. Target return mandates invest a portion in a diversified basket of alternative non-fixed income assets with the remainder invested in fixed income assets and seek to generate returns sufficient to support either guaranteed obligations or to maximize policyholder dividends or credited rates subject to risk and capital constraints for products that generally pass-through investment returns to policyholders. We manage overall allocations to alternative non-fixed income assets to reflect our risk tolerances.

We group our liabilities into four broad categories:

- Guaranteed products with premiums and benefits that are not adjusted with changes in investment returns and interest rates. We use a combination of matching and target return mandates with the matching mandates supporting obligations within the term period for which fixed income assets are generally available in investment markets.
- Adjustable products which have benefits that are generally adjusted as interest rates and investment returns change, but which have minimum credited rate guarantees. These tend to be supported by target return mandates although segments supporting shorter term liabilities may use matching mandates.
- Variable annuity guarantee liabilities with benefits and liability amounts that fluctuate significantly with performance of the underlying segregated funds. These tend to be supported by matching mandates.
- Non-insurance liabilities which are commingled with the assets held in our surplus account. These tend to be supported by a combination of mandates.

In our general fund, we limit concentration risk associated with non-fixed income asset performance by investing in a diversified basket of assets including public and private equities, commercial real estate, timber and agricultural properties, and oil and gas assets. We further diversify risk by managing publicly traded equities and alternative non-fixed income asset investments against established targets and limits, including for industry type and corporate connection, commercial real estate type and geography, and timber and agricultural property geography and crop type.

Authorities to manage our investment portfolios are delegated to investment professionals who manage to benchmarks derived from the target investment strategies established for each segment, including interest rate risk tolerances. Interest rate risk exposure measures are monitored and communicated to portfolio managers with frequencies ranging from daily to annually, depending on the type of liability. Asset portfolio rebalancing, accomplished using cash investments or derivatives, may occur at frequencies ranging from daily to monthly, depending on our established risk tolerances and the potential for changes in the profile of the assets and liabilities.



Our asset liability management strategy incorporates a wide variety of risk measurement, risk mitigation and risk management and hedging processes. The liabilities and risks to which the Company is exposed, however, cannot be completely matched or hedged due to both limitations on instruments available in investment markets and uncertainty of policyholder experience and consequent liability cash flows.

### **Foreign Exchange Risk Management Strategy**

Our foreign exchange risk management strategy is designed to hedge the sensitivity of our regulatory capital ratios to movements in foreign exchange rates. In particular, the objective of the strategy is to offset within acceptable tolerance levels, changes in required capital with changes in available capital that result from movements in foreign exchange rates. These changes occur when assets and liabilities related to business conducted in currencies other than Canadian dollars are translated to Canadian dollars at period ending exchange rates.

Our policy is to generally match the currency of our assets with the currency of the liabilities they support, and similarly, we have a policy of generally matching the currency of the assets in our shareholders' equity account to the currency of our required capital. Where assets and liabilities are not matched, forward contracts and currency swaps are used to stabilize our capital ratios and our capital adequacy relative to economic capital, when foreign exchange rates change.

We have established target levels of risk exposure, measured in terms of potential changes in capital ratios due to foreign exchange rate movements, determined to represent a specified likelihood of occurrence based on internal models. We utilize a Value-at-Risk ("VaR") methodology quarterly to estimate the potential impact of currency mismatches on our capital ratios.

While our risk management strategy is designed to stabilize capital adequacy ratios, the sensitivity of reported shareholders' equity and income to foreign exchange rate changes is not hedged.

### **Sensitivities and Risk Exposure Measures**

#### **Caution Related to Sensitivities**

In the sections that follow, we have provided sensitivities and risk exposure measures for certain risks. These include the sensitivity due to specific changes in market prices and interest rate levels projected using internal models as at a specific date, and are measured relative to a starting level reflecting the Company's assets and liabilities at that date and the actuarial factors, investment returns and investment activity we assume in the future. The risk exposures measure the impact of changing one factor at a time and assume that all other factors remain unchanged. Actual results can differ significantly from these estimates for a variety of reasons including the interaction among these factors when more than one changes, changes in actuarial and investment return and future investment activity assumptions, actual experience differing from the assumptions, changes in business mix, effective tax rates and other market factors, and the general limitations of our internal models. For these reasons, these sensitivities should only be viewed as directional estimates of the underlying sensitivities for the respective factors based on the assumptions outlined below. Given the nature of these calculations, we cannot provide assurance that the actual impact on net income attributed to shareholders or on MLI's MCCR ratio will be as indicated.

#### **Variable Annuity and Segregated Fund Guarantees**

Guarantees on variable products and segregated funds may include one or more of death, maturity, income and withdrawal guarantees. Variable annuity and segregated fund guarantees are contingent and only payable upon the occurrence of the relevant event, if fund values at that time are below guaranteed values. Depending on future equity market levels, liabilities on current in-force business would be due primarily in the period from 2015 to 2038.

The table below shows selected information regarding the Company's variable annuity and segregated fund investment related guarantees gross and net of reinsurance, and net of the business dynamically hedged.

### Variable Annuity and Segregated Fund Guarantees

As at December 31, (C\$ millions)	2011			2010		
	Guarantee value	Fund value	Amount at risk <sup>(4)</sup>	Guarantee value	Fund value	Amount at risk <sup>(4)</sup>
Guaranteed minimum income benefit <sup>(1)</sup>	\$ 7,518	\$ 5,358	\$ 2,163	\$ 8,202	\$ 6,359	\$ 1,856
Guaranteed minimum withdrawal benefit	66,655	56,954	9,907	62,382	57,331	6,391
Guaranteed minimum accumulation benefit	23,509	23,030	2,813	23,902	25,152	1,980
Gross living benefits <sup>(2)</sup>	\$ 97,682	\$ 85,342	\$ 14,883	\$ 94,486	\$ 88,842	\$ 10,227
Gross death benefits <sup>(3)</sup>	15,202	11,614	3,232	16,279	12,736	2,813
Total gross of reinsurance and hedging	\$ 112,884	\$ 96,956	\$ 18,115	\$ 110,765	\$ 101,578	\$ 13,040
Living benefits reinsured	\$ 6,491	\$ 4,622	\$ 1,871	\$ 7,108	\$ 5,506	\$ 1,611
Death benefits reinsured	4,360	3,430	1,104	4,924	4,070	1,052
Total reinsured	\$ 10,851	\$ 8,052	\$ 2,975	\$ 12,032	\$ 9,576	\$ 2,663
Total, net of reinsurance	\$ 102,033	\$ 88,904	\$ 15,140	\$ 98,733	\$ 92,002	\$ 10,377
Living benefits dynamically hedged	\$ 55,522	\$ 50,550	\$ 6,346	\$ 44,606	\$ 44,827	\$ 2,685
Death benefits dynamically hedged	5,133	3,461	739	4,685	3,032	424
Total dynamically hedged	\$ 60,655	\$ 54,011	\$ 7,085	\$ 49,291	\$ 47,859	\$ 3,109
Living benefits retained	\$ 35,669	\$ 30,170	\$ 6,666	\$ 42,772	\$ 38,509	\$ 5,931
Death benefits retained	5,709	4,723	1,389	6,670	5,634	1,337
<b>Total, net of reinsurance and dynamic hedging</b>	<b>\$ 41,378</b>	<b>\$ 34,893</b>	<b>\$ 8,055</b>	<b>\$ 49,442</b>	<b>\$ 44,143</b>	<b>\$ 7,268</b>

<sup>(1)</sup> Contracts with guaranteed long-term care benefits are included in this category.

<sup>(2)</sup> Where a policy includes both living and death benefits, the guarantee in excess of the living benefit is included in the death benefit category as outlined in footnote (3).

<sup>(3)</sup> Death benefits include standalone guarantees and guarantees in excess of living benefit guarantees where both death and living benefits are provided on a policy.

<sup>(4)</sup> Amount at risk (in-the-money amount) is the excess of guarantee values over fund values on all policies where the guarantee value exceeds the fund value. This amount is not currently payable. For guaranteed minimum death benefit, the net amount at risk is defined as the current guaranteed minimum death benefit in excess of the current account balance. For guaranteed minimum income benefit, the net amount at risk is defined as the excess of the current annuitization income base over the current account value. For all guarantees, the net amount at risk is floored at zero at the single contract level.

As at December 31, 2011, approximately 63 per cent of the guarantee value was either dynamically hedged or reinsured, compared to 55 per cent at December 31, 2010. The business dynamically hedged at December 31, 2011 comprises 59 per cent of the variable annuity guarantee values, net of amounts reinsured.

The policy liabilities established for these benefits were \$10,021 million at December 31, 2011 (2010 – \$3,101 million). These policy liabilities include the policy liabilities for both the hedged and the unhedged business. For unhedged business, policy liabilities were \$3,586 million at December 31, 2011 (2010 – \$2,083 million). The policy liabilities for the hedged block were \$6,435 million at December 31, 2011 (2010 – \$1,018 million). The increase in the policy liabilities for the hedged block was primarily due to the adverse impact of interest rate movements on the cost of hedging associated with the dynamic hedging program that is reflected in IFRS hedged reserves and the adverse impact from basis changes. The year over year increase in policy liabilities related to the unhedged business was due primarily to the adverse impacts from basis changes and interest rate movements, offset by the favourable impact of improved public equity markets.

### Variable Contracts with Guarantees

Variable contracts with guarantees are invested, at the policyholder's discretion subject to contract limitations, in various fund types within the segregated fund accounts and other investments. The account balances by investment category are set out below:

#### Investment categories for variable contracts with guarantees

As at December 31, (C\$ millions)	2011	2010
Equity funds	\$ 34,123	\$ 37,400
Balanced funds	55,921	57,411
Bond funds	10,296	10,430
Money market funds	3,027	2,805
Other fixed interest rate investments	1,519	1,452
<b>Total</b>	<b>\$ 104,886</b>	<b>\$ 109,498</b>

The following table shows the notional value of shorted equity futures contracts utilized for our variable annuity guarantee dynamic hedging and our macro equity risk hedging.

#### Notional value of shorted equity futures contracts

As at December 31, (C\$ millions)	2011	2010
For variable annuity guarantee dynamic hedging strategy <sup>(1)</sup>	\$ 10,600	\$ 4,200
For macro equity risk hedging strategy	5,600	5,100
<b>Total</b>	<b>\$ 16,200</b>	<b>\$ 9,300</b>

<sup>(1)</sup> Reflects net short and long positions for exposures to similar exchanges.

## Publicly Traded Equity Performance Risk

The tables below show the potential impact on net income attributed to shareholders resulting from an immediate 10, 20 and 30 per cent change in market values of publicly traded equities followed by a return to the expected level of growth assumed in the valuation of policy liabilities. The potential impact is shown before and after taking into account the impact of the change in markets on the hedge assets.

While we cannot reliably estimate the amount of the change in dynamically hedged variable annuity policy liabilities that will not be offset by the profit or loss on the dynamic hedge assets, we make certain assumptions for the purposes of estimating the impact on shareholders' net income. We assume that for a 10, 20 and 30 per cent decrease in the market value of public equities, the profit from the hedge assets offsets 80, 75 and 70 per cent, respectively, of the loss arising from the change in the policy liabilities of the guarantees dynamically hedged. For a 10, 20 and 30 per cent market increase in the market value of public equities the loss on the dynamic hedges is assumed to be 120, 125 and 130 per cent of the gain from the dynamically hedged variable annuity policy liabilities, respectively.

As at December 31, 2011 the change in the value of the hedge assets was estimated to offset 60 to 70 per cent of the underlying impact on net income attributed to shareholders<sup>16</sup> from a 10 per cent decline in publicly traded equity value. The lower end of the range assumes that the dynamic hedge assets would cover 80 per cent of the loss from the dynamically hedged variable annuity guarantee liabilities and the upper end of the ranges assumes the dynamic hedge assets would completely offset the loss from the dynamically hedged variable annuity guarantee liabilities. The Company targets to have hedge assets mitigate 60 per cent of the underlying impact by the end of 2012 and 75 per cent of the underlying impact by the end of 2014.

Sensitivities at December 31, 2011 were largely unchanged as compared to December 31, 2010, with reductions in equity sensitivity as a result of the additional dynamic hedging on our in-force variable annuity business in Q1 2011 being largely offset by the increased equity sensitivity on our non-dynamically hedged in-force business as a result of equity market declines during Q3 2011.

### Potential impact on net income attributed to shareholders arising from changes to public equity returns<sup>(1)</sup>

As at December 31, 2011

(C\$ millions)	-30%	-20%	-10%	+10%	+20%	+30%
<b>Underlying sensitivity of net income attributed to shareholders<sup>(2)</sup></b>						
Variable annuity guarantees	\$ (6,080)	\$ (3,830)	\$ (1,780)	\$ 1,490	\$ 2,720	\$ 3,690
Asset based fees	(260)	(180)	(80)	90	180	260
General fund equity investments <sup>(3)</sup>	(300)	(200)	(110)	100	200	300
<b>Total underlying sensitivity</b>	<b>\$ (6,640)</b>	<b>\$ (4,210)</b>	<b>\$ (1,970)</b>	<b>\$ 1,680</b>	<b>\$ 3,100</b>	<b>\$ 4,250</b>
<b>Impact of hedge assets</b>						
Impact of macro hedge assets	\$ 1,420	\$ 950	\$ 470	\$ (470)	\$ (950)	\$ (1,420)
Impact of dynamic hedge assets assuming the change in the value of the hedge assets completely offsets the change in the dynamically hedged variable annuity guarantee liabilities	3,170	1,980	900	(710)	(1,240)	(1,610)
<b>Total impact of hedge assets assuming the change in value of the dynamic hedge assets completely offsets the change in the dynamically hedged variable annuity guarantee liabilities</b>	<b>\$ 4,590</b>	<b>\$ 2,930</b>	<b>\$ 1,370</b>	<b>\$ (1,180)</b>	<b>\$ (2,190)</b>	<b>\$ (3,030)</b>
<b>Net impact assuming the change in the value of the hedge assets completely offsets the change in the dynamically hedged variable annuity guarantee liabilities</b>	<b>\$ (2,050)</b>	<b>\$ (1,280)</b>	<b>\$ (600)</b>	<b>\$ 500</b>	<b>\$ 910</b>	<b>\$ 1,220</b>
Impact of assuming the change in value of the dynamic hedge assets does not completely offset the change in the dynamically hedged variable annuity guarantee liabilities <sup>(4)</sup>	(950)	(500)	(180)	(140)	(300)	(480)
<b>Net impact assuming the change in value of the dynamic hedge assets does not completely offset the change in the dynamically hedged variable annuity guarantee liabilities<sup>(4)</sup></b>	<b>\$ (3,000)</b>	<b>\$ (1,780)</b>	<b>\$ (780)</b>	<b>\$ 360</b>	<b>\$ 610</b>	<b>\$ 740</b>
<b>Percentage of underlying earnings sensitivity to movements in equity markets that is offset by hedges if dynamic hedge assets completely offset the change in the dynamically hedged variable annuity guarantee liability</b>	<b>69%</b>	<b>70%</b>	<b>70%</b>	<b>70%</b>	<b>71%</b>	<b>71%</b>
<b>Percentage of underlying earnings sensitivity to movements in equity markets that is offset by hedge assets if dynamic hedges do not completely offset the change in the dynamically hedged variable annuity guarantee liability<sup>(4)</sup></b>	<b>55%</b>	<b>58%</b>	<b>60%</b>	<b>79%</b>	<b>80%</b>	<b>83%</b>

<sup>(1)</sup> See "Caution Related to Sensitivities" above.

<sup>(2)</sup> Defined as earnings sensitivity to a change in public equity markets including settlements on reinsurance contracts existing at September 30, 2010, but before the offset of hedge assets or other risk mitigants.

<sup>(3)</sup> This impact for general fund equities is calculated as at a point-in-time and does not include: (i) any potential impact on public equity weightings; (ii) any gains or losses on public equities held in the Corporate and Other segment; or (iii) any gains or losses on public equity investments held in Manulife Bank. The sensitivities assume that the participating policy funds are self-supporting and generate no material impact on net income attributed to shareholders as a result of changes in equity markets.

<sup>(4)</sup> For a 10, 20 and 30 per cent market decrease the gain on the dynamic hedge assets is assumed to be 80, 75 and 70 per cent of the loss from the dynamically hedged variable annuity policy liabilities, respectively. For a 10, 20 and 30 per cent market increase the loss on the dynamic hedges is assumed to be 120, 125 and 130 per cent of the gain from the dynamically hedged variable annuity policy liabilities, respectively. For presentation purposes, numbers are rounded.

<sup>16</sup> Defined as earnings sensitivity to a 10 per cent decline in public equity markets including settlements on reinsurance contracts existing at September 30, 2010, but before the offset of hedge assets or other risk mitigants.

## Potential impact on net income attributed to shareholders arising from changes to public equity returns<sup>(1)</sup>

As at December 31, 2010

(C\$ millions)	-30%	-20%	-10%	+10%	+20%	+30%
<b>Underlying sensitivity of net income attributed to shareholders<sup>(2)</sup></b>						
Variable annuity guarantees	\$ (4,840)	\$ (2,940)	\$ (1,300)	\$ 1,010	\$ 1,830	\$ 2,300
Asset based fees	(270)	(180)	(90)	90	180	270
General fund equity investments <sup>(3)</sup>	(270)	(180)	(90)	100	200	300
<b>Total underlying sensitivity</b>	<b>\$ (5,380)</b>	<b>\$ (3,300)</b>	<b>\$ (1,480)</b>	<b>\$ 1,200</b>	<b>\$ 2,210</b>	<b>\$ 2,870</b>
<b>Impact of hedge assets</b>						
Impact of macro hedge assets	\$ 1,270	\$ 850	\$ 420	\$ (420)	\$ (850)	\$ (1,270)
Impact of dynamic hedge assets assuming the change in the value of the hedge assets completely offsets the change in the dynamically hedged variable annuity guarantee liabilities	1,680	980	400	(260)	(440)	(560)
<b>Total impact of hedge assets assuming the change in value of the dynamic hedge assets completely offsets the change in the dynamically hedged variable annuity guarantee liabilities</b>	<b>\$ 2,950</b>	<b>\$ 1,830</b>	<b>\$ 820</b>	<b>\$ (680)</b>	<b>\$ (1,290)</b>	<b>\$ (1,830)</b>
<b>Net impact assuming the change in the value of the hedge assets completely offsets the change in the dynamically hedged variable annuity guarantee liabilities</b>	<b>\$ (2,430)</b>	<b>\$ (1,470)</b>	<b>\$ (660)</b>	<b>\$ 520</b>	<b>\$ 920</b>	<b>\$ 1,040</b>
Impact of assuming the change in value of the dynamic hedge assets does not completely offset the change in the dynamically hedged variable annuity guarantee liabilities <sup>(4)</sup>	(500)	(240)	(80)	(60)	(110)	(170)
<b>Net impact assuming the change in value of the dynamic hedge assets does not completely offset the change in the dynamically hedged variable annuity guarantee liabilities<sup>(4)</sup></b>	<b>\$ (2,930)</b>	<b>\$ (1,710)</b>	<b>\$ (740)</b>	<b>\$ 460</b>	<b>\$ 810</b>	<b>\$ 870</b>
<b>Percentage of underlying earnings sensitivity to movements in equity markets that is offset by hedges if dynamic hedge assets completely offset the change in the dynamically hedged variable annuity guarantee liability</b>	<b>55%</b>	<b>55%</b>	<b>55%</b>	<b>57%</b>	<b>58%</b>	<b>64%</b>
<b>Percentage of underlying earnings sensitivity to movements in equity markets that is offset by hedge assets if dynamic hedges do not completely offset the change in the dynamically hedged variable annuity guarantee liability<sup>(4)</sup></b>	<b>46%</b>	<b>48%</b>	<b>50%</b>	<b>62%</b>	<b>63%</b>	<b>70%</b>

<sup>(1)</sup> See "Caution Related to Sensitivities" above.

<sup>(2)</sup> Defined as earnings sensitivity to a change in public equity markets including settlements on reinsurance contracts existing at September 30, 2010, but before the offset of hedge assets or other risk mitigants.

<sup>(3)</sup> For a 10, 20 and 30 per cent market decrease the gain on the dynamic hedges is assumed to be 80, 75 and 70 per cent of the loss from the dynamically hedged variable annuity policy liabilities, respectively. For a 10, 20 and 30 per cent market increase the loss on the dynamic hedges is assumed to be 120, 125 and 130 per cent of the gain from the dynamically hedged variable annuity policy liabilities, respectively. For presentation purposes, numbers are rounded.

<sup>(4)</sup> This impact for general fund equities is calculated as at a point-in-time and does not include: (i) any potential impact on public equity weightings; (ii) any gains or losses on public equities held in the Corporate and Other segment; or (iii) any gains or losses on public equity investments held in Manulife Bank. The sensitivities assume that the participating policy funds are self-supporting and generate no material impact on net income attributed to shareholders as a result of changes in equity markets.

Changes in equity markets impact our available and required components of the MCCR ratio. The following table shows the potential impact to MLI's MCCR ratio resulting from changes in public equity market values, assuming that the change in the value of the hedge assets does not completely offset the change of the related variable annuity guarantee liabilities.

## Potential impact on MLI's MCCR ratio arising from public equity returns different than the expected return for policy liability valuation<sup>(1),(2)</sup>

As at December 31,	2011						2010					
	-30%	-20%	-10%	10%	20%	30%	-30%	-20%	-10%	10%	20%	30%
Impact on MLI MCCR (percentage points)	<b>(27)</b>	<b>(15)</b>	<b>(7)</b>	<b>2</b>	<b>3</b>	<b>4</b>	(27)	(16)	(7)	7	15	24

<sup>(1)</sup> See "Caution Related to Sensitivities" above.

<sup>(2)</sup> For a 10, 20 and 30 per cent market decrease the gain on the dynamic hedge assets is assumed to be 80, 75 and 70 per cent of the loss from the dynamically hedged variable annuity policy liabilities, respectively. For a 10, 20 and 30 per cent market increase the loss on the dynamic hedge assets is assumed to be 120, 125 and 130 per cent of the gain from the dynamically hedged variable annuity policy liabilities, respectively.

## Interest Rate and Spread Risk

The following table shows the potential impact on net income attributed to shareholders of a change of one per cent, in current government, swap and corporate rates for all maturities across all markets with no change in credit spreads between government, swap and corporate rates, and with a floor of zero on government rates, relative to the rates assumed in the valuation of policy liabilities. We also assume no change to the ultimate reinvestment rate ("URR").

### Potential impact on annual net income attributed to shareholders of an immediate one per cent parallel change in interest rates relative to rates assumed in the valuation of policy liabilities<sup>(1),(2),(3),(4)</sup>

As at December 31, (C\$ millions)	2011		2010	
	-100bp	+100bp	-100bp	+100bp
General fund products <sup>(2)</sup>	\$ (500)	\$ 350	\$ (1,400)	\$ 1,200
Variable annuity guarantees <sup>(3)</sup>	(500)	350	(400)	300
<b>Total</b>	<b>\$ (1,000)</b>	<b>\$ 700</b>	<b>\$ (1,800)</b>	<b>\$ 1,500</b>

<sup>(1)</sup> See "Caution Related to Sensitivities" above.

<sup>(2)</sup> The sensitivities assume that the participating policy funds are self-supporting and generate no material impact on net income attributed to shareholders as a result of changes in interest rates.

<sup>(3)</sup> For variable annuity liabilities that are dynamically hedged, it is assumed that interest rate hedges are rebalanced at 20 basis point intervals.

<sup>(4)</sup> Sensitivities are based on projected asset and liability cash flows at the beginning of the quarter adjusted for the estimated impact of new business and investment market and activities during the quarter. Any true-up to these estimates, as a result of the final asset and liability cash flows to be used in the next quarter's projection, are reflected in the next quarter's sensitivities.

The decline in exposures was primarily driven by the actions to extend the duration of our fixed income investments supporting policyholder liabilities. These impacts were partially offset by generally lower interest rates in the markets where we operate and the impact of increases to policy liabilities as a result of our annual review of policy valuation assumptions.

Actuarial reserves are determined by testing a range of future interest rate scenarios, including those prescribed by actuarial standards of practice. These future scenarios are derived from interest rates and spreads at the end of the quarter. The scenario that produces the highest reserve requirement determines the reserve that is held at the end of the quarter and is called the booking scenario.

Should interest rates and/or corporate spreads decline as indicated in the sensitivities above (and potentially smaller amounts), the future interest rate scenario that would produce the highest reserve, or booking scenario, could change in some jurisdictions. The current booking scenario begins with current rates grading to a URR with corporate bond spreads that grade to an expected long-term level over five years and a proportional reduction in future investment in corporate bonds to zero over 20 years. The potential change is one where then current interest rates, spreads and investment in corporate bonds prevail for the lifetime of the business.

The impact of the change in the booking scenario, should interest rates and spreads decline in parallel and by the amounts indicated, is incorporated into the earnings sensitivities shown above. For this reason, the impact of changes less than the amounts indicated are unlikely to be linear relative to this estimate. The change in booking scenario added approximately \$500 million to the impact of a 100 basis point decline in interest rates and \$300 million to the impact of a 50 basis point reduction in corporate spreads. Actual results in the future will be affected by a wide variety of factors and no simple formula can accurately predict the potential impact.

The potential impact on annual net income attributed to shareholders provided in the table above does not include any impact arising from the sale of fixed income assets held in our surplus segment. Changes in the market value of these assets may provide a natural economic offset to the interest rate risk arising from our product liabilities. In order for there to also be an accounting offset, the Company would need to realize a portion of the AFS fixed income asset unrealized gains or losses. It is not certain we would crystallize any of the unrealized gains or losses available. As at December 31, 2011 the AFS fixed income assets held in the surplus segment were in a net after-tax unrealized gain position of \$131 million (gross after-tax unrealized gains were \$400 million and gross after-tax unrealized losses were \$269 million).

The following table shows the potential impact on net income attributed to shareholders including the change in the market value of fixed income assets held in our surplus segment, which could be realized through the sale of these assets.

### Potential impact on annual net income attributed to shareholders of an immediate one per cent parallel change in interest rates including on the change in market value of AFS fixed income assets in the surplus segment<sup>(1),(2)</sup>

As at December 31, (C\$ millions)	2011		2010	
	-100bp	+100bp	-100bp	+100bp
Impact excluding the change in the market value of AFS fixed income assets held in the surplus segment	\$ (1,000)	\$ 700	\$ (1,800)	\$ 1,500
Impact of the change in the market value of AFS fixed income assets held in the surplus segment <sup>(2)</sup>	800	(700)	1,200	(900)
Including 100% of the change in the market value of fixed income assets held in the surplus segment <sup>(2)</sup>	<b>\$ (200)</b>	<b>\$ -</b>	<b>\$ (600)</b>	<b>\$ 600</b>

<sup>(1)</sup> See "Caution Related to Sensitivities" above.

<sup>(2)</sup> The amount of gain or loss that can be realized on AFS fixed income assets held in the surplus segment will depend on the amount of unrealized gain or loss. The table above only shows the change in the unrealized position, as the total unrealized position will depend upon the unrealized position at the beginning of the period.

The following table shows the potential impact on MLI's MCCR ratio from an immediate change in interest rates.

### Potential impact on MLI's MCCR ratio arising from an immediate one per cent parallel change in interest rates<sup>(1)</sup>

As at December 31, (percentage points)	2011		2010	
	-100bp	+100bp	-100bp	+100bp
Impact excluding the change in the market value of AFS fixed income assets held in the surplus segment	(18)	13	(23)	19
Impact including 100% of the change in the market value of the AFS fixed income assets held in the surplus segment <sup>(2)</sup>	(13)	8	(14)	12

<sup>(1)</sup> See "Caution Related to Sensitivities" above.

<sup>(2)</sup> The amount of gain or loss that can be realized on AFS fixed income assets held in the surplus segment will depend on the amount of unrealized gain or loss. The table above only shows the change in the unrealized position, as the total unrealized position will depend upon the unrealized position at the beginning of the period.

The following tables show the potential impact on net income attributed to shareholders resulting from a change in corporate spreads and swap spreads over government bond rates for all maturities across all markets with a floor of zero on the total interest rate, relative to the spreads assumed in the valuation of policy liabilities.

### Potential impact on net income attributed to shareholders arising from changes to corporate spreads<sup>(1),(2)</sup>

As at December 31, (C\$ millions)	2011		2010	
	-50bp	+50bp	-50bp	+50bp
<b>Corporate spreads<sup>(3),(4),(5)</sup></b>	<b>\$ (900)</b>	<b>\$ 500</b>	<b>\$ (500)</b>	<b>\$ 400</b>

<sup>(1)</sup> See "Caution Related to Sensitivities" above.

<sup>(2)</sup> The sensitivity was estimated as 50% of the sensitivity to a 100 basis point change. Actual results may differ materially from these estimates.

<sup>(3)</sup> The impact on net income attributed to shareholders assumes no gains or losses are realized on our AFS fixed income assets held in the surplus segment and excludes the impact arising from changes in segregated fund bond fund value arising from changes in credit spreads. The sensitivities assume that the participating policy funds are self-supporting and generate no material impact on net income attributed to shareholders as a result of changes in corporate spreads.

<sup>(4)</sup> Corporate spreads are assumed to grade to the long-term average over five years.

<sup>(5)</sup> Sensitivities are based on projected asset and liability cash flows at the beginning of the quarter adjusted for the estimated impact of new business and investment market and activities during the quarter. Any true-up to these estimates, as a result of the final asset and liability cash flows to be used in the next quarter's projection, are reflected in the next quarter's sensitivities.

The sensitivity of shareholders' net earnings to changes in corporate spreads increased over 2011, primarily due to the change in the booking scenario described above and the decline in interest rates over the year.

### Potential impact on net income attributed to shareholders arising from changes to swap spreads<sup>(1),(2),(3)</sup>

As at December 31, (C\$ millions)	2011		2010	
	-20bp	+20bp	-20bp	+20bp
<b>Swap spreads<sup>(2)</sup></b>	<b>\$ 600</b>	<b>\$ (600)</b>	<b>\$ 200</b>	<b>\$ (200)</b>

<sup>(1)</sup> See "Caution Related to Sensitivities" above.

<sup>(2)</sup> The impact on net income attributed to shareholders assumes no gains or losses are realized on our AFS fixed income assets held in the surplus segment and excludes the impact arising from changes in segregated fund bond fund value arising from changes in credit spreads. The sensitivities assume that the participating policy funds are self-supporting and generate no material impact on net income attributed to shareholders as a result of changes in swap spreads.

<sup>(3)</sup> Sensitivities are based on projected asset and liability cash flows at the beginning of the quarter adjusted for the estimated impact of new business and investment market and activities during the quarter. Any true-up to these estimates, as a result of the final asset and liability cash flows to be used in the next quarter's projection, are reflected in the next quarter's sensitivities.

The sensitivity of shareholders' net earnings to changes in swap spreads increased over the year due to the additional forward starting swaps executed.

### Alternative Non-Fixed Income Asset Performance Risk

The following table shows the potential impact on net income attributed to shareholders resulting from changes in market values of alternative non-fixed income assets different than the expected levels assumed in the valuation of policy liabilities.

### Potential impact on net income attributed to shareholders arising from changes in alternative non-fixed income asset returns<sup>(1),(2)</sup>

As at December 31, (C\$ millions)	2011		2010	
	-10%	+10%	-10%	+10%
Real estate, agriculture and timber assets	\$ (750)	\$ 750	\$ (500)	\$ 600
Private equities and other alternative non-fixed income assets	(550)	550	(400)	400
<b>Alternative non-fixed income assets</b>	<b>\$ (1,300)</b>	<b>\$ 1,300</b>	<b>\$ (900)</b>	<b>\$ 1,000</b>

<sup>(1)</sup> See "Caution Related to Sensitivities" above.

<sup>(2)</sup> This impact is calculated as at a point-in-time impact and does not include: (i) any potential impact on non-fixed income asset weightings; (ii) any gains or losses on non-fixed income investments held in the Corporate and Other segment; or (iii) any gains or losses on non-fixed income investments held in Manulife Bank. The sensitivities assume that the participating policy funds are self-supporting and generate no material impact on net income attributed to shareholders as a result of changes in alternative non-fixed income asset returns.



The increased sensitivity from December 31, 2010 to December 31, 2011 is primarily related to the drop in fixed income rates (reducing the rate at which funds can reinvest) as well as the change in foreign exchange rates.

### Foreign Exchange Risk

The following table shows the impact on net income attributed to shareholders of a ten per cent change in the Canadian dollar relative to our key operating currencies.

#### Potential impact on net income attributed to shareholders<sup>(1)</sup>

As at December 31, (C\$ millions)	2011		2010	
	+10% strengthening	-10% weakening	+10% strengthening	-10% weakening
10% change relative to the U.S. Dollar	\$ 91	\$ (91)	\$ 129	\$ (129)
10% change relative to the Japanese Yen	(8)	8	9	(9)

<sup>(1)</sup> See "Caution Related to Sensitivities" above. Normally, a strengthening Canadian dollar would reduce the Canadian dollar equivalent of our foreign denominated earnings. Applying a ten per cent strengthening of the Canadian dollar to the U.S. dollar denominated losses experienced in 2010 and 2011 and the Japanese Yen denominated losses in 2010 reduces these losses and therefore would have a positive impact to shareholders' earnings.

The following table shows the impact on shareholders' equity of a ten per cent change in the Canadian dollar relative to our key operating currencies.

#### Potential impact on shareholders' equity<sup>(1)</sup>

As at December 31, (C\$ millions)	2011		2010	
	+10% strengthening	-10% weakening	+10% strengthening	-10% weakening
10% change relative to the U.S. Dollar	\$ (1,564)	\$ 1,564	\$ (1,807)	\$ 1,807
10% change relative to the Japanese Yen	(310)	310	(292)	292

<sup>(1)</sup> See "Caution Related to Sensitivities" above.

### Liquidity Risk

**Liquidity risk is the risk of not having access to sufficient funds or liquid assets to meet both expected and unexpected cash and collateral demands.**

#### Key Risk Factors

Manulife Financial is exposed to liquidity risk in each of our operating companies and in our holding company. In the operating companies, expected cash and collateral demands arise day-to-day to fund anticipated policyholder benefits, withdrawals of customer deposit balances, reinsurance settlements, derivative instrument settlements/collateral pledging, expenses, investment and hedging activities. Under stressed conditions, unexpected cash and collateral demands could arise primarily from an increase in the level of policyholders either terminating policies with large cash surrender values or not renewing them when they mature, withdrawals of customer deposit balances, borrowers renewing or extending their loans when they mature, derivative settlements or collateral demands, and reinsurance settlements or collateral demands. The implementation of Dodd-Frank in the United States in 2012 will require certain derivatives to migrate from bilateral arrangements to clearing houses, and this is expected to increase liquidity requirements to support these contracts.

The ability of our holding company to fund its cash requirements depends upon it receiving dividends, distributions and other payments from our operating subsidiaries. These subsidiaries are generally required to maintain solvency and capital standards imposed by their local regulators and, as a result, may have restrictions on payments which they may make to MFC.

In the normal course of business, third party banks issue letters of credit on our behalf. In lieu of posting collateral, our businesses utilize letters of credit for which third parties are the beneficiaries, as well as for affiliate reinsurance transactions between subsidiaries of MFC. Letters of credit and letters of credit facilities must be renewed periodically. At time of renewal, the Company is exposed to repricing risk and under adverse conditions increases in costs will be realized. In the most extreme scenarios, letters of credit capacity could become constrained due to non-renewals which would restrict our flexibility to manage capital at the operating company level. This could negatively impact our ability to meet local capital requirements or our sales of products in jurisdictions in which our operating companies have been affected. Although the Company did not experience any material change in aggregate capacity during the financial crisis of the past three years, changes in prices and conditions were adverse during the market turbulence. There were no assets pledged against these outstanding letters of credit as at December 31, 2011.

#### Risk Management Strategy

Global liquidity management policies and procedures are designed to provide adequate liquidity to cover cash and collateral obligations as they come due, and to sustain and grow operations in both normal and stressed conditions. They take into account any legal, regulatory, tax, operational or economic impediments to inter-entity funding.

We seek to reduce liquidity risk by diversifying our business across different products, markets, geographical regions and policyholders. We design insurance products to encourage policyholders to maintain their policies in-force, to help generate a diversified and stable flow of recurring premium income. We design the policyholder termination features of our wealth management products and related investment strategies with the goal of mitigating the financial exposure and liquidity risk related to unexpected policyholder terminations. We establish and implement investment strategies intended to match the term profile of the assets to the liabilities they support, taking into account the potential for unexpected policyholder terminations and resulting liquidity needs. Liquid assets represent a large portion of our total assets. We aim to reduce liquidity risk in our deposit funded businesses by diversifying our funding sources and appropriately managing the term structure of our funding. We forecast and monitor daily operating liquidity and cash movements in various individual entities and operations as well as centrally, aiming to ensure liquidity is available and cash is employed optimally.

We also maintain centralized cash pools and access to other sources of liquidity such as repurchase funding agreements. Our centralized cash pool consists of cash or near-cash, high quality short-term investments that are continually monitored for their credit quality and market liquidity.

Through the normal course of business, pledging of assets is required to comply with jurisdictional regulatory and other requirements including collateral pledged to mitigate derivative counterparty credit risk, assets pledged to exchanges as initial margin and assets held as collateral for repurchase funding agreements. Total unencumbered assets were \$261.8 billion as at December 31, 2011 (2010 – \$214.6 billion).

The market values of our derivative portfolio are periodically stress tested based on shocks to interest rates, underlying indices, and foreign exchange rates to assess the potential collateral and cash settlement requirements under stressed conditions. Increased use of derivatives for hedging purposes has necessitated greater emphasis on measurement and management of contingent liquidity risk. In 2011, comprehensive new liquidity stress testing was implemented which measures, on an integrated basis, the impact of equity market and rate shocks on derivative collateral requirements, reserve requirements, reinsurance settlements, policyholder behaviour and the market value of eligible liquid assets. We manage the asset mix of our balance sheet taking into account the need to hold adequate unencumbered and appropriate liquid assets to satisfy the potential additional requirements arising under stressed scenarios and to allow our liquidity ratios to remain strong.

Consolidated group operating and strategic liquidity levels are managed against established minimums. We set minimum operating liquidity as the level of one month's operating cash outflows. We measure strategic liquidity under both immediate (within one month) and ongoing (within one year) stress scenarios. Our policy is to maintain the ratio of adjusted liquid assets to adjusted policy liabilities at or above a pre-established target. Adjusted liquid assets include unencumbered cash and short-term investments, and marketable bonds and stocks that are discounted to reflect convertibility to cash, net of maturing debt obligations. Policy liabilities are adjusted to reflect their potential for withdrawal. In addition to managing the consolidated liquidity levels, each entity maintains sufficient liquidity to meet its standalone demands.

Manulife Bank has a liquidity risk management policy framework, managed on a standalone basis. The framework includes stress testing, cashflow modeling, a funding plan and a contingency plan. The bank has established a securitization infrastructure which enables the bank to access a range of funding and liquidity sources.

### Risk Exposure Measures

Our strategic liquidity ratios are provided in the following table.

As at December 31, (C\$ millions, unless otherwise stated)	2011		2010	
	Immediate Scenario	Ongoing Scenario	Immediate Scenario	Ongoing Scenario
Adjusted liquid assets	\$ 123,429	\$ 124,685	\$ 103,787	\$ 106,341
Adjusted policy liabilities	\$ 27,452	\$ 35,656	\$ 24,467	\$ 32,058
Liquidity ratio	450%	350%	424%	332%

### Credit Risk

***Credit risk is the risk of loss due to the inability or unwillingness of a borrower or counterparty to fulfill its payment obligations.***

### Key Risk Factors

Worsening or continued poor economic conditions could result in borrower or counterparty defaults or downgrades, and could lead to increased provisions or impairments related to our general fund invested assets and off-balance sheet derivative financial instruments, and an increase in provisions for future credit impairments to be included in our policy liabilities. Any of our reinsurance providers being unable or unwilling to fulfill their contractual obligations related to the liabilities we cede to them could lead to an increase in policy liabilities.

### Risk Management Strategy

The Company has established objectives for overall quality and diversification of our general fund investment portfolio and criteria for the selection of counterparties, including derivative counterparties, reinsurers and insurance providers. Our policies establish exposure

limits by borrower, corporate connection, quality rating, industry, and geographic region, and govern the usage of credit derivatives. Corporate connection limits vary according to risk rating. Our general fund fixed income investments are primarily investment grade bonds and commercial mortgages. While we have minimal exposure to credit default swaps, we have recently launched a program for selling CDS that employs a highly selective, diversified and conservative approach. All CDS decisions will follow the same rigorous underwriting standards as our cash bond portfolio and we believe the addition of this asset class will allow us to better diversify our overall credit portfolio.

Our credit-granting units follow a defined evaluation process that provides an objective assessment of credit proposals. We assign each investment a risk rating based on a detailed examination of the borrower that includes a review of business strategy, market competitiveness, industry trends, financial strength, access to funds, and other risks facing the organization. We assess and update risk ratings regularly, based on a standardized 22-point scale consistent with those of external rating agencies. For additional input to the process, we also assess credit risks using a variety of industry standard market-based tools and metrics. We map our risk ratings to pre-established probabilities of default and loss given defaults, based on historical industry and Company experience, and to resulting default costs.

We establish delegated credit approval authorities and make credit decisions on a case-by-case basis at a management level appropriate to the size and risk level of the transaction, based on the delegated authorities that vary according to risk rating. We refer all major credit decisions to the Credit Committee and the largest credit decisions to the CEO for approval and, in certain cases, to the Board of Directors.

We limit the types of authorized derivatives and applications and require pre-approval of all derivative application strategies and regular monitoring of the effectiveness of derivative strategies. Derivative counterparty exposure limits are established based on a minimum acceptable counterparty credit rating of A- from internationally recognized rating agencies. We measure derivative counterparty exposure as net potential credit exposure, which takes into consideration mark-to-market values of all transactions with each counterparty, net of any collateral held, and an allowance to reflect future potential exposure. We measure reinsurance counterparty exposure, taking into account current exposures and potential future exposures reflecting the level of ceded policy liabilities. We require all reinsurance counterparties and insurance providers to meet minimum risk rating criteria.

Regular reviews of the credits within the various portfolios are undertaken with the goal of identifying changes to credit quality, and where appropriate, taking corrective action. Prompt identification of problem credits is a key objective. CRM provides independent credit risk oversight by reviewing assigned risk ratings, and monitoring problem and potential problem credits.

We establish an allowance for losses on a loan when it becomes impaired as a result of deterioration in credit quality, to the extent there is no longer assurance of timely realization of the carrying value of the loan and related investment income. We reduce the carrying value of an impaired loan to its estimated net realizable value when we establish the allowance. We establish an allowance for losses on reinsurance contracts when a reinsurance counterparty becomes unable or unwilling to fulfill its contractual obligations. We base the allowance for loss on current recoverables and ceded policy liabilities. There is no assurance that the allowance for losses will be adequate to cover future potential losses or that additional allowances or asset write-downs will not be required.

Policy liabilities include general provisions for credit losses from future asset impairments. We set these conservatively, taking into account average historical levels and future expectations, with a provision for adverse deviations. Fluctuations in credit default rates and deterioration in credit ratings of borrowers may result in losses if actual rates exceed expected rates.

Throughout the recent challenging credit environment, our credit policies and procedures and investment strategies have remained fundamentally unchanged. Credit exposure in our investment portfolio is actively managed to reduce risk and mitigate losses and derivative counterparty exposure is managed proactively. Defaults and downgrade charges were generally below the historical average in 2011, however, we still expect volatility on a quarterly basis and losses could potentially rise above long-term expected levels.

### Risk Exposure Measures

As at December 31, 2011 and December 31, 2010, for every 50 per cent that credit defaults over the next year exceeded the rates provided for in policy liabilities, net income attributed to shareholders would be reduced by \$63 million and \$65 million, respectively. Downgrades could also be higher than assumed in policy liabilities resulting in policy liability increases and a reduction in net income.

The table below shows net impaired assets and allowances for loan losses.

### Net Impaired Assets and Loan Losses

As at December 31, (C\$ millions, unless otherwise stated)	2011	2010
Net impaired fixed income assets	\$ 486	\$ 536
Net impaired fixed income assets as a per cent of total invested assets	0.21%	0.27%
Allowance for loan losses	\$ 94	\$ 118

## Insurance Risk

*Insurance risk is the risk of loss due to actual experience emerging differently than assumed when a product was designed and priced with respect to mortality and morbidity claims, policyholder behaviour and expenses.*

### Key Risk Factors

We make a variety of assumptions related to the future level of claims, policyholder behaviour, expenses and sales levels when we design and price products, and when we establish policy liabilities. Assumptions for future claims are based on both Company and industry experience and predictive models, and assumptions for future policyholder behaviour are based on Company experience and predictive models. Assumptions for future policyholder behaviour includes assumptions related to the retention rates for insurance and wealth products. Losses may result should actual experience be materially different than that assumed in the design, pricing and sale of products. Such losses could have a significant adverse effect on our results of operations and financial condition. In addition, we periodically review the assumptions we make in determining our policy liabilities and the review may result in an increase in policy liabilities and a decrease in net income attributable to shareholders. Such assumptions require significant professional judgment, and actual experience may be materially different than the assumptions we make.

Life and health insurance claims may be impacted by the unusual onset of disease or illness, natural disasters, large-scale manmade disasters and acts of terrorism. The ultimate level of lifetime benefits paid to policyholders may be impacted by unexpected changes in life expectancy. Policyholder behaviour including premium payment patterns, policy renewals, lapse rates and withdrawal and surrender activity are influenced by many factors including market and general economic conditions, and the availability and relative attractiveness of other products in the marketplace. For example, a weak or declining economic environment could increase the value of guarantees associated with variable annuities or other embedded guarantees and contribute to adverse policyholder behaviour experience. As well, adverse claims experience could result from systematic anti-selection, which could arise from the development of investor owned and secondary markets for life insurance policies, underwriting process failures, or other factors.

We purchase reinsurance protection on certain risks underwritten by our various business segments. External market conditions determine the availability, terms and cost of the reinsurance protection for new business and, in certain circumstances, the cost of reinsurance for business already reinsured. Accordingly, we may be forced to incur additional costs for reinsurance or may not be able to obtain sufficient reinsurance on acceptable terms, which could adversely affect our ability to write future business or result in the assumption of more risk with respect to those policies we issue.

### Risk Management Strategy

We have established a broad framework for managing insurance risk, together with all other elements of product design, product pricing, underwriting and reinsurance purchase practices, set out by our Product Design and Pricing Policy, Underwriting and Claims Management Policy and Reinsurance Risk Management Policy, and we have established global product design and pricing standards and guidelines, and reinsurance guidelines, aimed to help ensure our product offerings align with our risk taking philosophy and risk targets, and achieve acceptable profit margins. These cover:

- product design features
- use of reinsurance
- pricing models and software
- internal risk-based capital allocations
- target profit objectives
- pricing methods and assumption setting
- stochastic and stress scenario testing
- required documentation
- review and approval processes
- experience monitoring programs

In each business unit, we designate individual pricing officers who are accountable for all pricing activities and chief underwriters who are accountable for the underwriting activities. The general manager and chief financial officer of each business unit, the divisional risk officer and CRM, approve the design and pricing of each product, including key claims, policyholder behaviour, investment return and expense assumptions, as well as reinsurance treaties with third parties, with the goal of meeting corporate standards. Corporate Actuarial approves all policy liability valuation methods and assumptions and approves reinsurance treaties related to business in-force, as well as all related party reinsurance treaties. We perform annual risk and compliance self-assessments of the product development and pricing activities of all businesses. We also facilitate knowledge transfer between staff working with similar businesses in different geographies in order to leverage best practices.

We utilize a global underwriting manual intended to ensure insurance underwriting practices for direct written life business are consistent across the organization while reflecting local conditions. Each business unit establishes underwriting policies and procedures, including criteria for approval of risks and claims adjudication policies and procedures.

We apply retention limits per insured life that are intended to reduce our exposure to individual large claims which are monitored in each business unit. These retention limits vary by market and jurisdiction. We reinsure exposure in excess of these limits with other companies. Our current global retention limit is US\$30 million for a single life (US\$35 million for survivorship life policies) and is shared across businesses. We apply lower limits in some markets and jurisdictions. We aim to further reduce exposure to claims concentrations by applying geographical aggregate retention limits for certain covers. Enterprise-wide, we aim to reduce the likelihood of high aggregate claims by operating internationally and insuring a wide range of unrelated risk events.

The Company's aggregate exposure to each of policyholder behaviour risk and claims risk are managed against enterprise-wide economic capital, regulatory capital and earnings at risk targets. The policyholder behaviour risk targets cover the combined risk arising from policyholder renewal activity, policy lapses and surrenders, withdrawals, premium payment patterns, fund selections, and other policyholder driven activity. The claims risk targets cover the combined risk arising from mortality, longevity and morbidity.

Internal experience studies, as well as trends in our experience and that of the industry, are monitored to update current and projected claims and policyholder behaviour assumptions, resulting in updates to policy liabilities as appropriate.

We continue to seek state regulatory approvals for price increases on existing long-term care business in the United States. We cannot be certain whether or when each approval will be granted. Our policy liabilities reflect our estimates of the impact of these price increases, but should we be less successful than anticipated in obtaining them, then policy liabilities would increase accordingly.

### Risk Exposure Measures

Fluctuations in claims experience may result in losses. The table below shows the potential change in earnings attributable to shareholders, for every five per cent that actual mortality and morbidity rates over the next year differ from the rates provided for in policy liabilities.

### Potential Impact on Net Income Attributed to Shareholders<sup>(1),(2)</sup>

As at December 31, (C\$ millions)	2011		2010	
	-5%	+5%	-5%	+5%
Impact of change in mortality rates	\$ 34	\$ (34)	\$ 58	\$ (58)
Impact of change in morbidity rates	93	(93)	86	(86)
<b>Total</b>	<b>\$ 127</b>	<b>\$ (127)</b>	\$ 144	\$ (144)

<sup>(1)</sup> See "Caution Related to Sensitivities" above.

<sup>(2)</sup> These exposure measures were determined under the assumption that claims experience would subsequently return to normal levels and as such no change would be required to policy liabilities for future years. The sensitivities assume that the participating policy funds are self supporting and generate no material impact on net income attributed to shareholders as a result of changes in mortality or morbidity rates.

### Operational Risk

***Operational risk is the risk of loss resulting from inadequate or failed internal processes, risk management policies and procedures, systems failures, human performance failures or from external events.***

### Key Risk Factors

Operational risk is naturally present in all of our business activities and encompasses a broad range of risks, including regulatory compliance failures, legal disputes, technology failures, business interruption, information security and privacy, human resource management and employment practices, processing errors, complex modeling, business integration, theft and fraud, and damage to physical assets. Exposures can take the form of financial losses, regulatory sanctions, loss of competitive positioning, or damage to reputation. Operational risk is also embedded in all the practices we use to manage other risks; therefore, if not managed effectively, can impact our ability to manage other key risks such as credit risk, market risk, liquidity risk and insurance risk.

### Risk Management Strategy

Our corporate governance practices, corporate values, and integrated, enterprise-wide approach to managing risk set the foundation for mitigating operational risks. We strengthen this base by establishing appropriate internal controls and systems, compensation programs, and by seeking to retain trained and competent people throughout the organization. We align compensation programs with business strategy, long-term shareholder value and good governance practices, and we benchmark them against peer companies. We establish enterprise-wide risk management programs for specific operational risks that could materially impact our ability to do business or impact our reputation. Within established corporate standards, business unit general managers are accountable for the day-to-day management of the operational risks inherent in their operations. Business units and functional areas perform risk control self-assessments to identify, document and assess inherent operational risks and effectiveness of internal controls. They monitor key risk indicators that provide early warnings of emerging control issues and proactively modify procedures.

Through our corporate insurance program, we transfer a portion of our operational risk exposure by purchasing global and local insurance coverage that provides some protection against unexpected material losses resulting from events such as criminal activity, property loss or damage and liability exposures, or that satisfies legal requirements and contractual obligations. We determine the nature and amount of insurance coverage we purchase centrally, considering our enterprise-wide exposures and risk tolerances.

The following is a further description of key operational risk factors with associated management strategies.

### Legal and Regulatory Risk

In addition to the regulatory and capital requirements described under Strategic Risk, the Company is subject to extensive regulatory oversight by insurance and financial services regulators in the jurisdictions in which we conduct business. While many of these laws and regulations are intended to protect policyholders, beneficiaries, depositors and investors in our products and services, others also set standards and requirements for the governance of our operations. Failure to comply with applicable laws or regulations could result in financial penalties or sanctions, and damage our reputation. We are also regularly involved in litigation, both as a plaintiff or defendant, which could result in an unfavourable resolution.



Global Compliance oversees our regulatory compliance program and function, supported by designated Chief Compliance Officers in every Division. The program is designed to promote compliance with regulatory obligations worldwide and to assist in making the Company aware of the laws and regulations that affect us, and the risks associated with failing to comply. Divisional compliance groups monitor emerging legal and regulatory issues and changes and prepare us to address new requirements. Global Compliance also independently assesses and monitors the effectiveness of a broad range of regulatory compliance processes and business practices against potential legal, regulatory, fraud and reputation risks, and helps to ensure significant issues are escalated and proactively mitigated. Among these processes and business practices are: product design, sales and marketing practices, sales compensation practices, asset management practices, fiduciary responsibilities, employment practices, underwriting and claims processing, privacy (i.e., handling of personal information) and regulatory filings. In addition, we have policies, processes and controls in place to help protect the Company, our customers and other related third parties from acts of fraud and from risks associated with money laundering and terrorist financing. Audit Services and Global Compliance periodically assess the effectiveness of the control environment. For further discussion of government regulation and legal proceedings, refer to “Government Regulation” and “Legal Proceedings” in our most recent Annual Information Form.

### **Technology, Information Security and Business Continuity Risks**

Technology is used in virtually all aspects of our business and operations including the creation and support of new products and services. Our technology infrastructure, information services and applications are governed and managed according to operational integrity, resiliency, data integrity and information security policies, standards and controls. Disruption to Information Services operations due to system failure, security breach or global crisis can have negative consequences for our businesses. We have business continuity and disaster recovery, information security, technology risk and other policies, plans and procedures in place designed to minimize the impact of business disruptions, ensure compliance with laws and regulations and protect confidential/personal information; however these may not be completely effective at avoiding impact to the business. Disruptions, breaches or violations caused by errors, natural disasters, man-made disasters, criminal activity, fraud, cyber attacks, pandemics or other events beyond our control, could prevent us from effectively operating our business, or could adversely impact us from a financial, operational and reputational perspective.

Technology related risks are managed through a standard systems development methodology, business continuity processes and information security practices as part of our Global Information Risk Management program. Global Information Services implements controls to mitigate risks associated with information security, information systems privacy and compliance, business continuity and disaster recovery. The Global Information Risk Management team maintains and updates policies along with standards of practice designed to ensure to the extent practical, key business functions can continue normal operations effectively and efficiently, in the event of a major disruption. Each business unit is accountable for preparing and maintaining its own detailed business continuity plans and processes and the global program incorporates periodic scenario analysis designed to validate the assessment of both critical and non-critical units, as well as the establishment and testing of appropriate business continuity plans for all critical functions. The business continuity team establishes and regularly tests crisis management plans and global crisis communications protocols. The divisions maintain off-site backup facilities and failover capability designed to minimize downtime and accelerate system recovery. As part of our standard vendor management process we subject our outsourcing arrangements, whereby a service provider performs a service activity on behalf of the Company, to standard review procedures, prior to their approval. We have policies and procedures in place to monitor the ongoing results and contractual compliance of such third party arrangements.

### **Human Resource Risks**

We compete with other insurance companies and financial institutions for qualified executives, employees and agents. Competition for the best people is intense and an inability to recruit qualified individuals may negatively impact our ability to execute on business strategies or to conduct our operations. We have established and implemented a number of human resource policies, practices and programs in order to manage these risks, including recruiting programs at every level of the organization, training and development programs, and competitive compensation programs that are designed to attract, motivate and retain high-performing employees.

### **Model Risk**

Our reliance on highly complex models for pricing, valuation and risk measurement, and for input to decision making, is increasing. Consequently, the risk of inappropriate use or interpretation of our models or their output, or the use of deficient models, data or assumptions is growing. Our model risk oversight program includes processes intended to ensure that our critical business models are conceptually sound, used as intended, and to assess the appropriateness of the inputs, assumptions, calculations and outputs.

### **Environmental Risk**

Our Environmental Policy reflects the Company’s commitment to conducting all business activities in a manner that recognizes the need to preserve the quality of the natural environment. Environmental Procedures have been designed to manage environmental risk and to achieve compliance with all applicable environmental laws and regulations for business units, affiliates and subsidiaries. Environmental risk may originate from investment properties that are subject to natural or man-made environmental risk. The environmental risk may result from on-site or off-site (adjacent) due to migration of regulated pollutants or contaminants with financial or reputational environmental risk and liability consequences by virtue of strict liability. Real estate assets may be owned, leased and/or managed, as well as mortgaged by Manulife who might enter into the chain of liability due to foreclosure ownership when in default. Environmental risk could also arise from natural disasters (e.g. weather, fire, earthquake, floods, pests) or human activities (use of chemicals, pesticides) conducted within the site or when impacted from adjacent sites. To mitigate environmental



risk, business units have established protocols and due diligence standards to identify environmental issues in advance of acquisition. Historic and background investigation and subsequent soil and ground water subsurface testing may be conducted as required to assess manageable environmental risk. Regular property inspections and limitations on permitted activities further manage environmental liability or financial risk. Other potentially significant financial risks for individual assets, such as fire and earthquake, have generally been insured where practicable.

### **Additional Risk Factors That May Affect Future Results**

The Accounting Standards Board of the CICA makes changes to the financial accounting and reporting standards that govern the preparation of our financial statements. These changes may be difficult to anticipate and may materially impact how we record and present our financial condition and results of operations. As discussed under "Critical Accounting and Actuarial Policies", the preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts and disclosures made in the financial statements and accompanying notes. These estimates and assumptions may require revision and actual results may differ materially from these estimates. As well, as noted under "Cautionary Statement Concerning Forward-Looking Statements", forward-looking statements involve risks and uncertainties and actual results may differ materially from those expressed or implied in such statements. Key risk factors and their management have been described above, summarized by major risk category.

Other factors that may affect future results include changes in government trade policy; monetary policy; fiscal policy; political conditions and developments in or affecting the countries in which we operate; technological changes; public infrastructure disruptions; climate change; changes in consumer spending and saving habits; the possible impact on local, national or global economies from public health emergencies, such as an influenza pandemic, and international conflicts and other developments including those relating to terrorist activities. Although we take steps to anticipate and minimize risks in general, unforeseen future events may have a negative impact on our business, financial condition and results of operations.

We caution that the preceding discussion of risks that may affect future results is not exhaustive. When relying on our forward-looking statements to make decisions with respect to our Company, investors and others should carefully consider the foregoing risks, as well as other uncertainties and potential events, and other external and Company specific risks that may adversely affect the future business, financial condition or results of operations of our Company.

# Capital Management Framework

Manulife seeks to manage its capital with the objectives of:

- Operating with sufficient capital to be able to honour all policyholder and other obligations with a high degree of confidence;
- Securing stability and flexibility to operate, ensuring best access to capital markets and maintaining target credit ratings; and
- Seeking to optimize return on capital to meet shareholders expectations, subject to constraints and considerations of adequate levels of capital established to meet the first two objectives.

Capital is managed and monitored in accordance with the Capital Management Policy, which is reviewed and approved by the Board of Directors. The policy establishes guidelines regarding the quantity and quality of capital, capital mobility, integration with risk and financial frameworks and proactive assessment of future capital requirements. The Board or its designated committees regularly review the Company's capital position and capital plans. Operational oversight of capital management is provided by the Finance Committee, consisting of senior finance, risk management and investment executives and chaired by the Chief Actuary. The committee reviews issues and initiatives that affect the capital position of MFC's subsidiaries and the Company as a whole.

In assessing appropriate levels of capital, the Company looks at both a global view and regulatory capital definitions and measures applicable to any given entity and jurisdiction in which we operate. The primary assessment measures compare available capital to required capital using risk based factors and methods. Assessments of capital adequacy include internal sensitivity testing, expectations of key external stakeholders such as regulators and rating agencies, peer comparisons and our internal risk capital measurement framework. To ensure ongoing compliance with regulatory constraints, our internal targets for capital exceed regulatory requirements as they take into account risk profiles and external stakeholder perspectives, among other considerations. Management monitors capital against those internal targets and initiates action appropriate given our business objectives.

Our capital assessment includes an annual Dynamic Capital Adequacy Testing ("DCAT"). This test is required by OSFI and assesses the strength of our capital position under severe shock scenarios that include assumptions determined in relation to our business and risk profile. Our DCAT typically includes assessments of shocks related to economic risks pertaining to the performance of equity markets, credit and interest rates, amongst others. The 2011 DCAT results demonstrate that we have sufficient assets to discharge policy liabilities in the various adverse scenarios tested. In addition to DCAT we periodically quantify impacts of various stress scenarios the results of which inform our ongoing proactive capital management.

Capital management is integrated into our product planning and performance management. Capital is generally allocated to business lines based on the higher of the internal risk-based capital and the regulatory capital levels applicable to each jurisdiction.

To manage our overall global capital levels, the currency mix of assets supporting capital is managed in relation to the Company's global required capital level. The impact of currency movements on the capital ratios is thus mitigated as both available and required capital rise (fall) when the Canadian dollar weakens (strengthens).

The composition of capital between equity and other capital instruments impacts the Company's financial strength ratings and therefore is an important consideration in determining the appropriate amount of leverage. The Company monitors and rebalances its capital mix through capital issuances and redemptions.

## MFC Consolidated Capital

The following measure of capital serves as the foundation of our capital management activities at the MFC level.

As at December 31,  
(C\$ millions)

	2011	2010	2009 <sup>(2)</sup>
Total equity <sup>(1)</sup>	\$ 24,879	\$ 24,675	\$ 28,907
Less AOCI (loss) on cash flow hedges	(91)	(55)	(48)
Total equity less AOCI (loss) on cash flow hedges	\$ 24,970	\$ 24,730	\$ 28,955
Liabilities for preferred shares and qualifying capital instruments	4,012	4,004	4,037
Non-controlling interest in subsidiaries <sup>(3)</sup>	–	–	202
<b>Total capital</b>	<b>\$ 28,982</b>	<b>\$ 28,734</b>	<b>\$ 33,194</b>

<sup>(1)</sup> Total equity includes unrealized gains and losses on AFS bonds and AFS equities, net of taxes. Starting in 2009, the current year net unrealized gain or loss on AFS bonds is not part of OSFI regulatory capital. As at December 31, 2011, the gain on AFS bonds, net of taxes, was \$193 (2010 – \$168).

<sup>(2)</sup> 2009 amounts shown are based on CGAAP prior to the adoption of IFRS.

<sup>(3)</sup> Included in total equity under IFRS for December 31, 2011 and 2010.

At December 31, 2011, the Company's capital increased by \$0.3 billion compared to prior year. Contributing factors included: \$0.5 billion increase from the impact of the weaker Canadian dollar, \$0.4 billion of preferred shares issued and \$0.2 billion of earnings, partially offset by cash dividends of \$0.7 billion and a \$0.2 billion decrease in unrealized gains on AFS securities. The \$0.55 billion of MLI subordinated debt capital issued in the fourth quarter offset \$0.55 billion of MLI subordinated debt capital redeemed in the first quarter.

The "Total capital" above does not include senior debt raised by MFC, amounting to \$5.5 billion at December 31, 2011. However, the funds raised through senior indebtedness that do not meet OSFI's definition of regulatory capital at MFC can be down-streamed into operating entities as qualifying regulatory capital at the subsidiary level. Rating agencies expect companies to limit this and other sources of financial leverage to levels appropriate for their ratings.

### **Capital and Funding Activities**

On February 16, 2011, we redeemed \$550 million of MLI 6.240% subordinated debentures. On May 31, 2011, \$220 million of 6.822% senior notes matured and were repaid, followed by the maturity and repayment of \$175 million of 6.646% of senior notes on November 30, 2011. During the year we issued \$200 million of 4.200% preferred shares on March 11, 2011; \$550 million of MLI 4.210% subordinated debentures on November 18, 2011 and \$200 million of 4.400% preferred shares on December 6, 2011.

In 2011, MFC's Dividend Reinvestment Plan ("DRIP") resulted in the issuance of 23 million common shares (2010 – 19 million) for a total consideration of \$298 million (2010 – \$314 million). The DRIP allows for issuance of common shares from treasury with a discount, at the discretion of the Board. For the first three quarterly dividends in 2010, the Company elected to issue DRIP shares from treasury with a discount of three per cent. The discount was changed to two per cent for the fourth quarter 2010 dividend and throughout 2011. Participation in the DRIP is strong, with enrolment of approximately one third of shares outstanding.

Our capital ratios were supported by the sale of our Life Retrocession business and by ceding a block of business in our Canadian Division to a third party reinsurer.

On June 30, 2012, the Company will have the right to call the total of \$1,000 million of capital notes issued by Manulife Financial Capital Trust, qualifying as Innovative Tier 1 capital under OSFI rules. The amount represents two tranches: \$940 million of 6.700% Manulife Financial Capital Trust Securities ("MaCS") Series A Units and \$60 million of 7.000% MaCS Series B Units. Depending on, among other things, capital adequacy assessments and regulatory approval of redemption, management will decide whether or not to exercise the right to call these instruments.

### **Common Shareholder Dividends and Dividend Payout Ratio**

The declaration and payment of shareholder dividends and the amount thereof are subject to the discretion of the Board and depend upon the results of operations, financial conditions, cash requirements and future prospects of the Company, taking into account regulatory restrictions on the payment of shareholder dividends as well as other relevant factors. Manulife's normal course target payout ratio for shareholder dividends ranges from 25% to 35% of earnings from operations excluding direct impacts of equity markets and interest rates, but the Board may approve dividends outside this range from time to time.

### **Regulatory Capital Position<sup>17</sup>**

The Company monitors and manages consolidated capital for MFC in compliance with the OSFI Guideline A2 – Capital Regime for Regulated Insurance Holding Companies and Non-Operating Life Companies, issued July 5, 2005. Under this regime our consolidated available capital is measured against a required amount of risk capital determined in accordance with the guideline. The capital position of consolidated MFC operations remains in excess of our internal targets.

MFC's operating activities are mostly all conducted within MLI or its subsidiaries. Some reinsurance business is undertaken outside the MLI consolidated framework. MLI is regulated by OSFI and is subject to consolidated risk based capital requirements using the OSFI MCCSR framework.

Our MCCSR ratio for MLI ended the year at a comfortable 216 per cent. While lower than the 249 per cent at the end of 2010, 30 points of the decline was the result of changes in accounting policies, clarifications of regulatory capital policies and the impact of lower interest rates on the amount of regulatory required capital. Specifically the combination of the impact of new accounting standards (IFRS) and the elimination of credit for asset risk transfer on related party reinsurance agreements reduced MLI's MCCSR ratio by approximately 18 points. In addition, lower interest rates not only reduced earnings and available capital, but also resulted in a decline of approximately 12 points due to the mechanics of the required capital formula. The year end ratio of 216 per cent should be considered in context of the significantly reduced earnings sensitivity to changes in interest rate and equity markets. The impact of risk reduction programs on capital ratio sensitivity has been somewhat more muted with most of our residual interest rate sensitivity resulting from the impact of lower interest rates on required capital, the lack of explicit credit in the capital formula for equity hedging and the impact of the smoothing formula for required capital for segregated fund guarantee required capital.

In addition to the 30 point impact discussed above, the beneficial impacts of the third party reinsurance transaction on our Canadian Individual Insurance business and the sale of the life retrocession business combined with earnings (net of goodwill write-off that is neutral for regulatory capital ratios) were more than offset over the year by the funding of shareholder dividends and growth in required capital not attributable to the decline in interest rates; netting to an additional three point reduction in the MCCSR ratio for 2011.

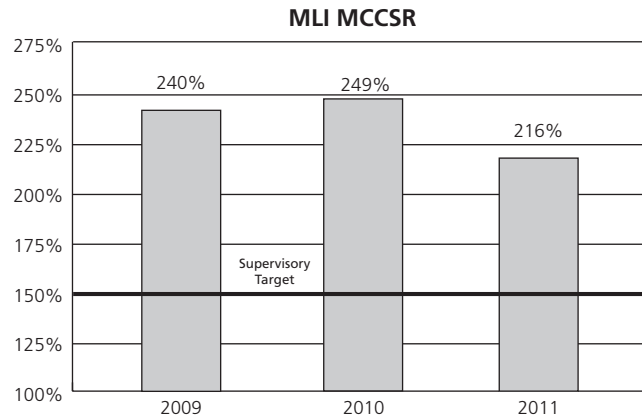
IFRS transition guidance outlined by OSFI required the impact of IFRS adoption on available capital to be phased-in over an eight quarter period which began with the first quarter of 2011. The impact on required capital is not subject to the phase-in rules. The phased-in adoption of IFRS reduced MLI's MCCSR ratio by approximately five points over 2011 and is expected to reduce the ratio by approximately a further two points over the remainder of the two year phase-in period ending with the fourth quarter of 2012.

<sup>17</sup> The risk management section of the MD&A outlines a number of regulatory capital risks.

In 2011, credit for the transfer of asset risk via a reinsurance agreement could no longer be reflected in regulatory required capital unless the assets are also transferred. This change reduced MLI's MCCR ratio by approximately 13 points.

The write-off of goodwill had no impact on the overall regulatory capital position as goodwill is excluded from available regulatory capital.

MLI's non-consolidated operations and subsidiaries all maintained capital levels in excess of local requirements as at December 31, 2011, with their capital ratios exceeding or within their internal target ranges. In particular, Manulife Canada Ltd., an OSFI regulated Canadian operating insurance company, had an MCCR ratio of 223 per cent, above the regulator's supervisory target of 150 per cent.



Actual MLI ratios.  
OSFI regulatory minimum is 120%, with 150% supervisory target.  
2009 and 2010 ratios are calculated on a CGAAP basis.

## Credit Ratings

Manulife Financial's insurance operating companies have strong ratings from the credit rating agencies for financial strength and claims paying ability. Maintaining strong ratings on debt and capital instruments issued by MFC and its subsidiaries allows us to access the capital markets at competitive pricing levels. Should these credit ratings decrease materially, our cost of funds may increase and our access to funding and capital through the capital markets could be reduced.

During 2011, A.M. Best revised the outlook from negative to stable on MFC and its subsidiaries, and all rating agencies maintained their assigned ratings. At December 31, 2011, all five rating agencies had a stable outlook. In February 2012, Fitch affirmed the financial strength ratings of our insurance operating companies and credit ratings and revised the outlook from stable to negative.

The following table summarizes the financial strength and claims paying ability ratings of MLI and certain of its subsidiaries as at March 13, 2012.

### Financial Strength/Claims Paying Ability Ratings

	S&P	Moody's	DBRS	Fitch	A.M. Best
The Manufacturers Life Insurance Company	AA-	A1	IC-1	AA-	A+
John Hancock Life Insurance Company (U.S.A.)	AA-	A1	Not Rated	AA-	A+
Manulife (International) Limited	AA-	Not Rated	Not Rated	Not Rated	Not Rated
Manulife Life Insurance Company (Japan)	AA-	Not Rated	Not Rated	Not Rated	Not Rated

# Critical Accounting and Actuarial Policies

## Adoption of IFRS

Effective January 1, 2011, the Company adopted International Financial Reporting Standards (“IFRS”) as a replacement of prior Canadian GAAP. The consolidated financial statements for the year ended December 31, 2011 reflect the Company’s first set of annual financial statements prepared under IFRS and include corresponding comparative financial information for 2010. For an overview of the impacts of the adoption of IFRS including a description of accounting policies selected, refer to note 25 – First-time adoption of IFRS in the Consolidated Financial Statements for the year ended December 31, 2011. The adoption of IFRS did not have a significant impact on our disclosure controls and procedures, information technology systems or business activities.

The preparation of financial statements in accordance with IFRS requires management to make estimates and assumptions that affect the reported amounts and disclosures made in the consolidated financial statements and accompanying notes. These estimates and assumptions are based on historical experience, management’s assessment of current events and conditions and activities that the Company may undertake in the future as well as possible future economic events. Actual results could differ from these estimates. The estimates and assumptions described in this section depend upon subjective or complex judgments about matters that may be uncertain and changes in these estimates and assumptions could materially impact the consolidated financial statements.

Our significant accounting policies are described in note 1 to the Consolidated Financial Statements. Significant estimation processes relate to the determination of insurance and investment contract liabilities, fair value of certain financial instruments, derivatives and hedge accounting, provisioning for asset impairment, determination of pension and other post-employment benefit obligations and expenses, income taxes and uncertain tax positions and valuation of goodwill and intangible assets as described below. In addition, in the determination of the fair values of invested assets, where observable market data is not available, management applies judgment in the selection of valuation models.

## Policy Liabilities

Policy liabilities for IFRS are valued under standards established by the Canadian Institute of Actuaries. These standards are designed to ensure we establish an appropriate liability on the balance sheet to cover future obligations to all our policyholders. Under IFRS, the assumptions underlying the valuation of policy liabilities are required to be reviewed and updated on an ongoing basis to reflect recent and emerging trends in experience and changes in risk profile of the business. In conjunction with prudent business practices to manage both product and asset related risks, the selection and monitoring of appropriate valuation assumptions is designed to minimize our exposure to measurement uncertainty related to policy liabilities.

## Determination of Policy Liabilities

Policy liabilities have two major components: a best estimate amount and a provision for adverse deviation. The best estimate amount represents the estimated value of future policyholder benefits and settlement obligations to be paid over the term remaining on in-force policies, including the costs of servicing the policies. The best estimate amount is reduced by the future expected policy revenues and future expected investment income on assets supporting the policies, before any consideration for reinsurance ceded. To determine the best estimate amount, assumptions must be made for a number of key factors, including future mortality and morbidity rates, investment returns, rates of policy termination, operating expenses, certain taxes (other than income taxes) and foreign currency. Reinsurance is used to transfer part or all of a policy liability to another insurance company at terms negotiated with that insurance company. A separate asset for reinsurance ceded is calculated based on the terms of the reinsurance treaties that are in force, with deductions taken for the credit standing of the reinsurance counterparties where appropriate.

To recognize the uncertainty involved in determining the best estimate actuarial liability assumptions, a provision for adverse deviation (“PfAD”) is established. The PfAD is determined by including a margin of conservatism for each assumption to allow for possible mis-estimation of, or deterioration in, future experience in order to provide greater comfort that the policy liabilities will be sufficient to pay future benefits. The Canadian Institute of Actuaries establishes suggested ranges for the level of margins for adverse deviation based on the risk profile of the business. Our margins are set taking into account the risk profile of our business. The effect of these margins is to increase policy liabilities over the best estimate assumptions. The margins for adverse deviation decrease the income that is recognized at the time a new policy is sold and increase the income recognized in later periods as the margins release as the remaining policy risks reduce.

## Best Estimate Assumptions

***We follow established processes to determine the assumptions used in the valuation of our policy liabilities. The nature of each risk factor and the process for setting the assumptions used in the valuation are discussed below.***

## Mortality

Mortality relates to the occurrence of death. Mortality assumptions are based on our internal as well as industry past and emerging experience and are differentiated by sex, underwriting class, policy type and geographic market. For our North American business we make assumptions about future mortality improvements using historic experience derived from population data. Reinsurance is used to offset some of our direct mortality exposure on in-force life insurance policies with the impact of the reinsurance directly reflected in our policy valuation. Actual mortality experience is monitored against these assumptions separately for each business. Where

mortality rates are lower than assumed for life insurance the result is favourable, and where mortality rates are higher than assumed for payout annuities, mortality results are favourable. Overall 2011 experience was favourable when compared with our assumptions. Changes to future expected mortality assumptions in the policy liabilities in 2011 resulted in a reduction in policy liabilities.

### **Morbidity**

Morbidity relates to the occurrence of accidents and sickness for the insured risks. Morbidity assumptions are based on our internal as well as industry past and emerging experience and are established for each type of morbidity risk and geographic market. For our Long-Term Care business we make assumptions about future morbidity improvements. Actual morbidity experience is monitored against these assumptions separately for each business. Our morbidity risk exposure relates to future expected claims costs for long-term care insurance, as well as for group benefits and certain individual health insurance products we offer. Overall 2011 experience was unfavourable when compared with our assumptions.

### **Property and Casualty**

Our Property and Casualty business insures against losses from natural and human disasters and accidental events. Reserves are held for incurred claims not yet reported, for claims reported but not yet paid and for expected future claims related to premiums paid to date. In 2011, we had significant adverse experience on business assumed on our retrocession business related to the earthquakes in Japan and New Zealand.

### **Policy Termination and Premium Persistency**

Policy termination includes lapses and surrenders, where lapses represent the termination of policies due to non-payment of premiums and surrenders represent the voluntary termination of policies by policyholders. Premium persistency represents the level of ongoing deposits on contracts where there is policyholder discretion as to the amount and timing of deposits. Policy termination and premium persistency assumptions are primarily based on our recent experience adjusted for expected future conditions. Assumptions reflect differences by type of contract within each geographic market and actual experience is monitored against these assumptions separately for each business. Overall 2011 experience was unfavourable when compared to our assumptions. A number of revisions were made to future expected policyholder behaviour assumptions in 2011 to reflect the emerging experience resulting in significant increases in policy liabilities in 2011, most notably for our Variable Annuity business. However, persistency experience on Variable Annuity business is not included in this analysis, but rather is included in the aggregate Variable Annuity results.

### **Expenses and Taxes**

Operating expense assumptions reflect the projected costs of maintaining and servicing in-force policies, including associated overhead expenses. The expenses are derived from internal cost studies and are projected into the future with an allowance for inflation. For some developing businesses, there is an expectation that unit costs will decline as these businesses mature. Actual expenses are monitored against assumptions separately for each business. Overall maintenance expenses for 2011 were unfavourable when compared with our assumptions. Taxes reflect assumptions for future premium taxes and other non-income related taxes. For income taxes, policy liabilities are adjusted only for temporary tax timing and permanent tax rate differences on the cash flows available to satisfy policy obligations.

### **Investment Returns**

We segment assets to support liabilities by business segment and geographic market and establish investment strategies for each liability segment. The projected cash flows from these assets are combined with projected cash flows from future asset purchases/sales to determine expected rates of return for future years. The investment strategies for future asset purchases and sales are based on our target investment policies for each segment and the re-investment returns are derived from current and projected market rates for fixed interest investments and our projected outlook for non-fixed interest assets. Credit losses are projected based on our own and industry experience, as well as specific reviews of the current investment portfolio. Investment return assumptions for each asset class also incorporate expected investment management expenses that are derived from internal cost studies. In 2011, actual investment returns were unfavourable when compared to our assumptions. Overall investment results, excluding returns on variable annuities, were favourable. While the decline in interest rates and public equity markets were adverse in the year, this unfavourable experience was more than offset by favourable results from asset trading, asset duration extension and gains on real estate, oil and gas and other non-fixed income assets.

### **Segregated Funds**

We offer segregated funds to policyholders that offer certain guarantees, including guaranteed returns of principal on maturity or death, as well as guarantees of minimum withdrawal amounts or income benefits. The on-balance sheet liability for these benefits is the expected cost of these guarantees including appropriate valuation margins for the various contingencies including mortality and lapse. The most dominant assumption is the return on the underlying funds in which the policyholders invest. This risk is mitigated through a dynamic hedging strategy. In 2011, experience on assets underlying segregated fund business which has guarantees due to changes in market value of funds under management was unfavourable for both the business that is hedged and the business that is not hedged. Experience on the hedged block was unfavourable due to higher hedging costs resulting from higher realized volatility and the positive correlation between equities and interest rates as well as adverse experience on the portion of the business within the hedged block, such as PfADs and certain underlying funds, which we have chosen not to hedge. Experience on the unhedged block



was unfavourable due to the general decline in equity markets throughout the year, where Canadian and Japan markets were down 11 per cent and 19 per cent, respectively, in the year, while the U.S. market was unchanged. Even in an unchanged market an earnings loss results because the actual returns do not meet the expected returns in the valuation models.

### Foreign Currency

Foreign currency risk results from a mismatch of the currency of the policy liabilities and the currency of the assets designated to support these obligations. We generally match the currency of our assets with the currency of the liabilities they support, with the objective of mitigating the risk of loss arising from movements in currency exchange rates. Where a currency mismatch exists, the assumed rate of return on the assets supporting the liabilities is reduced to reflect the potential for adverse movements in exchange rates.

### Experience Adjusted Products

Where policies have features that allow the impact of changes in experience to be passed on to policyholders through policy dividends, experience rating refunds, credited rates or other adjustable features, the projected policyholder benefits are adjusted to reflect the projected experience. Minimum contractual guarantees and other market considerations are taken into account in determining the policy adjustments.

### Provision for Adverse Deviation

The aggregate provision for adverse deviation is the sum of the provisions for adverse deviation for each risk factor. Margins for adverse deviation are established by product type and geographic market for each assumption or factor used in the determination of the best estimate actuarial liability. The margins are established based on the risk characteristics of the business being valued.

In addition to the explicit margin for adverse deviation, the valuation basis for segregated fund liabilities explicitly limits the future revenue recognition in the valuation basis to the amount necessary to offset acquisition expenses, after allowing for the cost of any guarantee features. The fees that are in excess of this limitation are reported as an additional margin and are shown in segregated fund non-capitalized margins.

The provision for adverse deviation and the future revenue deferred in the valuation due to the limitations on recognition of future revenue in the valuation of segregated fund liabilities are shown in the table below.

As at December 31,  
(C\$ millions)

	2011	2010
<b>Best estimate actuarial liability<sup>(1)</sup></b>	<b>\$ 134,514</b>	\$ 111,782
<b>Provision for adverse deviation</b>		
Insurance risks (mortality/morbidity)	\$ 9,008	\$ 8,455
Policyholder behavior (lapse/surrender/premium persistency)	3,074	3,089
Expenses	1,747	1,579
Investment risks (non-credit)	18,634	16,429
Investment risks (credit)	1,394	1,242
Segregated fund guarantees	5,240	3,012
Other	18	29
<b>Total provision for adverse deviation (PfAD)<sup>(1)</sup></b>	<b>\$ 39,115</b>	\$ 33,835
<b>Segregated funds – additional margins</b>	<b>8,686</b>	9,316
<b>Total of PfAD and additional segregated fund margins</b>	<b>\$ 47,801</b>	\$ 43,151

<sup>(1)</sup> Reported actuarial liabilities as at December 31, 2011 of \$173,629 (2010 – \$145,617) are composed of \$134,514 (2010 – \$111,782) of best estimate actuarial liability and \$39,115 (2010 – \$33,835) of PfAD.

The change in PfAD from period to period is impacted by changes in liability and asset composition, by movements in currency and movements in interest rates and by material changes in valuation assumptions. The overall increase in PfADs for insurance risks was driven by the decline in interest rates during the year as well as the appreciation of foreign currencies relative to the Canadian dollar.

### Sensitivity of Earnings to Changes in Assumptions

When the assumptions underlying our determination of policy liabilities are updated to reflect recent and emerging experience or change in outlook, the result is a change in the value of policy liabilities which in turn affects income. The sensitivity of after-tax income to changes in non-economic and certain asset related assumptions underlying policy liabilities is shown below, and assumes that there is a simultaneous change in the assumption across all business units.

For changes in asset related assumptions, the sensitivity is shown net of the corresponding impact on income of the change in the value of the assets supporting liabilities. In practice, experience for each assumption will frequently vary by geographic market and business and assumption updates are made on a business/geographic specific basis. Actual results can differ materially from these estimates for a variety of reasons including the interaction among these factors when more than one changes, changes in actuarial and investment return and future investment activity assumptions, actual experience differing from the assumptions, changes in business mix, effective tax rates and other market factors, and the general limitations of our internal models.

Participating business where we have the ability to pass both favourable and adverse experience to the policyholders through the participating dividend adjustment is excluded from this analysis.

### Sensitivity of Earnings to Changes in Non-economic Assumptions

For the years ended December 31, (C\$ millions)	Decrease in after-tax income	
	2011	2010
<b>Policy Related Assumptions</b>		
2% adverse change in future mortality rates <sup>(1)</sup>		
Products where an increase in rates increases policy liabilities	\$ (200)	\$ (300)
Products where a decrease in rates increases policy liabilities	(300)	(300)
5% increase in future morbidity rates <sup>(2),(3)</sup>	(1,200)	(1,100)
10% adverse change in future termination rates	(1,200)	(1,000)
5% increase in future expense levels	(300)	(300)

<sup>(1)</sup> An increase in mortality rates will generally increase policy liabilities for life insurance contracts whereas a decrease in mortality rates will generally increase policy liabilities for policies with longevity risk such as payout annuities.

<sup>(2)</sup> No amounts related to morbidity risk are included for policies where the policy liability provides only for claims costs expected over a short period, generally less than one year, such as Group Life and Health.

<sup>(3)</sup> The impacts of the sensitivities on LTC for morbidity, mortality and lapse are assumed to be moderated by partial offsets from the Company's ability to contractually raise premium rates in such events, subject to state regulatory approval.

### Potential impact on net income attributed to shareholders arising from changes in policy liabilities asset related assumptions

As at December 31, (C\$ millions)	Increase (decrease) in after-tax income			
	2011		2010	
	increase	decrease	increase	decrease
<b>Asset Related Assumptions Updated Periodically in Valuation Basis Changes</b>				
100 basis point change in ultimate fixed income reinvestment rates <sup>(1)</sup>	\$ 1,700	\$ (1,900)	\$ 1,500	\$ (1,900)
100 basis point change in future annual returns for public equities <sup>(2)</sup>	900	(900)	900	(900)
100 basis point change in future annual returns for other non-fixed income assets <sup>(3)</sup>	4,200	(3,800)	3,100	(2,900)
100 basis point change in equity volatility assumption for stochastic segregated fund modeling <sup>(4)</sup>	(300)	300	(300)	300

<sup>(1)</sup> Current URRs in Canada are 1.60% per annum and 3.70% per annum for short and long-term bonds, respectively, and in the U.S. are 1.10% per annum and 3.90% per annum for short and long-term bonds, respectively. Since the long-term URRs are based upon a five and ten year rolling average of government bond rates and the URR valuation assumptions are currently higher than the December 31, 2011 government bond rates, continuation of current rates or a further decline could have a material impact on net income. However, for this sensitivity, we assume the URRs decline with full and immediate effect.

<sup>(2)</sup> Expected long-term annual market growth assumptions for public equities pre-dividends for key markets are based on long-term historical observed experience and are 7.6% per annum in Canada, 8.0% per annum in the U.S., 5.2% per annum in Japan and 9.5% per annum in Hong Kong. These returns are then reduced by margins for adverse deviation to determine net yields used in the valuation. The amount includes the impact on both segregated fund guarantee reserves and on other policy liabilities. For a 100 basis point increase in expected growth rates, the impact from segregated fund guarantee reserves is \$700 million (2010 – \$700 million). For a 100 basis point decrease in expected growth rates, the impact from segregated fund guarantee reserves is \$700 million (2010 – \$800 million).

<sup>(3)</sup> Other non-fixed income assets include commercial real estate, timber and agricultural real estate, oil and gas, and private equities. The assumed returns on other non-fixed income assets net of provisions for adverse deviation and after taking into account the impact of differential taxation, have a similar impact on policyholder liabilities as the assumptions for public equities. The increased sensitivity from December 31, 2010 to December 31, 2011 is primarily related to the decline in fixed income rates over the year (reducing the rate at which funds can reinvest in) as well as the change in foreign exchange rates in the year.

<sup>(4)</sup> Volatility assumptions for public equities are based on long-term historic observed experience and are 18.05% per annum in Canada and 16.55% per annum in the U.S. for large cap public equities, and 18.35% per annum in Japan and 34.1% per annum in Hong Kong.

Under Canadian IFRS, we must test a number of prescribed interest rate scenarios. The scenario that produces the largest reserves is used and is called the booking scenario. The resulting interest scenario for most of our business is a gradual grading of market interest rates from current market levels to assumed ultimate reinvestment rates over 20 years.

The sensitivity of net income attributed to shareholders to a decline in the ultimate reinvestment rates is largely unchanged from last year primarily due to the change in the booking scenario for reserves should current rates decline by 100 basis points. This increases the sensitivity of that scenario and lowers the sensitivity of a change in the URR. The sensitivity to changes in public equity returns remains unchanged from 2010. Market returns in 2011 below the expected returns assumed in the valuation increased sensitivity but this was offset by the increased amounts of dynamic hedges that were put in place in 2011. The increase in sensitivity to a 100 basis point change in returns for other non-fixed income assets is primarily related to the decline in fixed income rates over the year, which reduces the rate at which we can reinvest, as well as the change in foreign exchange rates over the year.

### Review of Actuarial Methods and Assumptions

The 2011 full year review of the actuarial methods and assumptions underlying policy liabilities produced an increase in the policy liabilities of \$1,515 million net of reinsurance ceded. Net of the impacts on participating surplus and minority interests, this resulted in a decrease in net income attributable to shareholders of \$1,188 million post-tax.

The comprehensive 2011 review of valuation methods and assumptions was completed in the third quarter of 2011. In conjunction with prudent business practices to manage both product and asset related risks, the selection and monitoring of appropriate valuation assumptions are designed to minimize our exposure to measurement uncertainty related to policy liabilities. While the assumptions

selected represent the Company's current best estimates and assessment of risk, the ongoing monitoring of emerging actuarial and investment experience and the economic environment, are likely to result in future changes to the valuation assumptions, which could be material.

The following table summarizes the full year pre-tax policy liability impact of the basis changes by key category, as well as the corresponding impact on shareholders' net income (post-tax).

<b>For the year ended December 31, 2011</b>		
<b>(C\$ millions)</b>	To policy liabilities	To net income attributed to shareholders
<b>Assumption</b>		
Mortality and morbidity		
U.S. Life mortality update	\$ 754	\$ (475)
Other mortality updates	(986)	636
Future mortality and morbidity improvements	(180)	97
Lapses and policyholder behaviour		
VA lapse update	435	(309)
Insurance lapse update	114	(93)
Expenses	141	(85)
Investment returns		
URR update	612	(437)
Other updates	385	(327)
Other valuation model methodology and model refinements	240	(195)
<b>Net impact</b>	<b>\$ 1,515</b>	<b>\$ (1,188)</b>

### **Mortality and morbidity changes**

John Hancock Life Insurance completed a detailed study of life insurance mortality at the older ages. Based on our own experience as well as industry trends and observations, expected mortality rates at the older issue ages and attained ages were increased resulting in a reserve increase of \$754 million (post-tax charge of \$475 million).

Other mortality updates, resulting in a reserve reduction of \$986 million, included updates to U.S. Variable Annuities as well as assumption reviews and updates in Canada, Japan and Singapore.

A reduction in reserves of \$180 million resulted from the implementation of future mortality and morbidity improvements in reserves for North American insurance businesses. Valuation standards for reporting on a Canadian IFRS basis were amended in 2011 to allow future mortality improvements to be reflected in reserves where a decrease in reserves results.

### **Lapse and policyholder behavior assumptions**

Base lapse rates (i.e., lapse rates on out-of-the-money business) and other policyholder behaviour assumptions for Variable Annuity contracts were reduced to reflect more closely observed experience resulting in a reserve increase of \$435 million.

Lapse rates and premium persistency assumptions across several insurance business units were updated to reflect updated experience results. This resulted in a reserve increase of \$114 million.

### **Expenses**

Policy liabilities were increased by \$141 million to reflect the impact of projected letter of credit costs and expense study updates primarily in the U.S. business units, partially offset by release of redundant expense margins in Canada.

### **Investment returns**

Updates to the URR assumptions, most of which occurred in the second quarter of 2011, resulted in an increase of \$612 million to policy liabilities.

Policy liabilities increased by \$385 million for updates to commutation rates for GMWB business as well as updates to other non-fixed income assumptions including purchases.

### **Other valuation model methodology and model refinements**

A number of modeling refinements specific to individual business units were made to better model future cash flows that netted to a reserve increase of \$240 million. The major components are reserve increases due to a review of the modeling for payout annuities and refinements to modeling of Guaranteed Withdrawal Amounts partly offset by the impact of a systems conversion in the U.S.

### **2010**

The 2010 review of the actuarial methods and assumptions underlying policy liabilities produced a net increase in the policy liabilities of \$2,876 million. Net of the impacts on participating surplus, minority interests, and restatement of prior period retained earnings, this resulted in a decrease in 2010 shareholders' post-tax income of \$2,075 million.

## Change in Insurance Contract Liabilities

The change in insurance contract liabilities can be attributed to several sources: new business, acquisitions, in-force movement and currency impact. Changes in insurance contract liabilities are substantially offset in the financial statements by premiums, investment income, policy benefits and other policy related cash flows. The changes in insurance contract liabilities by business segment are shown below:

### 2011 Insurance Contract Liability Movement Analysis

(C\$ millions)	Asia Division	Canadian Division	U.S. Insurance	U.S. Wealth Management	Corporate and Other	Total
Balance, January 1, 2011	\$ 21,379	\$ 42,317	\$ 57,819	\$ 27,750	\$ 1,215	\$ 150,480
New business	\$ 273	\$ 444	\$ 949	\$ 686	\$ (2)	\$ 2,350
In-force movement	4,135	4,029	10,585	3,985	(917)	21,817
Changes in methods and assumptions	77	352	1,506	(399)	12	1,548
Currency impact	869	2	1,743	807	22	3,443
Total net changes	\$ 5,354	\$ 4,827	\$ 14,783	\$ 5,079	\$ (885)	\$ 29,158
<b>Balance, December 31, 2011</b>	<b>\$ 26,733</b>	<b>\$ 47,144</b>	<b>\$ 72,602</b>	<b>\$ 32,829</b>	<b>\$ 330</b>	<b>\$ 179,638</b>

For new business, the segments with large positive general account premium revenue at contract inception show increases in policy liabilities. For segments where new business deposits are primarily into segregated funds, the increase in policy liabilities related to new business is small since the increase measures only general account liabilities. New business policy liability impact is negative when estimated future premiums together with future investment income, is expected to be more than sufficient to pay estimated future benefits, policyholder dividends and refunds, taxes (excluding income taxes) and expenses on new policies issued.

The in-force movement over the year is an increase of \$21,817 million. A material part of the in-force movement increase was related to the decline in interest rates and the resulting impact on the fair value of assets which back those liabilities. The decrease in the Corporate and Other segment is related to the sale of the Reinsurance Life Retrocession business and John Hancock Accident and Health operation that is closed to new business and running off.

The increase of \$1,548 million from changes in methods and assumptions includes a comprehensive review of all valuation methods and assumptions and results in a decrease in pre-tax earnings.

Of the \$24,167 million net increase in insurance contract liabilities related to new business and in-force movement, \$23,634 million is an increase in actuarial liabilities. The remaining is an increase of \$533 million in other insurance contract liabilities.

The increase in policy liabilities from currency reflects the depreciation of the Canadian dollar relative to the U.S. dollar as well as Japanese yen. To the extent assets are currency matched to liabilities, the increase in insurance contract liabilities due to currency is offset by a corresponding increase from currency in the value of assets supporting those liabilities.

### 2010 Insurance Contract Liability Movement Analysis

(C\$ millions)	Asia Division	Canadian Division	U.S. Insurance	U.S. Wealth Management	Corporate and Other	Total
Balance, January 1, 2010	\$ 17,268	\$ 38,845	\$ 53,856	\$ 28,461	\$ 1,469	\$ 139,899
New business	\$ (43)	\$ 708	\$ 1,333	\$ 1,139	\$ (4)	\$ 3,133
In-force movement	3,697	2,405	3,843	(1,020)	(220)	8,705
Changes in methods and assumptions	214	361	1,727	509	68	2,879
Currency impact	243	(2)	(2,940)	(1,339)	(98)	(4,136)
Total net changes	\$ 4,111	\$ 3,472	\$ 3,963	\$ (711)	\$ (254)	\$ 10,581
<b>Balance, December 31, 2010</b>	<b>\$ 21,379</b>	<b>\$ 42,317</b>	<b>\$ 57,819</b>	<b>\$ 27,750</b>	<b>\$ 1,215</b>	<b>\$ 150,480</b>

For new business, the segments with large positive general account premium revenue at contract inception show increases in policy liabilities. For segments where new business deposits are primarily into segregated funds, the increase in policy liabilities related to new business is small since the increase measures only general account liabilities. New business policy liability impact is negative when estimated future premiums together with future investment income, is expected to be more than sufficient to pay estimated future benefits, policyholder dividends and refunds, taxes (excluding income taxes) and expenses on new policies issued.

The in-force movement over the year is an increase of \$8,705 million. A significant part of the in-force movement increase was related to the decline in interest rates and the resulting impact on the fair value of assets which back those liabilities. The large reduction of \$1,020 million for in-force movements on the U.S. Wealth Management block includes a reduction from net maturity benefits on institutional contracts, a product line that is intentionally being de-emphasized. The decrease in the Corporate and Other segment is related to the John Hancock Accident and Health operation that is closed to new business and running off.

The increase of \$2,879 million from changes in methods and assumptions includes a comprehensive review of all valuation methods and assumptions and results in a decrease in pre-tax earnings.

The reduction in policy liabilities from currency reflects the appreciation of the Canadian dollar relative to the U.S. dollar. To the extent assets are currency matched to liabilities, the reduction in policy liabilities due to currency is offset by a corresponding reduction from currency in the value of assets supporting those liabilities.

Of the \$11,838 million net increase in policy liabilities related to new business and in-force movement, \$10,950 million is an increase in actuarial liabilities. The remaining is an increase of \$888 million in other policy liabilities.

### **Consolidation**

Consolidation is required for those entities in which the Company, directly or indirectly, has power to exercise control over financial and operating policies in order to gain economic benefits. The existence and effect of potential voting rights that are currently exercisable or convertible are considered in assessing whether the Company controls another entity. Special Purpose Entities (“SPEs”) are consolidated when the substance of the relationship between the Company and that entity indicates control.

Potential indicators of control include an assessment of the Company’s exposure to the risks and benefits of the SPE. This assessment of risks and benefits is based on arrangements in place and the assessed risk exposures at inception. The initial assessment is reconsidered at a later date if:

- a) the Company acquires additional interests in the entity;
- b) the contractual arrangements of the entity are amended such that the relative exposure to risks and benefits change; or
- c) if the Company acquires control over the main operating and financial decisions of the entity.

Subsidiaries are consolidated from the date on which control is transferred to the Company and cease to be consolidated from the date that control ceases.

### **Fair Value of Invested Assets**

A large portion of the Company’s invested assets are recorded at fair value. Refer to note 1 of the 2011 Consolidated Financial Statements for a description of the methods used in determining fair value for applicable invested assets. When quoted prices in active markets are not available for a particular investment, significant judgment is required to determine an estimated fair value based on market standard valuation methodologies. The market standard valuation methodologies utilized by the Company include discounted cash flow methodologies, matrix pricing or other similar techniques. The inputs to these market standard valuation methodologies include, but are not limited to: current interest rates or yields for similar instruments, credit rating of the issuer or counterparty, industry sector of the issuer, coupon rate, call provisions, sinking fund requirements, tenor (or expected tenor) of the instrument, management’s assumptions regarding liquidity and estimated future cash flows. Accordingly, the estimated fair values are based on available market information and management’s judgments about the key market factors impacting these financial instruments. Financial markets are susceptible to severe events evidenced by rapid depreciation in asset values accompanied by a reduction in asset liquidity. The Company’s ability to sell securities, or the price ultimately realized for these securities, depends upon the demand and liquidity in the market and increases the use of judgment in determining the estimated fair value of certain securities.

### **Evaluation of Invested Asset Impairment**

AFS fixed income and equity securities are carried at fair market value, with changes in fair value recorded in Other Comprehensive Income (“OCI”) with the exception of unrealized gains and losses on foreign currency translation of AFS fixed income securities which are included in income. Impaired securities are reviewed on a regular basis and any fair value decrement is transferred out of AOCI and recorded in income when it is deemed probable that the Company will not be able collect all amounts due according to the contractual terms of a fixed income security or when fair value of an equity security has declined significantly below cost or for a prolonged period of time.

Provisions for impairments of mortgage loans and private placement loans are recorded with losses reported in earnings when there is no longer reasonable assurance as to the timely collection of the full amount of the principal and interest.

Significant judgment is required in assessing whether an impairment has occurred and in assessing fair values and recoverable values. Key matters considered include economic factors, company and industry specific developments and specific issues with respect to single issuers and borrowers.

Changes in circumstances may cause future assessments of asset impairment to be materially different from current assessments, which could require additional provisions for impairment. Additional information on the process and methodology for determining the allowance for credit losses is included in the discussion of credit risk in note 10 to the Consolidated Financial Statements.

### **Derivative Financial Instruments**

The Company uses derivative financial instruments (“derivatives”) to manage exposures to foreign currency, interest rate, equity and other market risks arising from on-balance sheet financial instruments, selected anticipated transactions and certain guarantee related actuarial liabilities. Refer to note 5 of the 2011 Consolidated Financial Statements for a description of the methods used to determine the fair value of derivatives.

The accounting for derivatives is complex and interpretations of the primary accounting guidance continue to evolve in practice. Judgment is applied in determining the availability and application of hedge accounting designations and the appropriate accounting

treatment under such accounting guidance. If it was determined that hedge accounting designations were not appropriately applied, reported net income could be materially affected. Differences in judgment as to the availability and application of hedge accounting designations and the appropriate accounting treatment may result in a differing impact on the consolidated financial statements of the Company from that previously reported. Assessments of hedge effectiveness and measurements of ineffectiveness of hedging relationships are also subject to interpretations and estimations and different interpretations or estimates may have a material effect on the amount reported in net income.

### **Employee Future Benefits**

The Company maintains a number of plans providing pension (defined benefit and defined contribution) and other benefits to eligible employees and agents after employment. The traditional defined benefit pension plans provide benefits based on years of service and average earnings at retirement. Due to the long-term nature of these plans and of the post-employment benefit plans, the calculation of the benefit expense and accrued benefit obligations depends on various economic assumptions such as discount rates, expected rates of return on plan assets, health care cost trend rates and compensation increase rates. These assumptions are determined by management and are reviewed annually. Differences between actual and assumed experience may affect the amount of the accrued benefit obligation and benefit expense. The key weighted average assumptions used, as well as the sensitivity of estimated liabilities to these assumptions, are presented in note 17 to the 2011 Consolidated Financial Statements.

Contributions to the defined benefit pension and funded post-employment plans are also subject to various projections and assumptions based on the demographic profile of the membership, expected rates of return on plan assets and compensation increase rates, as presented in note 17 to the 2011 Consolidated Financial Statements.

The Company's broad-based pension plans are funded in accordance with actuarially determined amounts required to satisfy any applicable pension regulations. During 2011 the Company contributed \$47 million (2010 – \$48 million) to the broad-based pension plans and as at December 31, 2011, the shortfall of fair value of plan assets over plan obligations amounted to \$252 million (2010 – \$119 million), as presented in note 17 to the 2011 Consolidated Financial Statements. For 2012, the required funding for the Company's largest Canadian and U.S. pension plans is expected to be approximately \$40 million.

The Company's supplemental pension plans for executives are for the most part unfunded. As at December 31, 2011, the shortfall of fair value of plan assets over plan obligations amounted to \$797 million (2010 – \$755 million), as presented in note 17 to the 2011 Consolidated Financial Statements.

The Company's other post-employment benefit plans are also for the most part unfunded. As at December 31, 2011, the shortfall of fair value of plan assets over plan obligations amounted to \$414 million (2010 – \$440 million), as presented in note 17 to the 2011 Consolidated Financial Statements.

The Company reviews the appropriateness of the plans' investment policy and strategy on a regular basis. The current asset mix and level of investment risk of the Company's pension plans reflects their long-term nature.

### **Income Taxes**

The Company is subject to income tax laws in various jurisdictions. Tax laws are complex and potentially subject to different interpretations by the taxpayer and the relevant tax authority. The provision for income taxes represents management's interpretation of the relevant tax laws and its estimate of current and future income tax implications of the transactions and events during the period. A deferred income tax asset or liability is recognized whenever an amount is recorded for accounting purposes but not for tax purposes or vice versa. Deferred tax assets and liabilities are recorded based on expected future tax rates and management's assumptions regarding the expected timing of the reversal of such temporary differences. The realization of deferred tax assets depends upon the existence of sufficient taxable income within the carryback or carryforward periods under the tax law in the applicable tax jurisdiction. Valuation allowances are established when management determines, based on available information, that it is more likely than not that deferred income tax assets will not be realized. Factors in management's determination consider the performance of the business including the ability to generate capital gains. Significant judgment is required in determining whether valuation allowances should be established, as well as the amount of such allowances. When making such determinations, consideration is given to, among other things, the following:

- a) future taxable income exclusive of reversing temporary differences and carryforwards;
- b) future reversals of existing taxable temporary differences;
- c) taxable income in prior carryback years; and
- d) tax planning strategies.

The Company may be required to change its provision for income taxes if the ultimate deductibility of certain items is successfully challenged by taxing authorities or if estimates used in determining valuation allowances on deferred tax assets significantly change, or when receipt of new information indicates the need for adjustment in valuation allowances. Additionally, future events, such as changes in tax laws, tax regulations, or interpretations of such laws or regulations, could have an impact on the provision for income tax, deferred tax balances and the effective tax rate. Any such changes could significantly affect the amounts reported in the consolidated financial statements in the year these changes occur.

The Company is an investor in a number of leasing transactions and has established provisions for possible disallowance of the tax treatment and for interest on past due taxes. The Company continues to believe that deductions originally claimed in relation to these



arrangements are appropriate. Should the tax attributes of all our lease transactions be fully denied, the maximum after-tax exposure amounts to the interest and other charges estimated to be an additional US\$127 million as at December 31, 2011.

### Goodwill and Intangible Assets

Under IFRS, goodwill is tested at the cash generating unit level ("CGU") or group of CGUs level. A CGU comprises the smallest group of assets that are capable of generating largely independent cash flows and is either a business segment or a level below. As a result of the current economic environment including the persistent low interest rates in 2011, the Company recorded a goodwill impairment charge of \$665 million (US\$650 million) attributable to our U.S. Life Insurance CGU. This non-cash charge recorded in our Corporate and Other segment does not effect our ongoing operations or our regulatory capital ratios. The tests performed in 2011 demonstrated that there was no impairment of intangible assets with indefinite lives.

Going forward, the impact of economic conditions and changes in product mix suggests a lower margin of recoverable value relative to carrying value attributable to our Canadian Individual Life CGU. As a result of these factors and the granular level of goodwill testing, impairment charges could occur in the future. The goodwill testing for 2012 will be updated based on the conditions that exist in 2012 and may result in further impairment charges, which could be material.

### Changes in Accounting Policies

#### Future Accounting and Reporting Changes

There are a number of accounting and reporting changes issued under IFRS including those still under development by the International Accounting Standards Board ("IASB") that will impact the Company beginning in 2012 and subsequently. A summary of the most recently issued new accounting standards are as follows:

Topic	Effective date	Measurement/ presentation	Expected impact
Amendments to IFRS 7 "Financial Instruments: Disclosures"	Jan. 1, 2012 Jan. 1, 2013	Disclosure	Not expected to be a significant impact.
Amendment to IAS 12 "Income Taxes"	Jan. 1, 2012	Measurement	Not expected to be a significant impact.
IFRS 10, IFRS 11, IFRS 12 and amendments to IAS 27 and IAS 28 regarding consolidation, disclosures and related matters	Jan. 1, 2013	Measurement and disclosure	Not expected to be a significant impact.
IFRS 13 "Fair Value Measurement"	Jan. 1, 2013	Measurement and disclosure	Not expected to be a significant impact.
Amendments to IAS 1 "Presentation of Financial Statements"	Jan. 1, 2013	Presentation	Not expected to be a significant impact.
Amendments to IAS 19 "Employee Benefits"	Jan. 1, 2013	Measurement	Could have a material adverse effect on the financial statements and regulatory capital at transition and subsequently.
IFRS 9 "Financial Instruments"	Jan. 1, 2015	Measurement	Currently assessing.

#### Amendments to IFRS 7 "Financial Instruments: Disclosures"

The amendments to IFRS 7 "Disclosures – Transfer of Financial Assets", issued in October 2010, increase the disclosure requirements for transactions involving transfers of financial assets. These amendments are intended to provide greater transparency around risk exposures when a financial asset is transferred but the transferor retains some level of continuing involvement in the asset. The amendments also require disclosures where transfers of financial assets do not occur evenly throughout the period.

The amendments to IFRS 7 are effective for fiscal years beginning on or after July 1, 2011. The adoption of these amendments is not expected to have a significant impact on the Consolidated Financial Statements.

#### Amendment to IAS 12 "Income Taxes"

An amendment to IAS 12 was issued in December 2010 that provides a practical approach to the measurement of deferred tax liabilities and deferred tax assets when investment property is measured using the fair value model under IAS 40 "Investment Property". Where entities measure deferred tax liabilities and deferred tax assets using a tax rate and tax base that are consistent with the expected manner of recovery or settlement, the amendment provides a rebuttable presumption for investment property measured using the fair value model that its carrying amount will be recovered through sale. This amendment is effective for fiscal years beginning on or after January 1, 2012. The adoption of these amendments is not expected to have a significant impact on the Consolidated Financial Statements.

## **IFRS 10 “Consolidated Financial Statements”, including:**

### **Amendments to IAS 27 “Separate Financial Statements”**

### **IFRS 11 “Joint Arrangements”**

### **IFRS 12 “Disclosure of Interests in Other Entities”**

### **Amendments to IAS 28 “Investments in Associates and Joint Ventures”**

IFRS 10 “Consolidated Financial Statements”, amendments to IAS 27 “Separate Financial Statements”, IFRS 11 “Joint Arrangements”, IFRS 12 “Disclosure of Interests in Other Entities” and amendments to IAS 28 “Investments in Associates and Joint Ventures” were all issued in May 2011 to improve consolidation and joint venture accounting. Each standard has an effective date for fiscal years beginning on or after January 1, 2013.

IFRS 10 replaces the consolidation guidance in IAS 27 “Separate Financial Statements” and SIC-12 “Consolidation – Special Purpose Entities” by introducing a single consolidation model for all entities based on control, irrespective of the nature of the investee. Under IFRS 10, control is based on whether an investor has 1) power over the investee; 2) exposure, or rights, to variable returns from its involvement with the investee; and 3) the ability to use its power over the investee to affect the amount of the returns. The adoption of IFRS 10 is not expected to have a significant impact on the consolidated financial statements although we expect that certain investments in private equity funds and a timber fund will be deconsolidated from our Consolidated Financial Statements.

IFRS 11 introduces new accounting requirements for joint arrangements, replacing IAS 31 “Interests in Joint Ventures”. The option to apply the proportional consolidation method when accounting for jointly controlled entities is removed. The adoption of IFRS 11 is not expected to have a significant impact on the Consolidated Financial Statements as the Company does not have significant joint venture arrangements.

IFRS 12 requires enhanced disclosures about both consolidated entities and unconsolidated entities in which an entity has involvement. The objective of IFRS 12 is to present information so that financial statement users may evaluate the basis of control, any restrictions on consolidated assets and liabilities, risk exposures arising from involvements with unconsolidated structured entities and non-controlling interest holders’ involvement in the activities of consolidated entities. The adoption of IFRS 12 is not expected to have a significant impact on the Consolidated Financial Statements.

IAS 28 is amended for conforming changes based on the issuance of IFRS 10, IFRS 11 and IFRS 12 and the adoption of these amendments is not expected to have a significant impact on the Consolidated Financial Statements.

### **IFRS 13 “Fair Value Measurement”**

IFRS 13 “Fair Value Measurement” was issued in May 2011 and replaces existing IFRS guidance on fair value measurement with a single standard. IFRS 13 defines fair value, provides guidance on how to determine fair value and requires disclosures about fair value measurements. IFRS 13 does not change the requirements regarding which items should be measured or disclosed at fair value. The standard is effective for fiscal years beginning on or after January 1, 2013. The adoption of IFRS 13 will result in additional financial statement disclosure but is not expected to have a significant impact on the Consolidated Financial Statements.

### **Amendments to IAS 1 “Presentation of Financial Statements”**

An amendment to IAS 1 was issued in June 2011 requiring changes to the presentation of items of other comprehensive income. Under the amendments, presentation of items within other comprehensive income will be separately presented based on whether or not the item will be subsequently reclassified into income. The amendments are effective for the Company for fiscal years beginning on or after January 1, 2013. The adoption of these amendments is not expected to have a significant impact on the Consolidated Financial Statements.

### **Amendments to IAS 19 “Employee Benefits”**

The amendments to IAS 19 “Employee Benefits” were issued in June 2011. The amendments require the full funded status of the plan to be reflected in the Consolidated Statements of Financial Position and eliminate the corridor approach for amortization of actuarial gains and losses. This will result in actuarial gains and losses being recognized in full in other comprehensive income when they occur and no longer recognized in income. Past service costs will be recognized when a plan is amended with no deferral over the vesting period. The net benefit cost for defined benefit plans will be disaggregated into service cost and finance cost components in the Consolidated Statements of Income. Finance cost will be calculated using interest rates based on high quality corporate bond yields. Further, these amendments include enhanced disclosures about the characteristics of defined benefit plans and the risks to which the entity is exposed through participation in those plans.

The amendments to IAS 19 are effective for fiscal years beginning on or after January 1, 2013. At December 31, 2011, the consolidated pre-tax unrecognized net actuarial loss for the Company’s pension and post-employment benefits was \$1,011 and \$58, respectively, which will be reflected in AOCI, a component of equity, upon adoption. If these amounts persist at the date of adoption, they are expected to result in a significant reduction of our capital ratios and could result in significant ongoing volatility in available capital, if regulatory capital includes this component of AOCI in the future. The actual impact to the Company will be based on actuarial estimates, market conditions and capital requirements that exist at the date of transition.

## **Amendments to IFRS 7 “Financial Instruments: Disclosure”**

### **Amendments to IAS 32 “Financial Instruments: Presentation”**

The amendments to IFRS 7 – Offsetting Financial Assets and Financial Liabilities issued in December 2011 introduce new disclosure requirements for financial instruments relating to their rights of offset and related arrangements under an enforceable master netting agreement or similar arrangements. The amendments to IFRS 7 are effective for fiscal years beginning on or after January 1, 2013. The Company is assessing the impact of these new disclosure requirements on its Consolidated Financial Statements.

The amendments to IAS 32 – Offsetting Financial Assets and Financial Liabilities also issued in December 2011 clarify the basis for offsetting financial instruments presented in the statement of financial position. The amendments to IAS 32 are effective for fiscal years beginning on or after January 1, 2014. The Company is currently assessing the impact of these amendments on its Consolidated Financial Statements.

### **IFRS 9 “Financial Instruments”**

IFRS 9 “Financial Instruments” issued in November 2009 and amended in October 2010 is the first phase of a three phase project to replace IAS 39 “Financial Instruments: Recognition and Measurement”. IFRS 9 currently provides that financial assets are measured at either amortized cost or fair value on the basis of the entity’s business model for managing the financial assets and the contractual cash flow characteristics of the financial assets. The classification and measurement for financial liabilities remains generally unchanged, however, revisions have been made in the accounting for changes in fair value of a financial liability attributable to changes in the credit risk of that liability. The other phases of this project which are currently under development include impairment and hedge accounting.

IFRS 9 is effective for annual periods beginning on or after January 1, 2015. The Company is assessing the impact of IFRS 9 on its Consolidated Financial Statements in conjunction with the completion of the other phases of this project.

### **Differences between IFRS and Hong Kong Financial Reporting Standards**

The consolidated financial statements of Manulife Financial are presented in accordance with IFRS. IFRS differs in certain respects from Hong Kong Financial Reporting Standards (“HKFRS”).

The primary difference between IFRS and HKFRS is the determination of policy liabilities. In certain interest rate environments, policy liabilities determined in accordance with HKFRS may be higher than those computed in accordance with current IFRS.

### **IFRS and Hong Kong Regulatory Requirements**

Insurers in Hong Kong are required by the Office of the Commissioner of Insurance to meet minimum solvency requirements. As at December 31, 2011, the Company has sufficient assets to meet the minimum solvency requirements under both Hong Kong regulatory requirements and IFRS.

# U.S. GAAP Disclosures

With the adoption of IFRS in 2011, the Company is no longer required to reconcile its annual financial results to U.S. GAAP in the consolidated financial statements. Instead, we have elected to disclose certain consolidated U.S. GAAP information in our MD&A.

For the full year 2011, net income in accordance with U.S. GAAP<sup>18</sup> was \$3,765 million, \$3,520 million higher than our results under IFRS. Variable annuity accounting differences totaled \$2,927 million and investment related accounting differences totaled (\$120) million.

As we are no longer reconciling our annual financial results under U.S. GAAP in our consolidated financial statements, net income in accordance with U.S. GAAP is considered a non-GAAP financial measure. A reconciliation of the major differences in net income attributed to shareholders is as follows:

## U.S. GAAP Results

For the years ended December 31,  
(C\$ millions)

	2011	2010	2009 <sup>(1)</sup>
<b>Net income (loss) attributed to shareholders in accordance with IFRS</b>	<b>\$ 129</b>	<b>\$ (1,663)</b>	<b>\$ 1,402</b>
Non-controlling interest and participating policyholders' income under IFRS	116	137	34
<b>Net income (loss) in accordance with IFRS</b>	<b>\$ 245</b>	<b>\$ (1,526)</b>	<b>\$ 1,436</b>
<b>Key earnings differences:</b>			
For variable annuity guarantee liabilities	<b>\$ 2,927</b>	\$ 214	\$ (1,774)
Related to the impact of mark-to-market accounting and investing activities on investment income and policy liabilities under IFRS <sup>(2)</sup> compared to net realized gains on investments supporting policy liabilities and derivatives in surplus under U.S. GAAP	(120)	1,147	2,389
New business differences including acquisition costs	(274)	(202)	(316)
Charges due to lower fixed income ultimate reinvestment rate assumptions used in the valuation of policy liabilities under IFRS only	437	309	132
Changes in actuarial methods and assumptions	349	1,614	1,031
Gain on sale of Life Retrocession business	(303)	–	–
Goodwill impairment	153	91	–
Other differences	351	65	245
<b>Total earnings difference</b>	<b>\$ 3,520</b>	<b>\$ 3,238</b>	<b>\$ 1,707</b>
<b>Net income in accordance with U.S. GAAP</b>	<b>\$ 3,765</b>	<b>\$ 1,712</b>	<b>\$ 3,143</b>

<sup>(1)</sup> Amounts presented for 2009 reflect a comparison of CGAAP prior to the adoption of IFRS with U.S. GAAP.

<sup>(2)</sup> Until the new IFRS standard for insurance contracts is effective, the requirements under prior Canadian GAAP for the valuation of insurance liabilities (CALM) will be maintained. Under CALM, the measurement of insurance liabilities is based on projected liability cash flows, together with estimated future premiums and net investment income generated from assets held to support those liabilities.

The primary earnings differences in accounting bases relate to:

- *Accounting for variable annuity guarantee liabilities* – The Canadian version of IFRS follows a predominantly “mark-to-market” accounting approach to measure variable annuity guarantee liabilities whereas U.S. GAAP only uses “mark-to-market” accounting for certain benefit guarantees, and reflects the Company’s own credit standing in the measurement of the liability. In 2011, we reported a net gain of \$682 million (2010 – \$4 million; 2009 – \$1,097 million) in our total variable annuity businesses under U.S. GAAP as the increase in the variable annuity guarantee liabilities was more than offset by the significant dynamic hedge asset gains. This compared to a net loss of \$2,245 million (2010 – net loss of \$210 million; 2009 – net gain of \$2,871 million) under IFRS.
- *Investment income and policy liabilities* – Under IFRS, accumulated unrealized gains and losses arising from investments and derivatives supporting policy liabilities are largely offset in the valuation of the policy liabilities. The 2011 IFRS impacts on insurance liabilities of fixed income reinvestment assumptions, general fund equity investments, activities to reduce interest rate exposures and certain market and trading activities of \$941 million (2010 – loss of \$473 million; 2009 – loss of \$3,153 million) compared to U.S. GAAP net realized gains on investments supporting policy liabilities of \$821 million (2010 – gain of \$674 million; 2009 – loss of \$764 million) including net unrealized losses on interest rate swaps in the surplus segment not in a hedge accounting relationship under U.S. GAAP of \$849 million (2010 – net loss of \$71 million; 2009 – gain of \$223 million).
- *Differences in the treatment of acquisition costs and other new business items* – Acquisition costs that are related to and vary with the production of new business are explicitly deferred and amortized under U.S. GAAP but are recognized as an implicit reduction in insurance liabilities along with other new business gains and losses under IFRS. In 2011, IFRS results benefited from lower new business strain compared to U.S. GAAP.

<sup>18</sup> Net income in accordance with U.S. GAAP is a non-GAAP measure. See “Performance and Non-GAAP Measures” below.

- *Changes in actuarial methods and assumptions* – The charges recognized under IFRS from the annual review of actuarial methods and assumptions of \$751 million (2010 – \$1,766 million; 2009 – \$1,154 million) excluding URR changes compared to charges of \$402 million (2010 – \$152 million; 2009 – \$123 million) on a U.S. GAAP basis as actuarial methods and assumptions for traditional long duration products are generally “locked in” at issuance unless the expected premiums are not sufficient to cover the expected benefits and related expenses.
- *Gain on sale of Life Retrocession business* – The total IFRS gain of \$303 million compares to a total gain of \$216 million under U.S. GAAP which is deferred and amortized over the expected life of the reinsurance agreement. The 2011 results under U.S. GAAP reflect a nil net impact of the gain amortization and transaction and other expenses.

Total equity in accordance with U.S. GAAP<sup>19</sup> as at December 31, 2011 was approximately \$16 billion higher than under IFRS. Of this difference, approximately \$10 billion is attributable to the higher cumulative net income on a U.S. GAAP basis with the remaining difference primarily attributable to the treatment of unrealized gains on fixed income investments and derivatives in a cash flow hedging relationship which are reported in equity under U.S. GAAP, but where the investments and derivatives are supporting policy liabilities, these accumulated unrealized gains are largely offset in the valuation of the policy liabilities under IFRS. The fixed income investments and derivatives have significant unrealized gains as a result of the current low levels of interest rates. The majority of the difference in equity between the two accounting bases as at December 31, 2011 arises from our U.S. businesses.

A reconciliation of the major differences in total equity is as follows:

<b>As at December 31,</b> (C\$ millions)	<b>2011</b>	2010	2009 <sup>(1)</sup>
<b>Total equity in accordance with IFRS/CGAAP<sup>(1)</sup></b>	<b>\$ 24,879</b>	\$ 24,675	\$ 28,907
Differences in shareholders’ retained earnings and participating policyholders’ equity <sup>(2)</sup>	<b>10,095</b>	6,600	1,710
Difference in Accumulated Other Comprehensive Income attributable to:			
(i) AFS securities and others;	<b>4,366</b>	1,723	468
(ii) Cash flow hedges; and	<b>2,570</b>	458	600
(iii) Translation of net foreign operations <sup>(3)</sup>	<b>(1,286)</b>	(1,418)	(841)
Differences in share capital, contributed surplus and non-controlling interest in subsidiaries <sup>(4)</sup>	<b>195</b>	162	464
<b>Total equity in accordance with U.S. GAAP</b>	<b>\$ 40,819</b>	\$ 32,200	\$ 31,308

<sup>(1)</sup> December 31, 2009 total equity is based on CGAAP. Amounts presented as at December 31, 2011 and 2010 reflect total equity in accordance with IFRS.

<sup>(2)</sup> Opening U.S. GAAP retained earnings at January 1, 2009 has been reduced by \$190 million to reflect the correction of errors identified in the fourth quarter of 2011 related to accounting for deferred tax assets and liabilities under U.S. GAAP.

<sup>(3)</sup> Reflects the net difference in the currency translation account after the reset to zero through retained earnings upon adoption of IFRS at January 1, 2010. The amounts presented for the year 2009 under Canadian GAAP do not reflect the reset.

<sup>(4)</sup> Non-controlling interest was not a component of equity under CGAAP and as such, the difference presented for 2009 excludes the impact of non-controlling interest under CGAAP.

<sup>19</sup> Total equity in accordance with U.S. GAAP is a non-GAAP measure. See “Performance and Non-GAAP Measures” below.

# Controls and Procedures

## Disclosure Controls and Procedures

Our disclosure controls and procedures are designed to provide reasonable assurance that information required to be disclosed by us is recorded, processed, summarized and reported accurately and completely and within the time periods specified under Canadian and U.S. securities laws. Our process includes controls and procedures that are designed to ensure that information is accumulated and communicated to management, including the CEO and CFO, to allow timely decisions regarding required disclosure.

As of December 31, 2011, management evaluated the effectiveness of its disclosure controls and procedures as defined under the rules adopted by the U.S. Securities and Exchange Commission and the Canadian securities regulatory authorities. This evaluation was performed under the supervision of the Audit Committee, the CEO and CFO.

Based on that evaluation, the CEO and CFO concluded that our disclosure controls and procedures were effective as at December 31, 2011.

## Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting. The Company's internal control system was designed to provide reasonable assurance to management and the Board of Directors regarding the preparation and fair presentation of published financial statements in accordance with generally accepted accounting principles. All internal control systems, no matter how well designed, have inherent limitations due to manual controls. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

Management maintains a comprehensive system of controls intended to ensure that transactions are executed in accordance with management's authorization, assets are safeguarded, and financial records are reliable. Management also takes steps to ensure that information and communication flows are effective and to monitor performance, including performance of internal control procedures.

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2011 based on the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control – Integrated Framework. Based on this assessment, management believes that, as of December 31, 2011, the Company's internal control over financial reporting is effective.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2011 has been audited by Ernst & Young LLP, the Company's independent registered public accounting firm that also audited the consolidated financial statements of the Company for the year ended December 31, 2011. Their report expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting as of December 31, 2011.

## Changes in Internal Control over Financial Reporting

No changes were made in our internal control over financial reporting during the year ended December 31, 2011 that have significantly affected, or are reasonably likely to significantly affect, our internal control over financial reporting.

# Performance and Non-GAAP Measures

We use a number of non-GAAP financial measures to measure overall performance and to assess each of our businesses. A financial measure is considered a non-GAAP measure for Canadian securities law purposes if it is presented other than in accordance with generally accepted accounting principles used for the Company's audited historical financial statements which is prior Canadian GAAP for 2010 and earlier and IFRS for 2011 and beyond. Non-GAAP measures include: net income (loss) excluding the direct impact of equity markets and interest rates; net income (loss) excluding notable items; net income in accordance with U.S. GAAP; total equity in accordance with U.S. GAAP; return on common shareholders' equity; constant currency basis; deposits; premiums and deposits; funds under management; capital; and sales. Non-GAAP financial measures are not defined terms under GAAP and, therefore, with the exception of net income in accordance with U.S. GAAP and total equity in accordance with U.S. GAAP (which are comparable to the equivalent measures of issuers whose financial statements are prepared in accordance with U.S. GAAP), are unlikely to be comparable to similar terms used by other issuers. Therefore, they should not be considered in isolation or as a substitute for any other financial information prepared in accordance with GAAP.

**Net income (loss) excluding the direct impact of equity markets and interest rates** is a non-GAAP profitability measure. It shows what the net income (loss) attributed to shareholders would have been assuming that existing hedges are unchanged and that interest and equity markets performed as assumed in our policy valuation. The direct impact of equity markets and interest rates is relative to our policy liability valuation assumptions and includes changes to the interest rate assumptions. We also include gains and losses on the sale of AFS bonds as management may have the ability to partially offset the direct impacts of changes in interest rates reported in the liability segments. We consider the gains or losses on the variable annuity business that is dynamically hedged to be an indirect impact, not a direct impact, of changes in equity markets and interest rates and accordingly, such gains and losses are reflected in this measure.



**Net income (loss) excluding notable items** is a non-GAAP measure. It shows what the net income (loss) attributed to shareholders would have been excluding the direct impact of equity markets and interest rates (as described above) and also excluding other notable items as listed on page 12.

### 2011 net income excluding notable items

(C\$ millions)	Asia	Canada	U.S.	Corporate and Other	Total
Net income (loss)	\$ (48)	\$ 910	\$ 638	\$ (1,371)	\$ 129
Direct impact of equity markets and interest rates	(1,159)	12	(397)	480	(1,064)
Net income excluding the direct impact of equity markets and interest rates	\$ 1,111	\$ 898	\$ 1,035	\$ (1,851)	\$ 1,193
Other notable items (as disclosed on page 12)	173	64	15	(1,641)	(1,389)
<b>Net income (loss) excluding notable items</b>	<b>\$ 938</b>	<b>\$ 834</b>	<b>\$ 1,020</b>	<b>\$ (210)</b>	<b>\$ 2,582</b>

**Net income in accordance with U.S. GAAP** is a non-GAAP profitability measure. It shows what the net income would have been if the Company had applied U.S. GAAP as its primary financial reporting basis. We consider this to be a relevant profitability measure given our large U.S. domiciled investor base and for comparability to our U.S. peers who report under U.S. GAAP.

**Total equity in accordance with U.S. GAAP** is a non-GAAP measure. It shows what the total equity would have been if the Company had applied U.S. GAAP as its primary financial reporting basis. We consider this to be a relevant measure given our large U.S. domiciled investor base and for comparability to our U.S. peers who report under U.S. GAAP.

**Return on common shareholders' equity** ("ROE") is a non-GAAP profitability measure that presents the net income available to common shareholders as a percentage of the capital deployed to earn the income. The Company calculates return on common shareholders' equity using average common shareholders' equity excluding Accumulated Other Comprehensive Income (Loss) ("AOCI") on AFS securities and cash flow hedges.

Return on common shareholders' equity (C\$ millions)	Quarterly results		Year ended	
	4Q 2011	4Q 2010	2011	2010
Net income (loss) attributed to common shareholders	\$ (90)	\$ 1,776	\$ 44	\$ (1,742)
Opening total equity attributed to common shareholders	\$ 23,077	\$ 21,856	\$ 22,683	\$ 25,836
Closing total equity attributed to common shareholders	\$ 22,402	\$ 22,683	\$ 22,402	\$ 22,683
<b>Weighted average total equity available to common shareholders</b>	<b>\$ 22,740</b>	<b>\$ 22,270</b>	<b>\$ 22,543</b>	<b>\$ 24,259</b>
Opening AOCI on AFS securities and cash flow hedges	\$ 28	\$ 584	\$ 278	\$ 641
Closing AOCI on AFS securities and cash flow hedges	\$ 13	\$ 278	\$ 13	\$ 278
<b>Adjustment for average AOCI</b>	<b>\$ (21)</b>	<b>\$ (431)</b>	<b>\$ (146)</b>	<b>\$ (459)</b>
<b>Weighted average total equity attributed to common shareholders excluding average AOCI adjustment</b>	<b>\$ 22,719</b>	<b>\$ 21,839</b>	<b>\$ 22,397</b>	<b>\$ 23,800</b>
<b>ROE based on weighted average total equity attributed to common shareholders (annualized)</b>	<b>(1.6)%</b>	<b>31.6%</b>	<b>0.2%</b>	<b>(7.2)%</b>
<b>ROE based on weighted average total equity attributed to common shareholders excluding average AOCI adjustment (annualized)</b>	<b>(1.6)%</b>	<b>32.3%</b>	<b>0.2%</b>	<b>(7.3)%</b>

The Company also uses financial performance measures that are prepared on a **constant currency basis**, which exclude the impact of currency fluctuations and which are non-GAAP measures. Quarterly amounts stated on a constant currency basis in this report are calculated, as appropriate, using the income statement and balance sheet exchange rates effective for the fourth quarter of 2010. Annual amounts stated on a constant currency basis in this report are calculated, as appropriate, using the income statement and balance sheet exchange rates effective for 2010.

**Premiums and deposits** is a non-GAAP measure of top line growth. The Company calculates premiums and deposits as the aggregate of (i) general fund premiums, net of reinsurance, reported as premiums on the Consolidated Statement of Income, (ii) premium equivalents for administration only group benefit contracts, (iii) premiums in the Canadian Group Benefits reinsurance ceded agreement, (iv) segregated fund deposits, excluding seed money, (v) mutual fund deposits, (vi) deposits into institutional advisory accounts, and (vii) other deposits in other managed funds.

Premiums and deposits (C\$ millions)	Quarterly results		Year ended	
	4Q 2011	4Q 2010	2011	2010
Premium income	\$ 4,540	\$ 4,714	\$ 17,504	\$ 18,098
Deposits from policyholders	5,575	6,025	21,689	24,544
<b>Premiums and deposits per financial statements</b>	<b>\$ 10,115</b>	<b>\$ 10,739</b>	<b>\$ 39,193</b>	<b>\$ 42,642</b>
Investment contract deposits	126	135	289	298
Mutual fund deposits	3,309	3,662	16,640	12,612
Institutional advisory account deposits	627	443	2,807	2,700
ASO premium equivalents	666	662	2,679	2,647
Group benefits ceded premiums	941	933	3,754	3,675
Other fund deposits	133	145	699	532
<b>Total premiums and deposits</b>	<b>\$ 15,917</b>	<b>\$ 16,719</b>	<b>\$ 66,061</b>	<b>\$ 65,106</b>
Currency impact	(175)	–	1,558	–
<b>Constant currency premiums and deposits</b>	<b>\$ 15,742</b>	<b>\$ 16,719</b>	<b>\$ 67,619</b>	<b>\$ 65,106</b>

**Funds under management** is a non-GAAP measure of the size of the Company. It represents the total of the invested asset base that the Company and its customers invest in.

Funds under management (C\$ millions)	Quarterly results		Year ended	
	4Q 2011	4Q 2010	2011	2010
Total invested assets	\$ 226,520	\$ 201,222	\$ 226,520	\$ 201,222
Total segregated funds net assets	196,058	199,120	196,058	199,120
<b>Funds under management per financial statements</b>	<b>\$ 422,578</b>	<b>\$ 400,342</b>	<b>\$ 422,578</b>	<b>\$ 400,342</b>
Mutual funds	49,399	47,726	49,399	47,726
Institutional advisory accounts (excluding segregated funds)	20,294	20,918	20,294	20,918
Other funds	7,381	7,971	7,381	7,971
<b>Total fund under management</b>	<b>\$ 499,652</b>	<b>\$ 476,957</b>	<b>\$ 499,652</b>	<b>\$ 476,957</b>
Currency impact	(9,744)	–	(9,744)	–
<b>Constant currency funds under management</b>	<b>\$ 489,908</b>	<b>\$ 476,957</b>	<b>\$ 489,908</b>	<b>\$ 476,957</b>

**Capital** The definition we use for capital, a non-GAAP measure, serves as a foundation of our capital management activities at the MFC level. For regulatory reporting purposes, the numbers are further adjusted for various additions or deductions to capital as mandated by the guidelines used by OSFI. Capital is calculated as the sum of: (i) total equity excluding AOCI on cash flow hedges and (ii) liabilities for preferred shares and capital instruments.

Capital (C\$ millions)	Quarterly results		Year ended	
	4Q 2011	4Q 2010	2011	2010
<b>Total equity</b>	<b>\$ 24,879</b>	<b>\$ 24,675</b>	<b>\$ 24,879</b>	<b>\$ 24,675</b>
Add AOCI loss on cash flow hedges	91	55	91	55
Add liabilities for preferred shares and capital instruments	4,012	4,004	4,012	4,004
<b>Total Capital</b>	<b>\$ 28,982</b>	<b>\$ 28,734</b>	<b>\$ 28,982</b>	<b>\$ 28,734</b>

**Sales** are measured according to product type:

- For total individual insurance, sales include 100 per cent of new annualized premiums and 10 per cent of both excess and single premiums. For individual insurance, new annualized premiums reflect the annualized premium expected in the first year of a policy that requires premium payments for more than one year. Sales are reported gross before the impact of reinsurance. Single premium is the lump sum premium from the sale of a single premium product, e.g., travel insurance.
- For group insurance, sales include new annualized premiums and administrative services only premium equivalents on new cases, as well as the addition of new coverages and amendments to contracts, excluding rate increases.
- For individual wealth management contracts, all new deposits are reported as sales. This includes individual annuities, both fixed and variable; variable annuity products; mutual funds; college savings 529 plans; and authorized bank loans and mortgages.
- For group pensions/retirement savings, sales of new regular premiums and deposits reflect an estimate of expected deposits in the first year of the plan with the Company. Single premium sales reflect the assets transferred from the previous plan provider. Sales include the impact of the addition of a new division or of a new product to an existing client. Total sales include both new regular and single premiums and deposits.

# Additional Disclosures

## Contractual Obligations

In the normal course of business, the Company enters into contracts that give rise to obligations fixed by agreement as to the timing and dollar amount of payment.

As at December 31, 2011, the Company's contractual obligations and commitments are as follows:

Payments due by period (C\$ millions)	Total	Less than			After 5 years
		1 year	1 – 3 years	3 – 5 years	
Long-term debt <sup>(1)</sup>	\$ 6,970	\$ 282	\$ 1,842	\$ 2,371	\$ 2,475
Liabilities for capital instruments <sup>(1),(2)</sup>	14,296	208	416	416	13,256
Purchase obligations	808	182	252	197	177
Operating leases	863	131	200	100	432
Insurance contract liabilities <sup>(3)</sup>	507,157	8,713	9,178	11,758	477,508
Investment contract liabilities <sup>(1)</sup>	3,749	272	641	575	2,261
Bank deposits	18,078	15,141	1,253	1,684	–
Other	1,061	701	173	86	101
<b>Total contractual obligations</b>	<b>\$ 552,982</b>	<b>\$ 25,630</b>	<b>\$ 13,955</b>	<b>\$ 17,187</b>	<b>\$ 496,210</b>

<sup>(1)</sup> The contractual payments include principal, interest and distributions. The contractual payments reflect the amounts payable from January 1, 2012 up to and including the final contractual maturity date. In the case of floating rate obligations, the floating rate index is based on the interest rates as at December 31, 2011 and is assumed to remain constant to the final contractual maturity date. The Company may have the contractual right to redeem or repay obligations prior to maturity and if such right is exercised, total contractual obligations paid and the timing of payment could vary significantly from the amounts and timing included in the table.

<sup>(2)</sup> Liabilities for preferred shares – Class A, Series 1 are not included in the contractual obligation table. These preferred shares are redeemable by the Company by payment of cash or issuance of MFC common shares and are convertible at the option of the holder into MFC common shares on or after December 15, 2015.

<sup>(3)</sup> Insurance contract liabilities cash flows include estimates related to the timing and payment of death and disability claims, policy surrenders, policy maturities, annuity payments, minimum guarantees on segregated fund products, policyholder dividends, commissions and premium taxes offset by contractual future premiums on in-force contracts. These estimated cash flows are based on the best estimate assumptions used in the determination of insurance contract liabilities. These amounts are undiscounted and reflect recoveries from reinsurance agreements. Due to the use of assumptions, actual cash flows may differ from these estimates (see "Policy Liabilities"). Cash flows include embedded derivatives measured separately at fair value.

In the normal course of business, the Company enters into investment commitments, which are not reflected in the consolidated financial statements. As at December 31, 2011, there were \$3,431 million of investment commitments (2010 – \$3,154 million), of which \$1,886 million matures within one year (2010 – \$2,310 million), \$1,068 million within one to three years (2010 – \$452 million), \$391 million matures within three to five years (2010 – \$278 million) and \$86 million matures after five years (2010 – \$114 million).

## Legal and Regulatory Proceedings

The Company is regularly involved in legal actions, both as a defendant and as a plaintiff. The legal actions naming the Company as a defendant ordinarily involve its activities as a provider of insurance protection and wealth management products, as well as an investment adviser, employer and taxpayer. In addition, government and regulatory bodies in Canada, the United States, Asia and other jurisdictions where the Company conducts business regularly make inquiries and, from time to time, require the production of information or conduct examinations concerning the Company's compliance with, among other things, insurance laws, securities laws, and laws governing the activities of broker-dealers.

The Company announced on April 21, 2011 that it had been informed by staff of the Ontario Securities Commission ("OSC") that staff would not seek any orders from OSC in connection with the enforcement notice delivered by staff in June 2009 relating to the Company's disclosure before March 2009 of risks related to the Company's variable annuity guarantee and segregated funds business.

A class action covering Quebec residents only is pending in Quebec against the Company and proposed class action lawsuits against the Company have been filed in Ontario and the United States, on behalf of investors in Canada (except for Quebec residents) and the United States, respectively. These proceedings are based on allegations that the Company failed to meet its disclosure obligations related to its exposure to market price risk in its segregated funds and variable annuity guaranteed products. The Company may become subject to other similar lawsuits by investors.

The Company believes that its disclosure satisfied applicable disclosure requirements and intends to vigorously defend itself against any claims based on these allegations.

Plaintiffs in class action and other lawsuits against the Company may seek very large or indeterminate amounts, including punitive and treble damages, and the damages claimed and the amount of any probable and estimable liability, if any, may remain unknown for substantial periods of time. A substantial legal liability or a significant regulatory action could have a significant adverse effect on the Company's business, results of operations, financial condition and capital position and adversely affect its reputation. Even if the Company ultimately prevails in the litigation, regulatory action or investigation, it could suffer reputational harm, which could have an adverse effect on its business, results of operations, financial condition and capital position, including its ability to attract new customers, retain current customers and recruit and retain employees.

## Key Planning Assumptions and Uncertainties

Manulife's 2015 management objectives do not constitute guidance and were established in November 2010 based on certain key planning assumptions, including then current accounting and capital standards; no acquisitions or divestitures; equity market returns and interest rates consistent with then current best estimate of long-term assumptions; no net impact from any future basis changes, additional expected cost of hedging<sup>20</sup>, benefits of potential variable annuity required capital releases (based upon current required capital standards and long-term assumptions for equity market performance); additional favourable investment experience expected with improved economic conditions; and no net issuance of debt or capital. In addition, uncertainties regarding market and investment risks; potential accounting standard changes; potential regulatory and capital regime changes; timing and approach to expanded hedging and other risks<sup>21</sup> could cause actual results to differ significantly from management objectives.

## Quarterly Financial Information

The following table provides summary information related to our eight most recently completed quarters:

As at and for the three months ended (C\$ millions, except per share amounts)	Dec 31, 2011	Sep 30, 2011	Jun 30, 2011	Mar 31, 2011	Dec 31, 2010	Sep 30, 2010	Jun 30, 2010	Mar 31, 2010
<b>Revenue</b>								
Premium income								
Life and health insurance	\$ 3,651	\$ 3,490	\$ 3,452	\$ 3,593	\$ 3,663	\$ 3,568	\$ 3,433	\$ 3,268
Annuities and pensions	889	772	730	927	1,051	1,035	986	1,094
Total premium income	\$ 4,540	\$ 4,262	\$ 4,182	\$ 4,520	\$ 4,714	\$ 4,603	\$ 4,419	\$ 4,362
Investment income	2,034	3,697	2,609	2,027	2,243	3,052	2,087	2,195
Realized and unrealized gains (losses) on assets supporting insurance and investment contract liabilities and deposits <sup>(1)</sup>	1,360	13,491	2,266	(1,247)	(5,187)	4,027	3,709	1,036
Other revenue	1,765	2,005	1,708	1,764	1,650	1,565	1,552	1,591
<b>Total revenue</b>	\$ 9,699	\$ 23,455	\$ 10,765	\$ 7,064	\$ 3,420	\$ 13,247	\$ 11,767	\$ 9,184
Income (loss) before income taxes	\$ 119	\$ (1,799)	\$ 532	\$ 1,296	\$ 2,174	\$ (2,598)	\$ (3,408)	\$ 1,507
Income tax (expense) recovery	(174)	615	(37)	(307)	(349)	421	1,001	(274)
<b>Net income (loss)</b>	\$ (55)	\$ (1,184)	\$ 495	\$ 989	\$ 1,825	\$ (2,177)	\$ (2,407)	\$ 1,233
<b>Net income (loss) attributed to shareholders</b>	\$ (69)	\$ (1,277)	\$ 490	\$ 985	\$ 1,796	\$ (2,249)	\$ (2,434)	\$ 1,224
<b>Basic earnings (loss) per common share</b>	\$ (0.05)	\$ (0.73)	\$ 0.26	\$ 0.54	\$ 1.00	\$ (1.28)	\$ (1.39)	\$ 0.68
<b>Diluted earnings (loss) per common share, excluding convertible instruments</b>	\$ (0.05)	\$ (0.73)	\$ 0.26	\$ 0.54	\$ 1.00	\$ (1.28)	\$ (1.39)	\$ 0.68
<b>Diluted earnings (loss) per common share</b>	\$ (0.05)	\$ (0.73)	\$ 0.26	\$ 0.53	\$ 0.96	\$ (1.28)	\$ (1.39)	\$ 0.66
<b>Segregated funds deposits</b>	\$ 5,575	\$ 5,109	\$ 5,086	\$ 5,919	\$ 6,025	\$ 5,347	\$ 5,968	\$ 7,204
<b>Total assets</b>	\$ 462,102	\$ 455,076	\$ 427,597	\$ 423,397	\$ 424,767	\$ 438,448	\$ 420,318	\$ 408,786
<b>Weighted average common shares (in millions)</b>	1,795	1,789	1,783	1,778	1,773	1,767	1,762	1,758
<b>Diluted weighted average common shares, excluding convertible instruments (in millions)</b>	1,795	1,789	1,786	1,781	1,776	1,767	1,762	1,763
<b>Diluted weighted average common shares (in millions)</b>	1,795	1,789	1,871	1,861	1,873	1,767	1,762	1,834
<b>Dividends per common share</b>	\$ 0.13	\$ 0.13	\$ 0.13	\$ 0.13	\$ 0.13	\$ 0.13	\$ 0.13	\$ 0.13
<b>CDN\$ to \$1US – Statement of Financial Position</b>	1.0170	1.0389	0.9643	0.9718	0.9946	1.0298	1.0606	1.0156
<b>CDN\$ to \$1US – Statement of Operations</b>	1.0232	0.9807	0.9679	0.9855	1.0128	1.0391	1.0276	1.0401

<sup>(1)</sup> For fixed income assets supporting insurance and investment contract liabilities and for equities supporting pass-through products and derivatives related to variable hedging programs, the impact of realized and unrealized (losses) gains on the assets is largely offset in the change in insurance and investment contract liabilities.

<sup>20</sup> In its financial model supporting the 2015 management objectives, the Company has modeled for an additional \$400 million per annum, after-tax, to cover the expected cost of hedging, though actual results are expected to vary.

<sup>21</sup> See "Caution regarding forward-looking statements".

## Selected Annual Financial Information

As at and for the years ended December 31,  
(C\$ millions, except per share amounts)

	2011	2010	2009 <sup>(1)</sup>
<b>Revenue</b>			
Asia Division	\$ 8,428	\$ 7,403	\$ 6,833
Canadian Division	11,451	9,559	10,984
U.S. Insurance	18,982	11,190	10,577
U.S. Wealth Management	9,923	7,405	11,177
Corporate and Other	2,199	2,061	536
<b>Total revenue</b>	<b>\$ 50,983</b>	<b>\$ 37,618</b>	<b>\$ 40,107</b>
<b>Total assets</b>	<b>\$ 462,102</b>	<b>\$ 424,767</b>	<b>\$ 205,845</b>
<b>Long-term financial liabilities</b>			
Long-term debt	\$ 5,503	\$ 5,841	\$ 3,308
Non-controlling interest in subsidiaries <sup>(2)</sup>	–	–	202
Liabilities for preferred shares and capital instruments	4,012	4,004	4,581
	<b>\$ 9,515</b>	<b>\$ 9,845</b>	<b>\$ 8,091</b>
Dividend per common share	\$ 0.52	\$ 0.52	\$ 0.78
Cash dividend per Class A Share, Series 1	\$ 1.025	\$ 1.025	\$ 1.025
Cash dividend per Class A Share, Series 2	\$ 1.16252	\$ 1.16252	\$ 1.16252
Cash dividend per Class A Share, Series 3	\$ 1.125	\$ 1.125	\$ 1.125
Cash dividend per Class A Share, Series 4	\$ 1.65	\$ 1.65	\$ 1.3087
Cash dividend per Class 1 Share, Series 1	\$ 1.40	\$ 1.40	\$ 0.76425
Cash dividend per Class 1 Share, Series 3	\$ 0.81267	\$ –	\$ –

<sup>(1)</sup> Where applicable, 2009 amounts shown are based on CGAAP prior to the adoption of IFRS.

<sup>(2)</sup> Under IFRS, non-controlling interest in subsidiaries is classified as equity.

## Additional Information Available

Additional information relating to Manulife Financial, including MFC's Annual Information Form, is available on the Company's website at [www.manulife.com](http://www.manulife.com) and on SEDAR at [www.sedar.com](http://www.sedar.com).

## Outstanding Shares – Selected Information

### Class A Shares Series 1

As at March 15, 2012, MFC had 14 million Class A Shares Series 1 ("Series 1 Preferred Shares") outstanding at a price of \$25.00 per share, for an aggregate amount of \$350 million. The Series 1 Preferred Shares are non-voting and are entitled to non-cumulative preferential cash dividends payable quarterly, if and when declared, at a per annum rate of 4.10%. With regulatory approval, the Series 1 Preferred Shares may be redeemed by MFC, in whole or in part, at declining premiums that range from \$1.25 to nil per Series 1 Preferred Share, by either payment of cash or the issuance of MFC common shares. On or after December 19, 2015, the Series 1 Preferred Shares will be convertible at the option of the holder into MFC common shares, the number of which is determined by a prescribed formula, and is subject to the right of MFC prior to the conversion date to redeem for cash or find substitute purchasers for such preferred shares. The prescribed formula is the face amount of the Series 1 Preferred Shares divided by the greater of \$2.00 and 95% of the then market price of MFC common shares.

### Common Shares

As at March 13, 2012 MFC had 1,801,113,056 common shares outstanding.

### Subsequent Events

On February 22, 2012, MFC issued 10 million Class 1 Shares Series 7 ("Class 1 Series 7 Preferred Shares") at a price of \$25 per share, for an aggregate amount of \$250 million. The Class 1 Series 7 Preferred Shares are entitled to non-cumulative preferential cash dividends, payable quarterly, if and when declared, at a per annum rate of 4.60% until March 19, 2017 after which the dividend rate will be reset every five years at a rate equal to the five year Government of Canada bond yield plus 3.13%. On March 19, 2017 and on March 19 every five years thereafter, the Class 1 Series 7 Preferred Shares will be convertible at the option of the holder into Class 1 Shares Series 8 ("Class 1 Series 8 Preferred Shares"). The Class 1 Series 8 Preferred Shares are entitled to non-cumulative preferential cash dividends, payable quarterly, if and when declared, at a rate equal to the three month Government of Canada Treasury Bill yield plus 3.13%. Subject to regulatory approval, MFC may redeem Class 1 Series 7 Preferred Shares, in whole or in part, at par, on March 19, 2017 and on March 19 every five years thereafter.

On February 17, 2012, MLI issued \$500 million in subordinated fixed/floating debentures, which mature June 1, 2022. The debentures are guaranteed by MFC on a subordinated basis. The debentures bear interest at a fixed rate of 4.165% per annum, payable semi-annually for five years and thereafter at the 90-day Bankers' Acceptance rate plus 2.45% payable quarterly. With regulatory approval, MLI may redeem the debentures, in whole or in part, on or after June 1, 2017, at par, together with accrued and unpaid interest. The subordinated debentures form part of the Company's Tier 2B regulatory capital.

# Responsibility for Financial Reporting

The accompanying consolidated financial statements of Manulife Financial Corporation are the responsibility of management and have been approved by the Board of Directors. It is also the responsibility of management to ensure that all information in the annual report to shareholders is consistent with these consolidated financial statements.

The consolidated financial statements have been prepared by management in accordance with International Financial Reporting Standards and the accounting requirements of the Office of the Superintendent of Financial Institutions, Canada. When alternative accounting methods exist, or when estimates and judgment are required, management has selected those amounts that present the Company's financial position and results of operations in a manner most appropriate to the circumstances.

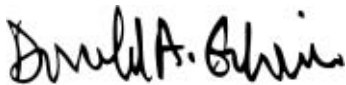
Appropriate systems of internal control, policies and procedures have been maintained to ensure that financial information is both relevant and reliable. The systems of internal control are assessed on an ongoing basis by management and the Company's internal audit department.

The actuary appointed by the Board of Directors (the "Appointed Actuary") is responsible for ensuring that assumptions and methods used in the determination of policy liabilities are appropriate to the circumstances and that reserves will be adequate to meet the Company's future obligations under insurance and annuity contracts.

The Board of Directors is responsible for ensuring that management fulfills its responsibility for financial reporting and is ultimately responsible for reviewing and approving the consolidated financial statements. These responsibilities are carried out primarily through an Audit Committee of unrelated and independent directors appointed by the Board of Directors.

The Audit Committee meets periodically with management, the internal auditors, the external auditors and the Appointed Actuary to discuss internal control over the financial reporting process, auditing matters and financial reporting issues. The Audit Committee reviews the consolidated financial statements prepared by management and then recommends them to the Board of Directors for approval. The Audit Committee also recommends to the Board of Directors and shareholders the appointment of external auditors and approval of their fees.

The consolidated financial statements have been audited by the Company's external auditors, Ernst & Young LLP, in accordance with Canadian generally accepted auditing standards and the standards of the Public Company Accounting Oversight Board (United States). Ernst & Young LLP has full and free access to management and the Audit Committee.



Donald A. Guloien  
President and Chief Executive Officer



Michael W. Bell  
Senior Executive Vice President and Chief Financial Officer

Toronto, Canada

March 16, 2012

## Appointed Actuary's Report to the Shareholders

I have valued the policy liabilities of Manulife Financial Corporation for its Consolidated Statements of Financial Position as at December 31, 2011 and 2010 and January 1, 2010 and their change in the Consolidated Statements of Income (Loss) for the years ended December 31, 2011 and 2010 in accordance with actuarial practice generally accepted in Canada, including selection of appropriate assumptions and methods.

In my opinion, the amount of policy liabilities makes appropriate provision for all policyholder obligations and the consolidated financial statements fairly present the results of the valuation.



Cindy Forbes, F.C.I.A.  
Executive Vice President and Appointed Actuary

Toronto, Canada

March 16, 2012



# Independent Auditors' Report of Registered Public Accounting Firm

## To the Shareholders of Manulife Financial Corporation

We have audited the accompanying consolidated financial statements of Manulife Financial Corporation, which comprise the Consolidated Statements of Financial Position as at December 31, 2011 and 2010, and January 1, 2010, and the Consolidated Statements of Income (Loss), Comprehensive Income (Loss), Changes in Equity and Cash Flows for the years ended December 31, 2011 and 2010, and a summary of significant accounting policies and other explanatory information.

### Management's responsibility for the consolidated financial statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

### Auditors' responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with Canadian generally accepted auditing standards and the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements, evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

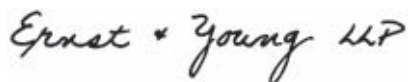
We believe that the audit evidence we have obtained in our audits is sufficient and appropriate to provide a basis for our audit opinion.

### Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of Manulife Financial Corporation as at December 31, 2011 and 2010, and January 1, 2010, and its financial performance and its cash flows for the years ended December 31, 2011 and 2010 in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

### Other matter

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Manulife Financial Corporation's internal control over financial reporting as of December 31, 2011, based on the criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 16, 2012 expressed an unqualified opinion on Manulife Financial Corporation's internal control over financial reporting.



Ernst & Young LLP  
Chartered Accountants  
Licensed Public Accountants

Toronto, Canada

March 16, 2012

# Independent Auditors' Report on Internal Controls under Standards of the Public Company Accounting Oversight Board (United States)

## To the Shareholders of Manulife Financial Corporation

We have audited Manulife Financial Corporation's internal control over financial reporting as of December 31, 2011, based on criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Manulife Financial Corporation's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in Management's Report on Internal Controls over Financial Reporting contained in Management's Discussion and Analysis. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

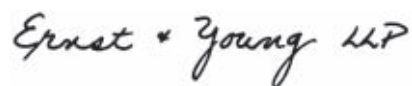
We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Manulife Financial Corporation maintained, in all material respects, effective internal control over financial reporting as of December 31, 2011, based on the COSO criteria.

We also have audited, in accordance with Canadian generally accepted auditing standards and the standards of the Public Company Accounting Oversight Board (United States), the Consolidated Statements of Financial Position as at December 31, 2011 and 2010, and January 1, 2010, and the Consolidated Statements of Income (Loss), Comprehensive Income (Loss), Changes in Equity and Cash Flows for the years ended December 31, 2011 and 2010 of Manulife Financial Corporation and our report dated March 16, 2012 expressed an unqualified opinion thereon.



Ernst & Young LLP  
Chartered Accountants  
Licensed Public Accountants

Toronto, Canada

March 16, 2012

# Consolidated Statements of Financial Position

As at (Canadian \$ in millions)	December 31, 2011	December 31, 2010	January 1, 2010
<b>ASSETS</b>			
Cash and short-term securities	\$ 12,813	\$ 11,849	\$ 18,805
Securities			
Bonds	120,487	101,560	85,107
Stocks	10,243	10,475	9,688
Loans			
Mortgages	35,023	32,837	31,158
Private placements	20,294	19,577	19,980
Policy loans	6,827	6,486	6,609
Bank loans	2,288	2,353	2,457
Real estate	7,466	6,353	5,988
Other invested assets	11,079	9,732	9,436
<b>Total invested assets (note 4)</b>	<b>\$ 226,520</b>	<b>\$ 201,222</b>	<b>\$ 189,228</b>
<b>Other assets</b>			
Accrued investment income	\$ 1,802	\$ 1,642	\$ 1,583
Outstanding premiums	781	671	812
Derivatives (note 5)	15,472	4,000	2,707
Reinsurance assets (note 8)	10,728	7,832	8,044
Deferred tax asset (note 6)	1,757	1,373	1,255
Goodwill and intangible assets (note 7)	5,442	5,907	8,405
Miscellaneous	3,542	3,000	3,183
<b>Total other assets</b>	<b>\$ 39,524</b>	<b>\$ 24,425</b>	<b>\$ 25,989</b>
<b>Segregated funds net assets (note 23)</b>	<b>\$ 196,058</b>	<b>\$ 199,120</b>	<b>\$ 190,783</b>
<b>Total assets</b>	<b>\$ 462,102</b>	<b>\$ 424,767</b>	<b>\$ 406,000</b>
<b>LIABILITIES and EQUITY</b>			
<b>Liabilities</b>			
Policy liabilities			
Insurance contract liabilities (note 8)	\$ 190,366	\$ 158,312	\$ 147,943
Investment contract liabilities (note 9)	2,540	2,990	3,778
Bank deposits	18,010	16,300	14,734
Derivatives (note 5)	7,627	3,287	2,451
Deferred tax liability (note 6)	766	640	1,026
Other liabilities	12,341	9,598	9,831
	\$ 231,650	\$ 191,127	\$ 179,763
Long-term debt (note 12)	5,503	5,841	3,856
Liabilities for preferred shares and capital instruments (note 13)	4,012	4,004	4,022
<b>Segregated funds net liabilities (note 23)</b>	<b>196,058</b>	<b>199,120</b>	<b>190,783</b>
<b>Total liabilities</b>	<b>\$ 437,223</b>	<b>\$ 400,092</b>	<b>\$ 378,424</b>
<b>Equity</b>			
Issued share capital			
Preferred shares (note 14)	\$ 1,813	\$ 1,422	\$ 1,422
Common shares (note 14)	19,560	19,254	18,937
Contributed surplus	245	222	196
Shareholders' retained earnings	2,501	3,393	6,062
Shareholders' accumulated other comprehensive income (loss)			
On available-for-sale securities	104	333	660
On cash flow hedges	(91)	(55)	(19)
On translation of foreign operations	83	(464)	-
Total shareholders' equity	\$ 24,215	\$ 24,105	\$ 27,258
Participating policyholders' equity	249	160	80
Non-controlling interest in subsidiaries	415	410	238
<b>Total equity</b>	<b>\$ 24,879</b>	<b>\$ 24,675</b>	<b>\$ 27,576</b>
<b>Total liabilities and equity</b>	<b>\$ 462,102</b>	<b>\$ 424,767</b>	<b>\$ 406,000</b>

The accompanying notes are an integral part of these consolidated financial statements.

  
 Donald A. Guloién  
 President and Chief Executive Officer

  
 Gail Cook-Bennett  
 Chair of the Board of Directors

# Consolidated Statements of Income (Loss)

For the years ended December 31,

(Canadian \$ in millions except per share amounts)

	2011	2010
<b>Revenue</b>		
Premium income		
Gross premiums	\$ 23,898	\$ 24,125
Premiums ceded to reinsurers	(6,394)	(6,027)
Net premiums	\$ 17,504	\$ 18,098
Investment income (note 4)		
Investment income	\$ 10,367	\$ 9,577
Realized and unrealized gains on assets supporting insurance and investment contract liabilities	15,870	3,585
Net investment income	\$ 26,237	\$ 13,162
Other revenue	\$ 7,242	\$ 6,358
<b>Total revenue</b>	<b>\$ 50,983</b>	<b>\$ 37,618</b>
<b>Contract benefits and expenses</b>		
To contract holders and beneficiaries		
Death, disability and other claims	\$ 9,213	\$ 8,837
Maturity and surrender benefits	5,403	5,205
Annuity payments	3,164	3,000
Policyholder dividends and experience rating refunds	1,080	1,130
Net transfers (from) to segregated funds	(299)	76
Change in insurance contract liabilities	27,934	13,642
Change in investment contract liabilities	64	78
Ceded benefits and expenses	(4,918)	(4,828)
Change in reinsurance assets	(1,852)	447
<b>Net benefits and claims</b>	<b>\$ 39,789</b>	<b>\$ 27,587</b>
General expenses	4,061	3,848
Investment expenses (note 4)	1,001	981
Commissions	3,813	3,891
Interest expense (note 4)	1,249	1,044
Net premium taxes	257	262
Goodwill impairment (note 7)	665	2,330
<b>Total contract benefits and expenses</b>	<b>\$ 50,835</b>	<b>\$ 39,943</b>
<b>Income (loss) before income taxes</b>	<b>\$ 148</b>	<b>\$ (2,325)</b>
Income tax recovery (note 6)	97	799
<b>NET INCOME (LOSS)</b>	<b>\$ 245</b>	<b>\$ (1,526)</b>
<b>Net income (loss) attributed to:</b>		
Non-controlling interest in subsidiaries	\$ 27	\$ 57
Participating policyholders	89	80
Shareholders	129	(1,663)
	<b>\$ 245</b>	<b>\$ (1,526)</b>
Net income (loss) attributed to shareholders	\$ 129	\$ (1,663)
Preferred share dividends	(85)	(79)
<b>Net income (loss) available to common shareholders</b>	<b>\$ 44</b>	<b>\$ (1,742)</b>
<b>EARNINGS (LOSS) PER SHARE</b>		
Weighted average number of common shares outstanding (in millions)	1,786	1,765
Weighted average number of diluted common shares outstanding (in millions)	1,789	1,765
<b>Basic earnings (loss) per common share</b>	<b>\$ 0.02</b>	<b>\$ (0.99)</b>
<b>Diluted earnings (loss) per common share</b>	<b>\$ 0.02</b>	<b>\$ (0.99)</b>
<b>Dividends per common share</b>	<b>\$ 0.52</b>	<b>\$ 0.52</b>

The accompanying notes are an integral part of these consolidated financial statements.

# Consolidated Statements of Comprehensive Income (Loss)

For the years ended December 31,  
(Canadian \$ in millions)

	2011	2010
<b>Net income (loss)</b>	<b>\$ 245</b>	<b>\$ (1,526)</b>
<b>Other comprehensive income (loss), net of tax</b>		
Change in unrealized foreign exchange gains (losses) on:		
Translation of foreign operations	<b>\$ 577</b>	\$ (625)
Net investment hedges	<b>(30)</b>	161
Change in unrealized gains on available-for-sale financial securities		
Unrealized gains arising during the year	<b>303</b>	348
Reclassification of realized (gains) losses and (recoveries) impairments to net income	<b>(536)</b>	(669)
Changes in unrealized losses on derivative instruments designated as cash flow hedges		
Unrealized losses arising during the year	<b>(52)</b>	(44)
Reclassification of realized losses to net income	<b>8</b>	8
Share of other comprehensive income (loss) of associates	<b>7</b>	(6)
<b>Other comprehensive income (loss), net of tax</b>	<b>\$ 277</b>	<b>\$ (827)</b>
<b>Total comprehensive income (loss)</b>	<b>\$ 522</b>	<b>\$ (2,353)</b>
<b>Total comprehensive income (loss) attributed to:</b>		
Non-controlling interest	<b>\$ 22</b>	\$ 57
Participating policyholders	<b>89</b>	80
Shareholders	<b>411</b>	(2,490)

## Income Taxes Included in Other Comprehensive Income (Loss)

For the years ended December 31,  
(Canadian \$ in millions)

	2011	2010
<b>Income tax (recovery) expense</b>		
Change in unrealized foreign exchange gains (losses)		
Income tax (recovery) expense on translation of foreign operations	<b>\$ 5</b>	\$ (7)
Income tax (recovery) expense on net investment hedges	<b>(17)</b>	80
Change in unrealized gains (losses) on available-for-sale financial securities		
Income tax expense from unrealized gains arising during the year	<b>68</b>	82
Income tax expense related to reclassification of realized gains and recoveries/impairments to net income	<b>(139)</b>	(252)
Changes in unrealized losses on derivative instruments designated as cash flow hedges		
Income tax (recovery) from unrealized losses arising during the year	<b>(10)</b>	(24)
Income tax recovery related to reclassification of realized losses to net income	<b>4</b>	5
Income tax expense (recovery) on share of other comprehensive income/loss of associates	<b>4</b>	(3)
<b>Total income tax recovery</b>	<b>\$ (85)</b>	<b>\$ (119)</b>

The accompanying notes are an integral part of these consolidated financial statements.

# Consolidated Statements of Changes in Equity

For the years ended December 31,  
(Canadian \$ in millions)

	2011	2010
<b>Preferred shares</b>		
Balance, beginning of year	\$ 1,422	\$ 1,422
Issued during the year (note 14)	400	–
Issuance costs, net of tax	(9)	–
<b>Balance, end of year</b>	<b>\$ 1,813</b>	<b>\$ 1,422</b>
<b>Common shares</b>		
Balance, beginning of year	\$ 19,254	\$ 18,937
Issued on exercise of stock options and deferred share units	2	3
Issued under dividend reinvestment and share purchase plans	304	314
<b>Balance, end of year</b>	<b>\$ 19,560</b>	<b>\$ 19,254</b>
<b>Contributed surplus</b>		
Balance, beginning of year	\$ 222	\$ 196
Exercise of stock options and deferred share units	–	1
Stock option expense	23	25
<b>Balance, end of year</b>	<b>\$ 245</b>	<b>\$ 222</b>
<b>Shareholders' retained earnings</b>		
Balance, beginning of year	\$ 3,393	\$ 6,062
Net income (loss) attributed to shareholders	129	(1,663)
Preferred share dividends	(85)	(79)
Common share dividends	(936)	(927)
<b>Balance, end of year</b>	<b>\$ 2,501</b>	<b>\$ 3,393</b>
<b>Shareholders' accumulated other comprehensive income (loss) ("AOCI")</b>		
Balance, beginning of year	\$ (186)	\$ 641
Change in unrealized foreign exchange gains (losses) on translation of foreign operations	547	(464)
Change in unrealized gains (losses) on available-for-sale financial securities	(236)	(321)
Changes in unrealized gains (losses) on derivative instruments designated as cash flow hedges	(36)	(36)
Share of other comprehensive income (loss) of associates	7	(6)
<b>Balance, end of year</b>	<b>\$ 96</b>	<b>\$ (186)</b>
<b>Total shareholders' equity, end of year</b>	<b>\$ 24,215</b>	<b>\$ 24,105</b>
<b>Participating policyholders' equity</b>		
Balance, beginning of year	\$ 160	\$ 80
Net income attributed to participating policyholders	89	80
<b>Balance, end of year</b>	<b>\$ 249</b>	<b>\$ 160</b>
<b>Non-controlling interest in subsidiaries</b>		
Balance, beginning of year	\$ 410	\$ 238
Net income attributed to non-controlling interest	27	57
Other comprehensive loss attributed to non-controlling interest	(5)	–
Deconsolidation of a subsidiary	–	107
Contributions (distributions), net	(17)	8
<b>Balance, end of year</b>	<b>\$ 415</b>	<b>\$ 410</b>
<b>Total equity, end of year</b>	<b>\$ 24,879</b>	<b>\$ 24,675</b>

The accompanying notes are an integral part of these consolidated financial statements.



# Consolidated Statements of Cash Flows

For the years ended December 31,  
(Canadian \$ in millions)

	2011	2010
<b>Operating activities</b>		
Net income (loss)	\$ 245	\$ (1,526)
Adjustments for non-cash items in net income (loss):		
Increase in insurance contract liabilities	27,934	13,642
Increase in investment contract liabilities	64	78
(Increase) decrease in reinsurance assets	(1,852)	447
Amortization of premium/discount on invested assets	25	118
Other amortization	345	316
Net realized and unrealized gains including impairments	(16,759)	(4,491)
Deferred income tax recovery	(210)	(474)
Stock option expense	23	25
Goodwill impairment	665	2,330
Net income adjusted for non-cash items	\$ 10,480	\$ 10,465
Changes in policy related and operating receivables and payables	(1,147)	1,094
<b>Cash provided by operating activities</b>	<b>\$ 9,333</b>	<b>\$ 11,559</b>
<b>Investing activities</b>		
Purchases and mortgage advances	\$ (82,830)	\$ (76,090)
Disposals and repayments	71,851	54,533
Changes in investment broker net receivables and payables	1,757	83
Net cash decrease from purchase of subsidiaries	-	(28)
<b>Cash used in investing activities</b>	<b>\$ (9,222)</b>	<b>\$ (21,502)</b>
<b>Financing activities</b>		
Increase in repurchase agreements and securities sold but not yet purchased	\$ 66	\$ 536
Issue of long-term debt, net	-	2,024
Repayment of long-term debt	(396)	(1)
Issue of capital instruments, net	547	-
Repayment of capital instruments	(550)	-
Net redemption of investment contract liabilities	(568)	(739)
Funds borrowed, net	44	5
Secured borrowings from securitization transactions	250	577
Changes in bank deposits, net	1,603	1,574
Shareholder dividends paid in cash	(717)	(691)
Contributions from (distributions to) non-controlling interest	(17)	36
Common shares issued, net	2	3
Preferred shares issued, net	391	-
<b>Cash provided by financing activities</b>	<b>\$ 655</b>	<b>\$ 3,324</b>
<b>Cash and short-term securities</b>		
Increase (decrease) during the year	\$ 766	\$ (6,619)
Effect of foreign exchange rate changes on cash and short-term securities	192	(339)
Balance, beginning of year	11,322	18,280
<b>Balance, December 31</b>	<b>\$ 12,280</b>	<b>\$ 11,322</b>
<b>Cash and short-term securities</b>		
<b>Beginning of year</b>		
Gross cash and short-term securities	\$ 11,849	\$ 18,805
Net payments in transit, included in other liabilities	(527)	(525)
<b>Net cash and short-term securities, January 1</b>	<b>\$ 11,322</b>	<b>\$ 18,280</b>
<b>End of year</b>		
Gross cash and short-term securities	\$ 12,813	\$ 11,849
Net payments in transit, included in other liabilities	(533)	(527)
<b>Net cash and short-term securities, December 31</b>	<b>\$ 12,280</b>	<b>\$ 11,322</b>
<b>Supplemental disclosures on cash flow information:</b>		
Interest paid	\$ 1,053	\$ 864
Interest received	\$ 8,401	\$ 8,022
Income taxes paid	\$ 255	\$ 103

The accompanying notes are an integral part of these consolidated financial statements.

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# Notes to Consolidated Financial Statements

(Canadian \$ in millions except per share amounts or unless otherwise stated)

## Note 1 Nature of Operations and Significant Accounting Policies

### (a) Reporting entity

Manulife Financial Corporation ("MFC") is a publicly traded life insurance company and the holding company of The Manufacturers Life Insurance Company ("MLI"), a Canadian life insurance company, and John Hancock Reassurance Company Ltd. ("JHRECO"), a Bermuda reinsurance company. MFC and its subsidiaries (collectively, "Manulife Financial" or the "Company") is a leading Canada-based financial services group with principal operations in Asia, Canada and the United States. Manulife Financial's international network of employees, agents and distribution partners offers financial protection and wealth management products and services to millions of clients as well as asset management services to institutional customers. The Company operates as Manulife Financial in Canada and Asia and primarily as John Hancock in the United States.

MFC is domiciled in Canada and incorporated under the Insurance Companies Act (Canada) ("ICA"). These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") and the accounting requirements of the Office of the Superintendent of Financial Institutions, Canada ("OSFI"). None of the accounting requirements of OSFI are exceptions to IFRS. As these are the Company's first consolidated annual financial statements presented under IFRS, they were prepared in accordance with IFRS 1 "First-time Adoption of International Financial Reporting Standards". As outlined in (d) below, IFRS does not currently include an insurance contract measurement model and, therefore, as permitted by IFRS 4 "Insurance Contracts", insurance contract liabilities continue to be measured using the Canadian Asset Liability Method ("CALM").

An explanation of how the transition to IFRS has affected the equity, comprehensive income (loss) and cash flows of the Company is provided in note 25.

These consolidated financial statements of MFC as at and for the year ended December 31, 2011 were authorized for issue by the Board of Directors on February 22, 2012.

### (b) Basis of preparation

The preparation of the consolidated financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, and the disclosure of contingent assets and liabilities as at the date of the consolidated financial statements, and the reported amounts of revenue and expenses during the reporting periods. Actual results may differ from these estimates. The most significant estimation processes relate to the determination of insurance and investment contract liabilities, provisioning for asset impairment, determination of pension and other post-employment benefit obligations and expenses, income taxes and uncertain tax positions, impairment testing of goodwill and intangible assets, fair value of certain financial instruments, derivative and hedge accounting, assessment of relationships with other entities for consolidation and the measurement and disclosure of contingent liabilities. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the year in which the estimates are revised and in any future years affected. Although some variability is inherent in these estimates, management believes that the amounts recorded are appropriate. The significant accounting policies used and the most significant judgments made by management in applying these accounting policies in the preparation of these consolidated financial statements are summarized below.

### (c) Basis of consolidation

MFC consolidates the financial statements of all subsidiary companies including certain special purpose entities ("SPEs") where appropriate. Subsidiaries are entities controlled by the Company. Control exists when the Company has the power to govern the financial and operating policies of another entity so as to obtain significant benefits from its activities. In assessing control, significant judgment is applied which considers whether potential voting rights that are presently exercisable and contractual management relationships with the entity, if any, provide the Company with power over the entity's financial and operating policies. Significant judgment is also applied to assess the level of significance of benefits to the Company from the entity's activities. The financial statements of the subsidiaries are included in the Company's consolidated results from the date control is established and are excluded from consolidation from the date control ceases. SPEs are consolidated when the substance of the relationship between the Company and that entity indicates control. Potential indicators of control include the assessment of the Company's exposure to the risks and rewards of the SPE. The assessment of risks and rewards is based on arrangements in place and the assessed risk exposures at inception. The initial assessment is reconsidered at a later date if the Company acquires additional interest in the entity, the contractual arrangements of the entity are amended such that the relative exposure to risks and rewards change, or if the Company acquires or loses control over the key operating and financial decisions of the entity.

The Company's consolidated financial statements have been prepared using uniform accounting policies for like transactions and events in similar circumstances. Intercompany balances, and income and expenses arising from intercompany transactions, have been eliminated in preparing the consolidated financial statements.

Non-controlling interest in subsidiaries represents interests of outside parties in the equity of the Company's subsidiaries and is presented within total equity, separate from the equity of MFC's shareholders. Non-controlling interest in the net income and other comprehensive income ("OCI") of MFC's subsidiaries is included in total net income and total other comprehensive income, respectively. An exception to this occurs where the subsidiary's shares are required to be redeemed for cash on a fixed or determinable date, in which case non-controlling interest in the subsidiary's equity is presented as liabilities of the Company and non-controlling interest in the subsidiary's income and OCI is recorded as expenses of the Company.

The equity method of accounting is used to account for investments over which the Company has significant influence, whereby the Company records its share of the investee's net assets and financial results using uniform accounting policies for similar transactions and events. Significant judgment is used to determine whether voting rights, contractual management and other relationships with the entity, if any, provide the Company with significant influence over the entity. Gains and losses on sale of these investments are included in income when realized, while impairment losses are recognized immediately when there is objective evidence of impairment. Gains and losses on transactions with investees are eliminated to the extent of the Company's interest in the investee. These investments are included in other invested assets on the Company's Consolidated Statements of Financial Position.

#### **(d) Invested assets**

Invested assets that are considered financial instruments are classified as fair-value-through-profit-or-loss ("FVTPL"), loans and receivables, held to maturity investments, available-for-sale ("AFS") financial assets, or as derivatives, including those designated as hedging instruments in an effective hedge, as appropriate. The Company determines the classification of its financial assets at initial recognition. Invested assets are recognized initially at fair value plus, in the case of investments not at FVTPL, directly attributable transaction costs. Invested assets are classified as financial instruments at FVTPL if they are held for trading, or if they are designated by management under the fair value option.

Invested assets classified as AFS are non-derivative financial assets that are designated as AFS and are not categorized into any of the other categories described above. They are initially recognized at fair value including direct and incremental transaction costs. They are subsequently held at fair value.

The invested assets held by the Company are accounted for using the methods described below.

Cash and short-term securities comprise cash, current operating accounts, overnight bank and term deposits, and fixed income securities held for the purpose of meeting short-term cash commitments. Short-term securities are carried at their fair values. Net payments in transit and overdraft bank balances are included in other liabilities.

Bonds are carried at fair value. Realized gains and losses on sale of bonds and unrealized gains and losses on bonds designated as FVTPL are recognized in investment income immediately. Unrealized gains and losses on AFS bonds are recorded in OCI, with the exception of unrealized gains and losses on foreign currency translation which are included in income. Impairment losses on AFS bonds are recognized in income on an individual security basis when there is objective evidence of impairment. Impairment is considered to have occurred when it is deemed probable that the Company will not be able to collect all amounts due according to contractual terms of the bond.

Stocks are carried at fair value. Realized gains and losses on sale of stocks and unrealized gains and losses on stocks designated as FVTPL are recognized in income immediately. Unrealized gains and losses on AFS stocks are recorded in OCI. Impairment losses on AFS stocks are recognized in income on an individual security basis when there is objective evidence that the cost may not be recovered. Impairment is considered to have occurred when fair value has declined below cost by significant amounts or for prolonged periods of time. Judgment is applied in determining whether the decline is significant or prolonged.

Mortgages are classified as loans and are carried at amortized cost less allowance for impairment losses, if any. Realized gains and losses are recorded in income immediately. When mortgages are impaired or when contractual payments are more than 90 days in arrears, contractual interest is no longer accrued. Contractual interest accruals are resumed once the contractual payments are no longer in arrears and are considered current. Impairment losses are recorded on individual mortgages when there is no longer reasonable assurance as to the timely collection of the full amount of principal and interest. Impairment is measured based on the discounted value of expected future cash flows at the original effective interest rates inherent in the mortgages. Expected future cash flows are typically determined in reference to the fair value of collateral security underlying the mortgages, net of expected costs of realization and any amounts legally required to be paid to the borrowers; or observable market prices for the mortgages, if any.

The Company accounts for current insured mortgage securitizations as secured financing transactions as the criteria for sale accounting is not met. For these transactions, the Company continues to recognize the mortgages and records a liability in other liabilities for the amount owed at maturity. Interest income on the mortgages and interest expense on the borrowing are recorded using the effective interest rate method.

Private placements, which include corporate loans for which there is no active market, are classified as loans and are carried at amortized cost less allowance for impairments. Realized gains and losses are recorded in income immediately. When private placements are considered impaired, contractual interest is no longer accrued. Contractual interest accruals are resumed once the investment is no longer considered to be impaired. Impairment losses are recorded on individual private placements when there is no longer assurance as to the timely collection of the full amount of principal and interest. Impairment is measured based on the discounted value of expected future cash flows at the original effective interest rates inherent in the loans. Judgment is applied in the determination of impairment including the timing and amount of future collections.

Policy loans are classified as loans with a carrying value equal to their unpaid balance. Policy loans are fully collateralized by the cash surrender value of the underlying policies.

Bank loans are carried at unpaid principal less allowance for credit losses, if any. When bank loans are impaired or when contractual payments are more than 90 days in arrears, contractual interest is no longer accrued. Contractual interest accruals are resumed once the contractual payments are no longer in arrears and are considered current.

Once established, allowances for impairment of mortgages, private placements and bank loans are reversed only if the conditions that caused the impairment no longer exist. Reversals of impairment charges on AFS debt securities are only recognized in income to the extent that increases in fair value can be attributed to events subsequent to the impairment loss being recorded. On disposition of an impaired asset, any allowance for impairment is released. Impairment losses for AFS equity instruments are not reversed through income.

In addition to allowances against the carrying value of impaired assets, the Company considers the impact of the impairments on the investment yields assumed in the calculation of actuarial liabilities.

Interest income is recognized on bonds and loans as it accrues and is calculated by using the effective interest rate method. Premiums, discounts and transaction costs are amortized over the life of the underlying investment using the effective yield method for AFS bonds and loans and receivables measured at amortized cost.

The Company records purchases and sales of invested assets on a trade date basis.

Real estate consists of both own use and investment property.

Own use property is carried at cost less accumulated depreciation and any accumulated impairment losses. Depreciation is calculated based on the cost of an asset less its residual value and is recognized in income on a straight-line basis over the estimated useful life ranging from 30 to 60 years. Impairment losses are recorded in income to the extent the recoverable amount is less than the carrying amount.

Investment property is property held to earn rental income, for capital appreciation or both. Investment property is measured at fair value with changes in fair value recognized in income.

Other invested assets include private equity and fixed income investments held primarily in power and infrastructure, oil and gas, and timber and agriculture sectors. Private equity investments are accounted for using the equity method when the Company has the ability to exercise significant influence or are classified as FVTPL or AFS and carried at fair value when the Company does not have significant influence. Fixed income investments are carried at amortized cost less impairment. Investments in oil and gas exploration and evaluation costs are measured on a "successful efforts" basis.

Other invested assets also include investments in leveraged leases. The carrying value of investments in leveraged leases is calculated by accruing income on the lease receivable and related non-recourse debt using the effective yield method.

### **(e) Goodwill and intangible assets**

Goodwill represents the difference between the acquisition cost of the business combination and the Company's proportionate share of the net identifiable assets acquired and liabilities and certain contingent liabilities assumed. It is initially recorded at cost and subsequently measured at cost less accumulated impairment.

Goodwill is tested for impairment at least annually or whenever events or changes in circumstances indicate that the carrying amounts may not be recoverable at the cash generating unit ("CGU") or group of CGUs level. The Company allocates goodwill to CGUs or groups of CGUs for the purpose of impairment testing based on the lowest level within the entity in which the goodwill is monitored for internal management purposes. The allocation is made to those CGUs or groups of CGUs that are expected to benefit from the business combination in which the goodwill arose. Any potential impairment of goodwill is identified by comparing the recoverable amount of a CGU or group of CGUs to its carrying value. If the deficiency exceeds the carrying amount of goodwill, the carrying values of the remaining assets in the CGU or group of CGUs are reduced by the excess on a pro-rata basis.

The recoverable amount of a CGU is the higher of the estimated fair value less costs to sell or value-in-use of the group. In assessing value-in-use, the estimated future cash flows are discounted using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

Intangible assets consist of assets with indefinite useful lives such as the John Hancock brand name and certain investment management contracts and assets with finite useful lives such as the Company's distribution networks. The assessment of the indefinite useful life is based on the brand name being protected in the markets where they are sold by trademarks, which are renewable indefinitely. There are no legal, regulatory or contractual provisions that limit the useful life.

An intangible asset with an indefinite useful life is subject to an annual impairment test or more frequently if there is an indication that it is not recoverable.

Finite life intangible assets are amortized over their estimated useful lives, which vary from three to 68 years, and assessed for indicators of impairment at each reporting period, or more frequently when events or changes in circumstances dictate. If any indication of impairment exists, these assets are subject to an impairment test.

#### **(f) Miscellaneous assets**

Miscellaneous assets include defined benefit assets, deferred acquisition costs and capital assets. Deferred acquisition costs are carried at cost less accumulated amortization. These costs are recognized over the period where redemption fees may be charged or over the period revenue is earned. Capital assets are carried at cost less accumulated amortization computed on a straight-line basis over their estimated useful lives, which vary from two to 10 years.

#### **(g) Segregated funds**

The Company manages a number of segregated funds on behalf of policyholders. The investment returns on these funds are passed directly to the policyholders, although in some cases the Company has provided guarantees of investment performance as described below. Segregated funds net assets and segregated funds net liabilities are presented on separate lines on the Consolidated Statements of Financial Position. Segregated funds net assets are generally recorded at fair value. The fair value of the segregated funds net liabilities is equal to the fair value of the segregated funds net assets. Income earned from segregated fund management fees is included in other revenue. Investment income earned by the segregated funds and expenses incurred by the segregated funds are not separately presented in the Consolidated Statements of Income (Loss) and are disclosed in note 23.

The Company provides minimum guarantees on certain individual variable life and annuity contracts. These include minimum death benefit guarantees, minimum withdrawal guarantees, minimum accumulation guarantees and minimum income benefit guarantees. The liabilities associated with these minimum guarantees are recorded within insurance contract liabilities in the general fund.

#### **(h) Insurance and investment contract liabilities**

##### **Contract classification**

Most contracts issued by the Company are considered insurance, investment or service contracts. Contracts under which the Company accepts significant insurance risk from a policyholder are classified as insurance contracts in the consolidated financial statements. A contract is considered to have significant insurance risk if, and only if, an insured event could cause an insurer to make significant additional payments in any scenario, excluding scenarios that lack commercial substance at the inception of the contract. Contracts under which the Company does not accept significant insurance risk are classified as either investment contracts or considered a service contract and are accounted for in accordance with IAS 39 "Financial Instruments: Recognition and Measurement" or IAS 18 "Revenue", respectively.

Once a contract has been classified as an insurance contract, it remains an insurance contract for the remainder of its term, even if the insurance risk reduces significantly during this period, unless all rights and obligations are extinguished or expire. Investment contracts can be reclassified as insurance contracts if insurance risk subsequently becomes significant.

##### **Insurance contract liabilities**

Insurance contract liabilities, net of reinsurance assets, represent the amount which, together with estimated future premiums and net investment income, will be sufficient to pay estimated future benefits, policyholder dividends and refunds, taxes (other than income taxes) and expenses on policies in force. Insurance contract liabilities are presented gross of reinsurance assets on the Consolidated Statements of Financial Position. The Company's Appointed Actuary is responsible for determining the amount of insurance contract liabilities in accordance with standards established by the Canadian Institute of Actuaries. Insurance contract liabilities, net of reinsurance assets, have been determined using the Canadian Asset Liability Method ("CALM") as permitted by IFRS 4 "Insurance Contracts". Refer to note 8.

##### **Investment contract liabilities and deposits**

Investment contract liabilities include contracts issued to retail and institutional investors that do not contain significant insurance risk. Investment contract liabilities and deposits are measured at amortized cost, or at fair value if elected to ensure consistent measurement and reduce accounting mismatches between the assets supporting the contracts and the liabilities. The liability is derecognized when the contract expires, is discharged or is cancelled.

##### **Embedded derivatives**

Derivatives embedded within insurance contracts are separated if they are not considered to be closely related to the host insurance contract and do not meet the definition of an insurance contract. These embedded derivatives are presented separately in other assets or other liabilities and are measured at fair value with changes in fair value recognized in income.

#### **(i) Reinsurance assets**

The Company uses reinsurance in the normal course of business to manage its risk exposure. Insurance ceded to a reinsurer does not relieve the Company from its obligations to policyholders. The Company remains liable to its policyholders for the portion reinsured to the extent that any reinsurer does not meet its obligations for reinsurance ceded to it under the reinsurance agreements.

Reinsurance assets represent the benefit derived from reinsurance agreements in force at the reporting date, taking into account the financial condition of the reinsurer. Amounts recoverable from reinsurers are estimated in accordance with the terms of the relevant reinsurance contract.

Gains or losses on buying reinsurance are recognized in income immediately at the date of purchase and are not amortized. Premiums ceded and claims reimbursed are presented on a gross basis on the Consolidated Statements of Income (Loss). Reinsurance assets are



not offset against the related insurance contract liabilities and are presented separately on the Consolidated Statements of Financial Position.

#### **(j) Other financial instruments accounted for as liabilities**

The Company issues a variety of other financial instruments classified as liabilities, including notes payable, term notes, senior notes, senior debentures, subordinated notes, surplus notes and preferred shares. These financial liabilities are measured at amortized cost, with issuance costs deferred and amortized using the effective interest rate method.

#### **(k) Income taxes**

The Company provides for income taxes using the liability method of tax allocation. Under this method, the provision for income taxes is calculated based on income tax laws and income tax rates substantively enacted as at the date of the Consolidated Statements of Financial Position. The income tax provision is comprised of current income taxes and deferred income taxes. Current and deferred income taxes relating to items recognized in OCI and directly in equity are similarly recognized in OCI and directly in equity, respectively.

Current income taxes are amounts expected to be payable or recoverable as a result of operations in the current year and any adjustments to tax payable in respect of previous years.

Deferred income taxes result from temporary differences between the carrying value of assets and liabilities and their respective tax bases. Deferred income tax is measured at the substantively enacted tax rates that are expected to be applied to temporary differences when they reverse.

A deferred tax asset is recognized to the extent that future realization of the tax benefit is probable. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the tax benefit will be realized. Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets and they relate to income taxes levied by the same tax authority on the same taxable entity.

Deferred tax liabilities are recognized for all taxable temporary differences, except in respect of taxable temporary differences associated with investments in subsidiaries and investments subject to significant influence, where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

#### **(l) Foreign currency translation**

Items included in the financial statements of each of the Company's subsidiaries are measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). Transactions in a foreign currency are initially recorded at the functional currency rate prevailing at the date of the transaction.

Assets and liabilities denominated in foreign currencies are retranslated to the functional currency at the exchange rate in effect at the reporting date. Revenue and expenses denominated in foreign currencies are translated at the average exchange rate prevailing during the year. Exchange gains and losses are recognized in income with the exception of foreign monetary items that form part of a net investment in a foreign operation and the results of hedging these positions. These foreign exchange gains and losses are recognized in OCI until such time that a gain or loss on the underlying investment in the subsidiary is recognized in income.

#### **(m) Stock-based compensation**

The Company provides stock-based compensation to certain employees and directors as described in note 16. The Company uses the fair value method for stock option awards granted on or after January 1, 2002.

Compensation expense of equity instruments is accrued based on the best estimate of the number of instruments expected to vest, with revisions made to that estimate if subsequent information indicates that actual forfeitures are likely to differ from initial estimates, unless forfeitures are due to market based conditions.

Stock options are expensed with a corresponding increase in contributed surplus. Restricted share units, special restricted share units and deferred share units are expensed with a corresponding liability accrued based on the fair value of MFC's common shares. Performance share units are expensed with a corresponding liability accrued based on specific performance conditions and the market value of MFC's common shares. The change in the value of units resulting from changes in the Company's market value or changes in the specific performance conditions and credited dividends is recognized in income, offset by the impact of total return swaps used to manage the variability of the related liability.

Stock-based compensation is recognized as compensation expense over the applicable vesting period, except if the employee is eligible to retire at the time of grant or will be eligible to retire during the vesting period. Compensation cost, attributable to stock options and restricted share units granted to employees who are eligible to retire on the grant date or who will become eligible to retire during the vesting period, is recognized over the period from the grant date to the date of retirement eligibility.

When a stock-based compensation award vests in instalments (graded vesting features), each instalment is considered a separate award with the compensation expense amortized accordingly.

Contributions to the Global Share Ownership Plan ("GSOP") are expensed as incurred. Under the GSOP, subject to certain conditions, the Company will match a percentage of the employee's eligible contributions to certain maximums. All contributions are used by the plan's trustee to purchase MFC common shares in the open market.

## **(n) Employee future benefits**

The Company maintains a number of pension plans, both defined benefit and defined contribution, and post-employment benefit plans for eligible employees and agents. These plans include broad-based pension plans for employees, supplemental pension plans for executives and other post-employment benefit plans.

The Company's obligation in respect of defined benefit pension plans and post-employment benefit plans is calculated for each plan as the estimated present value of the future benefits that employees have earned in return for their service up to the reporting date. The discount rate used is based on the yield at the reporting date on high quality corporate bonds that have maturity dates approximating the terms of these obligations and that are denominated in the same currency in which the benefits are expected to be paid. To determine the Company's net defined benefit asset or liability, the fair value of any plan assets, any unrecognized past service costs and any unrecognized gains and losses are then deducted. When this calculation results in an asset, the amount recognized is limited to the sum of any unrecognized past service costs and actuarial losses and the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan.

Defined benefit assets are included in other assets and defined benefit liabilities are included in other liabilities.

The traditional defined benefit pension plans provide pension benefits based on the length of the employees' service and the employees' final average earnings. The other defined benefit pension plans consist of cash balance plans in the United States and Japan that provide benefits based on notional accumulated contributions and interest credits. The cost of all defined benefit pension plans is recognized using the projected benefit method, prorated on service, and estimates of expected return on plan assets and, where applicable, rates of compensation increases and retirement ages of employees. Actuarial gains and losses that exceed 10 per cent of the greater of the defined benefit obligation or the fair value of the plan assets are amortized and recognized in income on a straight-line basis over the estimated average remaining service life of the plan members. The expected return on plan assets is based on the Company's best estimate of the long-term expected rate of return and on the fair value of plan assets.

The defined contribution plans provide pension benefits based on the accumulated contributions and fund earnings. The cost of defined contribution plans is the contribution provided by the Company. Contributions to defined contribution pension plans are recognized in income in the periods during which services are rendered by employees.

The Company also provides health, dental and, in some instances, life insurance benefits to qualifying employees upon retirement. The estimated present value of the cost of these benefits is recognized in income over the employees' years of service to their dates of full entitlement. Actuarial gains and losses that exceed 10 per cent of the defined benefit obligation are amortized and recognized in income on a straight-line basis over the estimated average remaining service life of the plan members.

In Canada and the United States, health and dental benefits are also provided to employees who are absent from work due to disability (or other approved leave). The year over year change in the defined benefit obligation, including any actuarial gains or losses, is recognized in income in the current year.

When the benefits under the pension plans and post-employment benefit plans are improved, the portion of the increased benefit relating to past service by employees is recognized in income on a straight-line basis over the average period until the benefits become vested. To the extent that the benefits vest immediately, the increased benefit for past service is immediately recognized in income.

## **(o) Derivative and hedging instruments**

The Company uses derivative financial instruments ("derivatives") to manage exposures to foreign currency, interest rate and other market risks arising from on-balance sheet financial instruments, selected anticipated transactions and certain insurance contract liabilities. Derivatives embedded in other financial instruments ("host instruments") are separately recorded as derivatives when their economic characteristics and risks are not closely related to those of the host instrument, the terms of the embedded derivative are the same as those of a stand-alone derivative and the host instrument itself is not recorded at FVTPL. Derivatives are recorded at fair value. Derivatives with unrealized gains are reported as derivative assets and derivatives with unrealized losses are reported as derivative liabilities.

A determination is made for each relationship as to whether hedge accounting can be applied. Where hedge accounting is not applied, changes in the fair value of derivatives are recorded in investment income. Refer to note 5.

### **Hedge accounting**

Where the Company has elected to use hedge accounting, a hedge relationship is designated and documented at inception. Hedge effectiveness is evaluated at inception and throughout the term of the hedge and hedge accounting is only applied when the Company expects that each hedging instrument will be highly effective in achieving offsetting changes in fair value or changes in cash flows attributable to the risk being hedged. The assessment of hedge effectiveness is performed at the end of each reporting period. When it is determined that the hedging relationship is no longer effective, or the hedging instrument or the hedged item has been sold or terminated, the Company discontinues hedge accounting prospectively. In such cases, if the derivative hedging instruments are not sold or terminated, any subsequent changes in fair value of the derivative are recognized in investment income.

For derivatives that are designated as hedging instruments, changes in fair value are recognized according to the nature of the risks being hedged, as discussed below.

### **Fair value hedges**

In a fair value hedging relationship, changes in the fair value of the hedging derivatives are recorded in investment income, along with changes in fair value attributable to the hedged risk. The carrying value of the hedged item is adjusted for changes in fair value attributable to the hedged risk. To the extent the changes in the fair value of derivatives do not offset the changes in the fair value of the hedged item attributable to the hedged risk in investment income, any ineffectiveness will remain in investment income. When hedge accounting is discontinued, the carrying value of the hedged item is no longer adjusted and the cumulative fair value adjustments are amortized to investment income over the remaining term of the hedged item unless the hedged item is sold, at which time the balance is recognized immediately in investment income.

### **Cash flow hedges**

In a cash flow hedging relationship, the effective portion of the changes in the fair value of the hedging instrument is recorded in OCI while the ineffective portion is recognized in investment income. Gains and losses accumulated in Accumulated Other Comprehensive Income ("AOCI") are recognized in income during the same periods as the variability in the cash flows hedged or the hedged forecasted transactions are recognized. The reclassifications from AOCI are made to investment income, with the exception of total return swaps that hedge restricted share units, which are reclassified to compensation expense.

Gains and losses on cash flow hedges accumulated in AOCI are reclassified immediately to investment income when the hedged item is sold or the forecasted transaction is no longer expected to occur. When a hedge is discontinued, but the hedged forecasted transaction remains highly probable to occur, the amounts accumulated in AOCI are reclassified to investment income in the periods during which variability in the cash flows hedged or the hedged forecasted transaction is recognized in income.

### **Net investment hedges**

In a net investment hedging relationship, the gains and losses relating to the effective portion of the hedge are recorded in OCI. Gains and losses in AOCI are recognized in income during the periods when gains or losses on the underlying hedged net investment in foreign operations are recognized in income.

### **(p) Premium income and related expenses**

Gross premiums for all types of insurance contracts, and contracts with limited mortality or morbidity risk, are generally recognized as revenue when due. Premiums are reported gross of reinsurance ceded (see note 8). Revenue on service contracts is recognized as services are rendered.

Expenses are recognized when incurred. Insurance contract liabilities are computed at the end of each year, resulting in benefits and expenses being matched with the premium income.

## **Note 2 Future Accounting and Reporting Changes**

### **(a) Amendments to IFRS 7 "Financial Instruments: Disclosures"**

The amendments to IFRS 7 "Disclosures – Transfer of Financial Assets", issued in October 2010, increase the disclosure requirements for transactions involving transfers of financial assets. These amendments are intended to provide greater transparency around risk exposures when a financial asset is transferred but the transferor retains some level of continuing involvement in the asset. The amendments also require disclosures where transfers of financial assets do not occur evenly throughout the reporting period.

The amendments to IFRS 7 are effective for fiscal years beginning on or after July 1, 2011. The adoption of these amendments is not expected to have a significant impact on the consolidated financial statements.

### **(b) Amendment to IAS 12 "Income Taxes"**

An amendment to IAS 12 was issued in December 2010 that provides a practical approach to the measurement of deferred tax liabilities and deferred tax assets when investment property is measured using the fair value model under IAS 40 "Investment Property". Where entities measure deferred tax liabilities and deferred tax assets using a tax rate and tax base that is consistent with the expected manner of recovery or settlement, the amendment provides a rebuttable presumption for investment property measured using the fair value model that its carrying amount will be recovered through sale. This amendment is effective for fiscal years beginning on or after January 1, 2012. The adoption of this amendment is not expected to have a significant impact on the consolidated financial statements.

### **(c) IFRS 10 "Consolidated Financial Statements"**

#### **IFRS 11 "Joint Arrangements"**

#### **IFRS 12 "Disclosure of Interests in Other Entities"**

#### **Amendments to IAS 27 "Separate Financial Statements"**

#### **Amendments to IAS 28 "Investments in Associates and Joint Ventures"**

IFRS 10 "Consolidated Financial Statements", IFRS 11 "Joint Arrangements", IFRS 12 "Disclosure of Interests in Other Entities", amendments to IAS 27 "Separate Financial Statements" and amendments to IAS 28 "Investments in Associates and Joint Ventures" were all issued in May 2011 to improve consolidation and joint venture accounting. Each standard has an effective date for fiscal years beginning on or after January 1, 2013.

IFRS 10 replaces the consolidation guidance in IAS 27 “Separate Financial Statements” and Standards Interpretation Committee (“SIC”) -12 “Consolidation – Special Purpose Entities” by introducing a single consolidation model for all entities based on control, irrespective of the nature of the investee. Under IFRS 10, control is based on whether an investor has 1) power over the investee; 2) exposure or rights to variable returns from its involvement with the investee; and 3) the ability to use its power over the investee to affect the amount of the returns. The adoption of IFRS 10 is not expected to have a significant impact on the consolidated financial statements, although the Company expects that certain investments in private equity funds and a timber fund will be deconsolidated from the consolidated financial statements.

IFRS 11 introduces new accounting requirements for joint arrangements, replacing IAS 31 “Interests in Joint Ventures”. The option to apply the proportional consolidation method when accounting for jointly controlled entities is removed. The adoption of IFRS 11 is not expected to have a significant impact on the consolidated financial statements as the Company does not have material joint venture arrangements.

IFRS 12 requires enhanced disclosures about both consolidated entities and unconsolidated entities in which an entity has involvement. The objective of IFRS 12 is to present information so that financial statement users may evaluate the basis of control, any restrictions on consolidated assets and liabilities, risk exposures arising from involvements with unconsolidated structured entities and non-controlling interest holders’ involvement in the activities of consolidated entities. The adoption of IFRS 12 is not expected to have a significant impact on the consolidated financial statements.

IAS 27 and 28 have been amended for conforming changes based on the issuance of IFRS 10, IFRS 11 and IFRS 12 and the adoption of these amendments is not expected to have a significant impact on the consolidated financial statements.

#### **(d) IFRS 13 “Fair Value Measurement”**

IFRS 13 “Fair Value Measurement” was issued in May 2011 and replaces existing IFRS guidance on fair value measurement with a single standard. IFRS 13 defines fair value, provides guidance on how to determine fair value and requires disclosures about fair value measurements. IFRS 13 does not change the requirements regarding which items should be measured or disclosed at fair value. The standard is effective for fiscal years beginning on or after January 1, 2013. The adoption of IFRS 13 will result in additional financial statement disclosure but is not expected to have a significant impact on the consolidated financial statements.

#### **(e) Amendments to IAS 1 “Presentation of Financial Statements”**

An amendment to IAS 1 was issued in June 2011 requiring changes to the presentation of items of other comprehensive income. Under the amendments, presentation of items within other comprehensive income will be separately presented based on whether or not the item will be subsequently reclassified into net income. The amendments are effective for the Company for fiscal years beginning on or after January 1, 2013. The adoption of these amendments is not expected to have a significant impact on the consolidated financial statements.

#### **(f) Amendments to IAS 19 “Employee Benefits”**

The amendments to IAS 19 “Employee Benefits” were issued in June 2011. The amendments require the full funded status of the plan to be reflected in the Consolidated Statements of Financial Position and eliminate the corridor approach for amortization of actuarial gains and losses. This will result in actuarial gains and losses being recognized in full in OCI when they occur and no longer recognized in income. Past service costs will be recognized when a plan is amended with no deferral over the vesting period. The net benefit cost for defined benefit plans will be disaggregated into service cost and finance cost components in the Consolidated Statements of Income (Loss). Finance costs will be calculated using interest rates based on high quality corporate bond yields. Further, these amendments include enhanced disclosures about the characteristics of defined benefit plans and the risks to which the entity is exposed through participation in those plans.

The amendments to IAS 19 are effective for fiscal years beginning on or after January 1, 2013. At December 31, 2011, the consolidated pre-tax unrecognized net actuarial loss for the Company’s pension and post-employment benefit plans was \$1,011 and \$58, respectively, which will be reflected in AOCI, a component of equity, upon adoption. If these amounts persist at the date of adoption, they are expected to result in a material reduction of the Company’s capital ratios and could result in significant ongoing volatility in available capital, if regulatory capital includes this component of AOCI in the future. The actual impact to the Company will be based on actuarial estimates, market conditions and capital requirements that exist at the date of transition.

#### **(g) Amendments to IFRS 7 “Financial Instruments: Disclosure”**

##### **Amendments to IAS 32 “Financial Instruments: Presentation”**

The amendments to IFRS 7 – “Offsetting Financial Assets and Financial Liabilities” issued in December 2011 introduce new disclosure requirements for financial instruments relating to their rights of offset and related arrangements under an enforceable master netting agreement or similar arrangements. The amendments to IFRS 7 are effective for fiscal years beginning on or after January 1, 2013. The Company is assessing the impact of these new disclosure requirements on its consolidated financial statements.

The amendments to IAS 32 – “Offsetting Financial Assets and Financial Liabilities” also issued in December 2011 clarify the basis for offsetting financial instruments presented in the statement of financial position. The amendments to IAS 32 are effective for fiscal years beginning on or after January 1, 2014. The Company is currently assessing the impact of these amendments on its consolidated financial statements.

**(h) IFRS 9 “Financial Instruments”**

IFRS 9 “Financial Instruments” issued in November 2009 and amended in October 2010 is the first phase of a three phase project to replace IAS 39 “Financial Instruments: Recognition and Measurement”. IFRS 9 currently provides that financial assets are measured at either amortized cost or fair value on the basis of the entity’s business model for managing the financial assets and the contractual cash flow characteristics of the financial assets. The classification and measurement for financial liabilities remains generally unchanged; however, revisions have been made in the accounting for changes in fair value of a financial liability attributable to changes in the credit risk of that liability. The other phases of this project which are currently under development include impairment of financial assets and hedge accounting.

IFRS 9 is effective for fiscal years beginning on or after January 1, 2015. The Company is assessing the impact of IFRS 9 on its consolidated financial statements in conjunction with the completion of the other phases of this project.

**Note 3 Disposition**

On July 18, 2011, the Company entered into an agreement with Pacific Life Insurance Company (“Pacific Life”) to sell its life retrocession business. The transaction closed on August 31, 2011. The transaction was structured as reinsurance agreements between Pacific Life and the Company, in which the actuarial liabilities and related operating assets were transferred to Pacific Life. The net cash payment to Pacific Life was \$704 in lieu of transferring the invested assets backing the actuarial liabilities. Under the terms of the agreement, the Company transferred the infrastructure (including information technology systems and workforce) required to administer the life retrocession business to Pacific Life. The gain on transfer was \$303 (net of taxes of \$128), which has been recorded in other revenue in the Company’s Consolidated Statements of Income (Loss).

## Note 4 Invested Assets and Investment Income

### (a) Carrying values and fair values of invested assets

As at December 31, 2011	FVTPL	AFS	Other	Total carrying value	Total fair value
Cash and short-term securities <sup>(1)</sup>	\$ 568	\$ 8,473	\$ 3,772	\$ 12,813	\$ 12,813
Bonds <sup>(2)</sup>					
Canadian government & agency	11,030	5,517	–	16,547	16,547
U.S. government & agency <sup>(3)</sup>	20,108	7,904	–	28,012	28,012
Other government & agency	10,318	1,844	–	12,162	12,162
Corporate	53,091	5,017	–	58,108	58,108
Mortgage/asset-backed securities	5,135	523	–	5,658	5,658
Stocks <sup>(4)</sup>	8,778	1,465	–	10,243	10,243
Loans					
Mortgages <sup>(5)</sup>	–	–	35,023	35,023	37,062
Private placements <sup>(6)</sup>	–	–	20,294	20,294	22,191
Policy loans <sup>(7)</sup>	–	–	6,827	6,827	6,827
Bank loans <sup>(5)</sup>	–	–	2,288	2,288	2,299
Real estate <sup>(8)</sup>					
Own use property	–	–	831	831	1,260
Investment property	–	–	6,635	6,635	6,635
Other invested assets <sup>(9)</sup>	4,062	121	6,896	11,079	11,390
<b>Total invested assets</b>	<b>\$ 113,090</b>	<b>\$ 30,864</b>	<b>\$ 82,566</b>	<b>\$ 226,520</b>	<b>\$ 231,207</b>

#### As at December 31, 2010

Cash and short-term securities <sup>(1)</sup>	\$ 668	\$ 8,827	\$ 2,354	\$ 11,849	\$ 11,849
Bonds <sup>(2)</sup>					
Canadian government & agency	10,044	5,177	–	15,221	15,221
U.S. government & agency <sup>(3)</sup>	13,109	5,587	–	18,696	18,696
Other government & agency	7,591	1,417	–	9,008	9,008
Corporate	47,648	4,367	–	52,015	52,015
Mortgage/asset-backed securities	5,947	673	–	6,620	6,620
Stocks <sup>(4)</sup>	8,892	1,583	–	10,475	10,475
Loans					
Mortgages <sup>(5)</sup>	–	–	32,837	32,837	34,375
Private placements <sup>(6)</sup>	–	–	19,577	19,577	20,838
Policy loans <sup>(7)</sup>	–	–	6,486	6,486	6,486
Bank loans <sup>(5)</sup>	–	–	2,353	2,353	2,364
Real estate <sup>(8)</sup>					
Own use property	–	–	822	822	1,207
Investment property	–	–	5,531	5,531	5,531
Other invested assets <sup>(9)</sup>	3,283	80	6,369	9,732	10,113
<b>Total invested assets</b>	<b>\$ 97,182</b>	<b>\$ 27,711</b>	<b>\$ 76,329</b>	<b>\$ 201,222</b>	<b>\$ 204,798</b>

#### As at January 1, 2010

Cash and short-term securities <sup>(1)</sup>	\$ 651	\$ 16,124	\$ 2,030	\$ 18,805	\$ 18,805
Bonds <sup>(2)</sup>					
Canadian government & agency	8,131	4,337	–	12,468	12,468
U.S. government & agency <sup>(3)</sup>	5,365	2,230	–	7,595	7,595
Other government & agency	5,105	1,022	–	6,127	6,127
Corporate	45,780	5,690	–	51,470	51,470
Mortgage/asset-backed securities	6,556	891	–	7,447	7,447
Stocks <sup>(4)</sup>	7,730	1,958	–	9,688	9,688
Loans					
Mortgages <sup>(5)</sup>	–	–	31,158	31,158	32,114
Private placements <sup>(6)</sup>	–	–	19,980	19,980	20,594
Policy loans <sup>(7)</sup>	–	–	6,609	6,609	6,609
Bank loans <sup>(5)</sup>	–	–	2,457	2,457	2,468
Real estate <sup>(8)</sup>					
Own use property	–	–	859	859	1,212
Investment property	–	–	5,129	5,129	5,129
Other invested assets <sup>(9)</sup>	2,544	124	6,768	9,436	9,931
<b>Total invested assets</b>	<b>\$ 81,862</b>	<b>\$ 32,376</b>	<b>\$ 74,990</b>	<b>\$ 189,228</b>	<b>\$ 191,657</b>

<sup>(1)</sup> Fair values of short-term securities are determined using appropriate prevailing interest rates and credit spreads.

<sup>(2)</sup> Fair values for bonds, including corporate, U.S. Treasury and municipal securities are based on quoted market prices when available. When market prices are not available, fair value is generally estimated using discounted cash flow analyses, incorporating current market inputs for similar financial instruments with comparable terms and credit quality (matrix pricing). The significant inputs into these models include, but are not limited to, yield curves, credit risks and spreads, measures of volatility and prepayment rates.

(footnotes continue on following page)



<sup>(3)</sup> U.S. government & agency bonds include \$5,541 of state issued securities (December 31, 2010 – \$4,304 and January 1, 2010 – \$2,141).

<sup>(4)</sup> Fair values for stocks are determined with reference to quoted market prices. The balance includes investments in seed capital funds of approximately \$642 (December 31, 2010 – \$595 and January 1, 2010 – \$454) consisting principally of public stocks.

<sup>(5)</sup> Fair values of fixed-rate mortgages and bank loans are determined by discounting the expected future cash flows at market interest rates for mortgages with similar remaining terms and credit risks. Fair values for the majority of variable-rate mortgages and bank loans are assumed to equal their carrying values since there are no fixed spreads. Where a variable rate mortgage has a fixed spread above the benchmark rate, the mortgages are valued using current market spreads for equivalently rated borrowers.

<sup>(6)</sup> Fair values of private placements are based on valuation techniques and assumptions which reflect changes in interest rates and changes in the creditworthiness of individual borrowers which have occurred since the investments were originated. The assumptions are based primarily on market observable data. Fair values also reflect any applicable provision for credit loan losses.

<sup>(7)</sup> Policy loans are carried at amortized cost. As policy loans are fully collateralized by their cash surrender values and can be repaid at any time, their carrying values approximate their fair values.

<sup>(8)</sup> Fair values of investment property real estate are determined by qualified independent external appraisals using a variety of techniques including discounted cash flows, income capitalization approaches and comparable sales analysis. These appraisals incorporate relevant market evidence, where available. Own use real estate properties are carried on a cost basis with carrying values adjusted for accumulated depreciation and any accumulated impairment losses.

<sup>(9)</sup> Other invested assets include private equity (13% at December 31, 2011 and 14% at December 31, 2010) and fixed income investments held primarily in power and infrastructure (23% at December 31, 2011 and 22% at December 31, 2010), oil and gas (12% at December 31, 2011 and 9% at December 31, 2010), and timber and agriculture sectors (21% at December 31, 2011 and 20% at December 31, 2010) as well as investments in leveraged leases (23% at December 31, 2011 and 25% at December 31, 2010). Fair values of these investments are estimated based on best available information which is generally not market observable. This may include external appraisals, various valuation techniques used by external managers as well as internal valuations using a variety of techniques including discounted cash flows, earnings multiple of comparable companies and comparable sales analyses. Leveraged leases are carried at values taking into account the present value of future cash flows from the net investment.

### (b) Bonds and stocks classified as FVTPL

The FVTPL classification was elected for securities backing insurance and investment contract liabilities in order to substantially reduce an accounting mismatch arising from changes in the value of these assets and changes in the value recorded for the related insurance and investment contract liabilities. There would otherwise be a mismatch if the AFS classification was selected because changes in insurance and investment contract liabilities are reflected in net income rather than in OCI.

### (c) Bonds and stocks classified as AFS

The Company's investments in bonds and stocks classified as AFS are summarized below.

	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
<b>As at December 31, 2011</b>				
Bonds				
Canadian government & agency	\$ 5,546	\$ 226	\$ (255)	\$ 5,517
U.S. government & agency	7,758	154	(8)	7,904
Other government & agency	1,813	38	(7)	1,844
Corporate	4,867	229	(79)	5,017
Mortgage/asset-backed securities	572	22	(71)	523
<b>Total bonds</b>	<b>\$ 20,556</b>	<b>\$ 669</b>	<b>\$ (420)</b>	<b>\$ 20,805</b>
Stocks <sup>(1)</sup>	1,577	41	(153)	1,465
Other invested assets – private stocks	119	13	(11)	121
<b>Total bonds and stocks</b>	<b>\$ 22,252</b>	<b>\$ 723</b>	<b>\$ (584)</b>	<b>\$ 22,391</b>
<b>As at December 31, 2010</b>				
Bonds				
Canadian government & agency	\$ 4,974	\$ 263	\$ (60)	\$ 5,177
U.S. government & agency	5,697	49	(159)	5,587
Other government & agency	1,388	33	(4)	1,417
Corporate	4,199	196	(28)	4,367
Mortgage/asset-backed securities	736	25	(88)	673
<b>Total bonds</b>	<b>\$ 16,994</b>	<b>\$ 566</b>	<b>\$ (339)</b>	<b>\$ 17,221</b>
Stocks <sup>(1)</sup>	1,372	255	(44)	1,583
Other invested assets – private stocks	86	–	(6)	80
<b>Total bonds and stocks</b>	<b>\$ 18,452</b>	<b>\$ 821</b>	<b>\$ (389)</b>	<b>\$ 18,884</b>
<b>As at January 1, 2010</b>				
Bonds				
Canadian government & agency	\$ 3,892	\$ 525	\$ (80)	\$ 4,337
U.S. government & agency	2,163	89	(22)	2,230
Other government & agency	998	31	(7)	1,022
Corporate	5,327	431	(68)	5,690
Mortgage/asset-backed securities	1,051	10	(170)	891
<b>Total bonds</b>	<b>\$ 13,431</b>	<b>\$ 1,086</b>	<b>\$ (347)</b>	<b>\$ 14,170</b>
Stocks <sup>(1)</sup>	1,755	263	(60)	1,958
Other invested assets – private stocks	138	1	(15)	124
<b>Total bonds and stocks</b>	<b>\$ 15,324</b>	<b>\$ 1,350</b>	<b>\$ (422)</b>	<b>\$ 16,252</b>

<sup>(1)</sup> The largest single issuer represented 9% (December 31, 2010 – 9% and January 1, 2010 – 26%) of the fair value of stocks classified as AFS.

A tax expense of \$26 (December 31, 2010 – \$97 and January 1, 2010 – \$266) reduces the pre-tax net unrealized gain of \$139 (December 31, 2010 – gain of \$432 and January 1, 2010 – gain of \$928) above to \$113 (December 31, 2010 – \$335 and January 1, 2010 – \$662).

Securities that are designated as AFS are not actively traded but sales do occur as circumstances warrant. Such sales result in a reclassification of any accumulated unrealized gain (loss) in AOCI to net income as a realized gain (loss). The table below sets out the movement in unrealized gains (losses) on AFS securities during the year. In determining gains and losses on sale and transfer of AFS assets, cost is determined at the security lot level.

### Sales of AFS securities

For the years ended December 31,	2011	2010
Sale of bonds		
Sale proceeds	<b>\$ 30,307</b>	\$ 13,909
Gross gains	<b>1,550</b>	1,319
Gross losses	<b>(850)</b>	(515)
Sale of stocks		
Sale proceeds	<b>1,264</b>	2,387
Gross gains	<b>165</b>	359
Gross losses	<b>(50)</b>	(191)
Sale of other invested assets – private stocks		
Sale proceeds	<b>41</b>	34
Gross gains	<b>4</b>	6
Gross losses	<b>(2)</b>	(3)
Sale of short-term securities		
Sale proceeds	<b>13,017</b>	9,495
Gross gains	–	–
Gross losses	–	–

## Unrealized losses on AFS securities

The Company monitors its portfolio of AFS securities on an ongoing basis to identify impairments based on objective evidence. Analysis is conducted at the individual security lot level and includes an assessment of a significant or prolonged decline in the fair value of an individual security lot below its cost.

For further discussion regarding the Company's impairment policy, see note 1. The following table presents the Company's unrealized loss aging for total bonds and stocks classified as AFS, by investment type and length of time the security was in a continuous unrealized loss position.

	Less than 12 months			12 months or more			Total		
	Amortized cost	Fair value	Unrealized losses	Amortized cost	Fair value	Unrealized losses	Amortized cost	Fair value	Unrealized losses
<b>As at December 31, 2011</b>									
Bonds									
Canadian government & agency	\$ 1,474	\$ 1,419	\$ (55)	\$ 1,490	\$ 1,290	\$ (200)	\$ 2,964	\$ 2,709	\$ (255)
U.S. government & agency	1,031	1,023	(8)	1	1	–	1,032	1,024	(8)
Other government & agency	649	643	(6)	18	17	(1)	667	660	(7)
Corporate	1,180	1,144	(36)	321	278	(43)	1,501	1,422	(79)
Mortgage/asset-backed securities	46	44	(2)	212	143	(69)	258	187	(71)
<b>Total bonds</b>	<b>\$ 4,380</b>	<b>\$ 4,273</b>	<b>\$ (107)</b>	<b>\$ 2,042</b>	<b>\$ 1,729</b>	<b>\$ (313)</b>	<b>\$ 6,422</b>	<b>\$ 6,002</b>	<b>\$ (420)</b>
Stocks	1,058	905	(153)	2	2	–	1,060	907	(153)
Other invested assets – private stocks	1	1	–	57	46	(11)	58	47	(11)
<b>Total bonds and stocks</b>	<b>\$ 5,439</b>	<b>\$ 5,179</b>	<b>\$ (260)</b>	<b>\$ 2,101</b>	<b>\$ 1,777</b>	<b>\$ (324)</b>	<b>\$ 7,540</b>	<b>\$ 6,956</b>	<b>\$ (584)</b>
<b>As at December 31, 2010</b>									
Bonds									
Canadian government & agency	\$ 3,111	\$ 3,057	\$ (54)	\$ 103	\$ 97	\$ (6)	\$ 3,214	\$ 3,154	\$ (60)
U.S. government & agency	3,942	3,783	(159)	–	–	–	3,942	3,783	(159)
Other government & agency	321	317	(4)	11	11	–	332	328	(4)
Corporate	1,020	1,000	(20)	127	119	(8)	1,147	1,119	(28)
Mortgage/asset-backed securities	37	36	(1)	257	170	(87)	294	206	(88)
<b>Total bonds</b>	<b>\$ 8,431</b>	<b>\$ 8,193</b>	<b>\$ (238)</b>	<b>\$ 498</b>	<b>\$ 397</b>	<b>\$ (101)</b>	<b>\$ 8,929</b>	<b>\$ 8,590</b>	<b>\$ (339)</b>
Stocks	415	378	(37)	41	34	(7)	456	412	(44)
Other invested assets – private stocks	78	72	(6)	3	3	–	81	75	(6)
<b>Total bonds and stocks</b>	<b>\$ 8,924</b>	<b>\$ 8,643</b>	<b>\$ (281)</b>	<b>\$ 542</b>	<b>\$ 434</b>	<b>\$ (108)</b>	<b>\$ 9,466</b>	<b>\$ 9,077</b>	<b>\$ (389)</b>
<b>As at January 1, 2010</b>									
Bonds									
Canadian government & agency	\$ 1,847	\$ 1,788	\$ (59)	\$ 185	\$ 164	\$ (21)	\$ 2,032	\$ 1,952	\$ (80)
U.S. government & agency	819	798	(21)	17	16	(1)	836	814	(22)
Other government & agency	167	162	(5)	15	13	(2)	182	175	(7)
Corporate	522	510	(12)	781	725	(56)	1,303	1,235	(68)
Mortgage/asset-backed securities	42	40	(2)	447	279	(168)	489	319	(170)
<b>Total bonds</b>	<b>\$ 3,397</b>	<b>\$ 3,298</b>	<b>\$ (99)</b>	<b>\$ 1,445</b>	<b>\$ 1,197</b>	<b>\$ (248)</b>	<b>\$ 4,842</b>	<b>\$ 4,495</b>	<b>\$ (347)</b>
Stocks	666	606	(60)	–	–	–	666	606	(60)
Other invested assets – private stocks	91	76	(15)	–	–	–	91	76	(15)
<b>Total bonds and stocks</b>	<b>\$ 4,154</b>	<b>\$ 3,980</b>	<b>\$ (174)</b>	<b>\$ 1,445</b>	<b>\$ 1,197</b>	<b>\$ (248)</b>	<b>\$ 5,599</b>	<b>\$ 5,177</b>	<b>\$ (422)</b>

At December 31, 2011, there were 507 (December 31, 2010 – 555 and January 1, 2010 – 899) AFS bonds with an aggregate gross unrealized loss of \$420 (December 31, 2010 – \$339 and January 1, 2010 – \$347) of which the single largest unrealized loss was \$81 (December 31, 2010 – \$67 and January 1, 2010 – \$27). The Company anticipates that these bonds will perform in accordance with their contractual terms and currently has found no objective evidence of impairment.

At December 31, 2011, there were 1,358 (December 31, 2010 – 1,046 and January 1, 2010 – 546) publicly traded stocks with an aggregate gross unrealized loss of \$153 (December 31, 2010 – \$44 and January 1, 2010 – \$60), of which the single largest unrealized loss was \$40 (December 31, 2010 – \$3 and January 1, 2010 – \$5). The Company anticipates that these stocks will recover in value in the near term.

As at December 31, 2011, 78 per cent (December 31, 2010 – 86 per cent and January 1, 2010 – 81 per cent) of publicly traded securities in an unrealized loss position were trading at greater than 80 per cent of amortized cost. Based upon the Company's current evaluation of these securities in accordance with its impairment policy, the Company has found no objective evidence of impairment and the carrying value is appropriate. For securities listed above as being in an unrealized loss position of 12 months or more, the duration of impairment ranges from 12 to 57 months (December 31, 2010 – 12 to 45 months and January 1, 2010 – 12 to 33 months).

## Contractual maturity of AFS bonds

The amortized cost and estimated fair value of AFS bonds by contractual maturity are shown below.

As at December 31, 2011	Amortized cost	Fair value
<b>Maturity</b>		
One year or less	\$ 1,405	\$ 1,408
Over one year through five years	2,806	2,878
Over five years through ten years	3,727	3,889
Over ten years	12,046	12,107
Subtotal	\$ 19,984	\$ 20,282
Asset-backed and mortgage-backed securities	572	523
<b>Total</b>	<b>\$ 20,556</b>	<b>\$ 20,805</b>

Securitized assets, such as asset-backed securities ("ABS"), mortgage-backed securities ("MBS") and collateralized mortgage obligations ("CMOs"), are not categorized by contractual maturity because estimated maturities may differ from contractual maturities due to security call or prepayment provisions.

## (d) Other invested assets

Other invested assets include investments in associates accounted for using the equity method of accounting as follows.

As at	December 31,				January 1,	
	2011		2010		2010	
	Carrying value	% of total	Carrying value	% of total	Carrying value	% of total
Leases	\$ 2,560	75.7	\$ 2,424	72.7	\$ 2,479	72.2
Private equity and mezzanine debt	45	1.3	116	3.5	140	4.1
Timber	129	3.8	120	3.6	99	2.9
Agriculture	183	5.4	147	4.4	118	3.4
Affordable housing	336	9.9	377	11.3	429	12.5
Other	132	3.9	148	4.5	168	4.9
<b>Total</b>	<b>\$ 3,385</b>	<b>100.0</b>	<b>\$ 3,332</b>	<b>100.0</b>	<b>\$ 3,433</b>	<b>100.0</b>

The Company's share of profit from its investments in associates included in income for the year ended December 31, 2011 was \$54 (2010 – \$55).

For the year ended December 31, 2011, the Company did not receive dividends from any of its investments in associates (2010 – nil).

## (e) Mortgages

The following tables present the carrying value and fair value of mortgages, by region and by property type:

### Mortgage loans by region

As at	December 31,				January 1,	
	2011		2010		2010	
	Carrying value	Fair value	Carrying value	Fair value	Carrying value	Fair value
Canada						
Ontario	\$ 9,037	\$ 9,329	\$ 8,577	\$ 8,820	\$ 7,999	\$ 8,070
Western Canada	7,569	7,727	7,159	7,294	6,566	6,633
Quebec	2,919	2,983	2,458	2,509	2,127	2,141
Eastern Canada	1,418	1,474	1,337	1,380	1,251	1,265
United States						
East North Central	1,528	1,666	1,267	1,366	1,195	1,268
East South Central	222	242	229	245	417	431
Middle Atlantic	2,301	2,583	2,287	2,503	2,308	2,462
Mountain	895	975	918	986	946	999
New England	1,014	1,142	1,003	1,099	1,095	1,166
Pacific	3,710	4,084	3,517	3,786	3,537	3,741
South Atlantic	2,905	3,198	2,520	2,702	2,282	2,426
West North Central	561	625	498	536	359	372
West South Central	785	850	907	966	903	947
Other	158	183	159	182	172	192
Other	1	1	1	1	1	1
<b>Total</b>	<b>\$ 35,023</b>	<b>\$ 37,062</b>	<b>\$ 32,837</b>	<b>\$ 34,375</b>	<b>\$ 31,158</b>	<b>\$ 32,114</b>

## Mortgage loans by property type

As at	December 31,				January 1,	
	2011		2010		2010	
	Carrying value	Fair value	Carrying value	Fair value	Carrying value	Fair value
Residential	\$ 16,893	\$ 17,266	\$ 14,875	\$ 15,125	\$ 13,238	\$ 13,409
Office	5,688	6,153	5,483	5,854	4,821	5,067
Retail	5,816	6,398	5,903	6,332	5,999	6,221
Industrial	2,888	3,120	3,184	3,410	3,444	3,608
Other	3,738	4,125	3,392	3,654	3,656	3,809
<b>Total</b>	<b>\$ 35,023</b>	<b>\$ 37,062</b>	<b>\$ 32,837</b>	<b>\$ 34,375</b>	<b>\$ 31,158</b>	<b>\$ 32,114</b>

The carrying value of government-insured mortgages was 32 per cent of the total mortgage portfolio as at December 31, 2011 (December 31, 2010 – 34 per cent and January 1, 2010 – 30 per cent) and the carrying value of privately-insured mortgages was 0.4 per cent of the total mortgage portfolio as at December 31, 2011 (December 31, 2010 – 0.3 per cent and January 1, 2010 – 0.1 per cent).

## (f) Investment income

For the year ended December 31, 2011	FVTPL	AFS	Other <sup>(2)</sup>	Total	Yields
Cash and short-term securities					1.3%
Interest income	\$ 16	\$ 83	\$ –	\$ 99	
Gains <sup>(1)</sup>	9	44	–	53	
Bonds					13.1%
Interest income	4,014	620	–	4,634	4.4%
Gains <sup>(1)</sup>	8,070	640	–	8,710	8.4%
Impairment loss, net	(60)	(15)	–	(75)	
Stocks					(2.8)%
Dividend income	210	68	–	278	
Gains (losses) <sup>(1)</sup>	(648)	133	–	(515)	
Impairment loss	–	(61)	–	(61)	
Loans					5.1%
Mortgages					
Interest income	–	–	1,660	1,660	
Gains <sup>(1)</sup>	–	–	24	24	
Provision, net	–	–	(24)	(24)	
Private placements					7.2%
Interest income	–	–	1,319	1,319	
Gains <sup>(1)</sup>	–	–	23	23	
Recovery, net	–	–	28	28	
Policy loans	–	–	391	391	6.0%
Bank loans					4.3%
Interest income	–	–	97	97	
Real estate					10.1%
Rental income, net of depreciation	–	–	358	358	
Gains <sup>(1)</sup>	–	–	271	271	
Impairment loss	–	–	(3)	(3)	
Derivatives					n/a
Interest income, net	–	–	316	316	
Gains <sup>(1)</sup>	–	–	7,802	7,802	
Other investments					8.8%
Interest income	–	–	30	30	
Oil and gas, timber, agriculture and other income	–	–	585	585	
Gains <sup>(1)</sup>	163	23	48	234	
Recovery	–	–	3	3	
<b>Total investment income</b>	<b>\$ 11,774</b>	<b>\$ 1,535</b>	<b>\$ 12,928</b>	<b>\$ 26,237</b>	<b>13.4%</b>
Interest income	\$ 4,030	\$ 703	\$ 3,813	\$ 8,546	4.2%
Dividend, rental and other income	210	68	943	1,221	0.6%
Impairments and provisions for loan losses (note 10)	(60)	(76)	4	(132)	(0.1)%
Realized gains (losses) on assets backing surplus	(18)	799	(49)	732	0.4%
	\$ 4,162	\$ 1,494	\$ 4,711	\$ 10,367	
Realized and unrealized gains (losses) on assets supporting insurance and investment contract liabilities					
Bonds	\$ 8,070	\$ 28	\$ –	\$ 8,098	3.9%
Stocks	(648)	13	–	(635)	(0.3)%
Loans	–	–	44	44	0.0%
Real estate	–	–	267	267	0.1%
Other investments	190	–	32	222	0.1%
Derivatives	–	–	7,874	7,874	3.8%
	\$ 7,612	\$ 41	\$ 8,217	\$ 15,870	
<b>Total investment income</b>	<b>\$ 11,774</b>	<b>\$ 1,535</b>	<b>\$ 12,928</b>	<b>\$ 26,237</b>	<b>13.4%</b>

For the year ended December 31, 2010	FVTPL	AFS	Other <sup>(2)</sup>	Total	Yields
Cash and short-term securities					0.1%
Interest income	\$ 14	\$ 62	\$ –	\$ 76	
Losses <sup>(1)</sup>	(59)	–	–	(59)	
Bonds					8.3%
Interest income	3,785	683	–	4,468	4.7%
Gains <sup>(1)</sup>	2,500	819	–	3,319	3.5%
Impairment loss, net	(52)	(22)	–	(74)	
Stocks					14.0%
Dividend income	188	55	–	243	
Gains <sup>(1)</sup>	945	168	–	1,113	
Impairment loss	–	(43)	–	(43)	
Loans					
Mortgages					5.1%
Interest income	–	–	1,612	1,612	
Gains <sup>(1)</sup>	–	–	21	21	
Provision for loan losses, net	–	–	(35)	(35)	
Private placements					6.5%
Interest income	–	–	1,275	1,275	
Gains <sup>(1)</sup>	–	–	58	58	
Provision for loan losses, net	–	–	(37)	(37)	
Policy loans	–	–	422	422	6.3%
Bank loans					3.9%
Interest income	–	–	93	93	
Real estate					5.4%
Rental income, net of depreciation	–	–	346	346	
Losses <sup>(1)</sup>	–	–	(27)	(27)	
Derivatives					n/a
Interest income, net	–	–	2	2	
Losses <sup>(1)</sup>	–	–	(197)	(197)	
Recovery	–	–	1	1	
Other investments					6.8%
Interest income	–	–	125	125	
Oil and gas, timber, agriculture and other income	–	–	304	304	
Gains <sup>(1)</sup>	155	49	9	213	
Impairment (loss) recovery	–	(63)	6	(57)	
<b>Total investment income</b>	<b>\$ 7,476</b>	<b>\$ 1,708</b>	<b>\$ 3,978</b>	<b>\$ 13,162</b>	<b>6.8%</b>
Interest income	\$ 3,799	\$ 745	\$ 3,529	\$ 8,073	4.1%
Dividend, rental and other income	188	55	650	893	0.4%
Impairments and provisions for loan losses (note 10)	(52)	(128)	(65)	(245)	(0.1)%
Realized gains (losses) on assets backing surplus	20	995	(159)	856	0.4%
	\$ 3,955	\$ 1,667	\$ 3,955	\$ 9,577	
Realized and unrealized gains (losses) on assets supporting insurance and investment contract liabilities					
Bonds	\$ 2,500	\$ 4	\$ –	\$ 2,504	1.3%
Stocks	945	8	–	953	0.5%
Loans	–	–	82	82	0.0%
Real estate	–	–	(21)	(21)	0.0%
Other investments	76	29	9	114	0.1%
Derivatives	–	–	(47)	(47)	0.0%
	\$ 3,521	\$ 41	\$ 23	\$ 3,585	
<b>Total investment income</b>	<b>\$ 7,476</b>	<b>\$ 1,708</b>	<b>\$ 3,978</b>	<b>\$ 13,162</b>	<b>6.8%</b>

<sup>(1)</sup> Gains (losses) include realized and unrealized gains (losses) for securities and derivatives designated as FVTPL and realized gains (losses) for AFS securities, loans and other invested assets.

<sup>(2)</sup> Other includes interest income, real estate rental income and derivative income as outlined in note 5 and earnings on other investments.

## (g) Investment and interest expense

### Investment expenses

For the years ended December 31,	2011	2010
Related to invested assets	\$ 381	\$ 391
Related to segregated, mutual and other funds	620	590
<b>Total investment expenses</b>	<b>\$ 1,001</b>	<b>\$ 981</b>



## Interest expense

For the years ended December 31,	2011	2010
Interest expense on investment contracts	\$ 105	\$ 122
Other interest expense	1,144	922
<b>Total interest expense</b>	<b>\$ 1,249</b>	<b>\$ 1,044</b>

## (h) Real estate

A summary of the Company's real estate assets by type is as follows.

As at	December 31,		January 1,
	2011	2010	2010
Own use property <sup>(1)</sup>	\$ 831	\$ 822	\$ 859
Investment property	6,635	5,531	5,129
	<b>\$ 7,466</b>	<b>\$ 6,353</b>	<b>\$ 5,988</b>

<sup>(1)</sup> Net of accumulated depreciation of \$244 (December 31, 2010 – \$231 and January 1, 2010 – \$216).

## Own use real estate

Real estate held for own use consists of real estate and buildings, including buildings on leased land. Changes in own use real estate for the years ended December 31, 2011 and 2010 are summarized as follows.

For the years ended December 31,	2011	2010
Balance at January 1	\$ 822	\$ 859
Additions	25	10
Disposals	(8)	(5)
Depreciation	(20)	(19)
Impairment	(3)	–
Impact of changes in foreign exchange rates	15	(23)
<b>Balance at December 31</b>	<b>\$ 831</b>	<b>\$ 822</b>

## Investment property

Investment property comprises a number of commercial properties that are leased to third parties. Investment property activity is summarized as follows.

For the years ended December 31,	2011	2010
Balance at January 1	\$ 5,531	\$ 5,129
Acquisitions	1,093	579
Disposals	(331)	(50)
Change in fair value	252	(30)
Impact of changes in foreign exchange rates	90	(97)
<b>Balance at December 31</b>	<b>\$ 6,635</b>	<b>\$ 5,531</b>

The following table identifies the amounts included in investment income relating to investment property:

For the years ended December 31,	2011	2010
Rental income from investment property	\$ 656	\$ 635
Direct operating expenses that generated rental income	(341)	(330)
<b>Net income from investment property</b>	<b>\$ 315</b>	<b>\$ 305</b>

## (i) Mortgage securitization

The Company securitizes certain insured fixed and variable rate commercial and residential mortgages and Home Equity Lines of Credit ("HELOC") through creation of mortgage-backed securities under the Canadian Mortgage Bond Program ("CMB"), Government of Canada National Housing Act ("NHA") MBS program, as well as to other third party investors. Additionally, the Company mitigates credit risk on certain mortgages through transfers to third party investors. Under IFRS, these transactions remain "on-balance sheet" and are accounted for as secured borrowings, as described in note 1(d).

There are no expected credit losses on the mortgages that have been securitized under the Government of Canada CMB and NHA MBS programs and the HELOC securitization as they are government guaranteed. For the mortgages transferred to third party investors, credit risk is mitigated by the terms of the transfer arrangement. Benefits received from the transfers include interest spread between the asset and associated liability.

The carrying amount of securitized assets reflecting the Company's continuing involvement with the mortgages and the associated liabilities is as follows.

As at December 31, 2011	Securitized assets			Secured borrowing liabilities
	Securitized mortgages	Restricted cash and short-term securities	Total	
Securitization program				
HELOC securitization <sup>(1)</sup>	\$ 750	\$ 4	\$ 754	\$ 747
CMB securitization	391	93	484	481
NHA MBS securitization <sup>(2)</sup>	39	–	39	39
Other	16	–	16	16
<b>As at December 31, 2010</b>				
HELOC securitization <sup>(1)</sup>	\$ 500	\$ 3	\$ 503	\$ 497
CMB securitization	439	42	481	481
NHA MBS securitization <sup>(2)</sup>	46	1	47	47
Other	16	–	16	16
<b>As at January 1, 2010</b>				
CMB securitization	\$ 389	\$ 18	\$ 407	\$ 407
NHA MBS securitization <sup>(2)</sup>	56	1	57	57

<sup>(1)</sup> The restricted cash balance for the HELOC securitization reflects a cash reserve fund established in relation to the transactions. The reserve will be drawn upon only in the event of insufficient cash flows from the underlying HELOCs to satisfy the secured borrowing liability.

<sup>(2)</sup> Under the Government of Canada programs, cash received on the mortgages is held in a restricted cash account for the payment of the liability under the terms of the program.

## Note 5 Derivative and Hedging Instruments

Derivatives are financial contracts, the value of which is derived from underlying interest rates, foreign exchange rates, other financial instruments, commodity prices or indices. The Company uses derivatives including swaps, forward and futures agreements, and options to manage current and anticipated exposures to changes in interest rates, foreign exchange rates, commodity prices and equity market prices, and to replicate permissible investments.

Swaps are over-the-counter ("OTC") contractual agreements between the Company and a third party to exchange a series of cash flows based upon rates applied to a notional amount. For interest rate swaps, counterparties generally exchange fixed or floating interest rate payments based on a notional value in a single currency. Cross currency swaps involve the exchange of principal amounts between parties as well as the exchange of interest payments in one currency for the receipt of interest payments in another currency. Total return swaps are contracts that involve the exchange of payments based on changes in the values of a reference asset, including any returns such as interest earned on these assets, in return for amounts based on reference rates specified in the contract.

Forward and futures agreements are contractual obligations to buy or sell a financial instrument, foreign currency or other underlying commodity on a predetermined future date at a specified price. Forward contracts are OTC contracts negotiated between counterparties, whereas futures agreements are contracts with standard amounts and settlement dates that are traded on regulated exchanges.

Options are contractual agreements whereby the holder has the right, but not the obligation, to buy (call option) or sell (put option) a security, exchange rate, interest rate, or other financial instrument at a predetermined price/rate within a specified time.

See variable annuity guarantee dynamic hedging strategy in note 10(a) for an explanation of the Company's dynamic hedging strategy for its variable annuity product guarantees.

### Hedging relationships

The Company uses derivatives for economic hedging purposes. In certain circumstances, these hedges also meet the requirements for hedge accounting. Hedging relationships eligible for hedge accounting are designated as fair value hedges, cash flow hedges or as net investment hedges, as described below.

## Fair value hedges

The Company uses interest rate swaps to manage its exposure to changes in the fair value of fixed rate financial instruments caused by changes in interest rates. The Company also uses cross currency swaps to manage its exposure to foreign exchange rate fluctuations, interest rate fluctuations, or both.

The Company recognizes gains and losses on derivatives and the related hedged items in fair value hedges in investment income. These investment gains (losses) are shown in the following table.

## Derivatives in fair value hedging relationships

	Hedged items in fair value hedging relationships	Gains (losses) recognized on derivatives	Gains (losses) recognized for hedged items	Ineffectiveness recognized in investment income
<b>For the year ended December 31, 2011</b>				
Interest rate swaps	Fixed rate assets	\$ (1,688)	\$ 1,470	\$ (218)
	Fixed rate liabilities	98	(97)	1
Foreign currency swaps	Fixed rate assets	(7)	9	2
	Floating rate liabilities	(1)	1	-
<b>Total</b>		<b>\$ (1,598)</b>	<b>\$ 1,383</b>	<b>\$ (215)</b>
<b>For the year ended December 31, 2010</b>				
Interest rate swaps	Fixed rate assets	\$ (226)	\$ 204	\$ (22)
	Fixed rate liabilities	(1)	-	(1)
Foreign currency swaps	Fixed rate assets	(33)	56	23
	Floating rate liabilities	-	(7)	(7)
<b>Total</b>		<b>\$ (260)</b>	<b>\$ 253</b>	<b>\$ (7)</b>

## Cash flow hedges

The Company uses interest rate swaps to hedge the variability in cash flows from variable rate financial instruments and forecasted transactions. The Company also uses cross currency swaps and foreign currency forward contracts to hedge the variability from foreign currency financial instruments and foreign currency expenses.

The effects of derivatives in cash flow hedging relationships on the Consolidated Statements of Income (Loss) and the Consolidated Statements of Changes in Equity are shown in the following table.

## Derivatives in cash flow hedging relationships

	Hedged items in cash flow hedging relationships	Gains (losses) deferred in AOCI on derivatives	Gains (losses) reclassified from AOCI into investment income	Ineffectiveness recognized in investment income
<b>For the year ended December 31, 2011</b>				
Interest rate swaps	Forecasted liabilities	\$ (12)	\$ (12)	\$ -
Foreign currency swaps	Fixed rate assets	(1)	-	1
Foreign currency forwards	Forecasted expenses	(24)	-	-
Total return swaps	Stock-based compensation	(24)	-	-
<b>Total</b>		<b>\$ (61)</b>	<b>\$ (12)</b>	<b>\$ 1</b>
<b>For the year ended December 31, 2010</b>				
Interest rate swaps	Forecasted liabilities	\$ (31)	\$ (14)	\$ -
Foreign currency swaps	Fixed rate assets	4	-	-
Foreign currency forwards	Forecasted expenses	(16)	-	-
Total return swaps	Stock-based compensation	(12)	-	-
<b>Total</b>		<b>\$ (55)</b>	<b>\$ (14)</b>	<b>\$ -</b>

The Company anticipates that net losses of approximately \$13 will be reclassified from AOCI to net income within the next twelve months.

The maximum time frame for which variable cash flows are hedged is 29 years.

## Hedges of net investments in net foreign operations

The Company primarily uses forward currency contracts, cross currency swaps and non-functional currency denominated debt to manage its foreign currency exposures to net investments in net foreign operations.

The effects of derivatives in net investment hedging relationships on the Consolidated Statements of Income (Loss) and the Consolidated Statements of Changes in Equity are shown in the following table.

### Hedging instruments in net investment hedging relationships

	Gains (losses) deferred in AOCI on derivatives	Gains (losses) reclassified from AOCI into investment income	Ineffectiveness recognized in investment income
<b>For the year ended December 31, 2011</b>			
Currency swaps	\$ (69)	\$ –	\$ –
Foreign currency forwards	–	–	–
Non-functional currency denominated debt	(25)	–	–
<b>Total</b>	<b>\$ (94)</b>	<b>\$ –</b>	<b>\$ –</b>
<b>For the year ended December 31, 2010</b>			
Currency swaps	\$ 87	\$ –	\$ –
Foreign currency forwards	119	–	–
<b>Total</b>	<b>\$ 206</b>	<b>\$ –</b>	<b>\$ –</b>

### Derivatives not designated as hedging instruments

Derivatives used in portfolios supporting insurance contract liabilities are generally not designated as hedging instruments because the change in the value of the insurance contract liabilities hedged items in these portfolios is recorded through net income. Given the changes in fair value of these derivatives and related hedge risks are recognized in investment income as they occur, they generally offset the change in hedged risk to the extent the hedges are effective.

Interest rate and cross currency swaps are used in the portfolios supporting insurance contract liabilities to manage duration and currency risks.

The effects of derivatives in non-hedging relationships on the Consolidated Statements of Income (Loss) are shown in the following table.

<b>For the years ended December 31,</b>	<b>2011</b>	<b>2010</b>
<b>Non-hedging relationships</b>		
Investment income (loss)		
Interest rate swaps	\$ 8,673	\$ 686
Credit default swaps	–	(1)
Stock futures	(216)	(987)
Currency futures	75	67
Interest rate futures	(352)	(100)
Interest rate options	1	(1)
Total return swaps	(29)	13
Foreign currency swaps	(108)	82
Foreign currency forwards	(28)	52
<b>Total investment income (loss) from derivatives in non-hedging relationships</b>	<b>\$ 8,016</b>	<b>\$ (189)</b>

### Fair value of derivatives

The pricing models used to value OTC derivatives are based on market standard valuation methodologies and the inputs to these models are consistent with what a market participant would use when pricing the instruments. Derivative valuations can be affected by changes in interest rates, currency exchange rates, financial indices, credit spreads, default risk (including the counterparties to the contract), and volatility. The significant inputs to the pricing models for most OTC derivatives are inputs that are observable or can be corroborated by observable market data. Inputs that are observable generally include: interest rates, foreign currency exchange rates and interest rate curves. However, certain OTC derivatives may rely on inputs that are significant to the fair value that are not observable in the market or cannot be derived principally from or corroborated by observable market data. Inputs that are unobservable generally include: broker quotes, volatilities and inputs that are outside of the observable portion of the interest rate curve or other relevant market measures. These unobservable inputs may involve significant management judgment or estimation. Even though unobservable, these inputs are based on assumptions deemed appropriate given the circumstances and consistent with what market participants would use when pricing such instruments. The Company's use of unobservable inputs is limited and the impact on derivative fair values does not represent a material amount as evidenced by the limited amount of Level 3 derivatives in note 11. The credit risk of both the counterparty and the Company are considered in determining the fair value for all OTC derivatives after taking into account the effects of netting agreements and collateral arrangements.

The fair value of derivative instruments is summarized by term to maturity in the following tables. Fair values shown do not incorporate the impact of master netting agreements (see note 10).

<b>Term to maturity</b>	Less than 1 year	1 to 3 years	3 to 5 years	Over 5 years	Total
<b>As at December 31, 2011</b>					
Derivative assets	\$ 67	\$ 198	\$ 469	\$ 14,738	\$ 15,472
Derivative liabilities	115	342	387	6,783	7,627
<b>As at December 31, 2010</b>					
Derivative assets	\$ 153	\$ 179	\$ 182	\$ 3,486	\$ 4,000
Derivative liabilities	97	366	302	2,522	3,287
<b>As at January 1, 2010</b>					
Derivative assets	\$ 271	\$ 249	\$ 99	\$ 2,088	\$ 2,707
Derivative liabilities	163	410	278	1,600	2,451

	Remaining term to maturity (notional amounts)				Fair value			Credit risk equivalent <sup>(1)</sup>	Risk-weighted amount <sup>(2)</sup>
	Under 1 year	1 to 5 years	Over 5 years	Total	Positive	Negative	Net		
<b>As at December 31, 2011</b>									
Interest rate contracts									
Swap contracts	\$ 6,301	\$ 22,726	\$ 99,494	\$ 128,521	\$ 15,378	\$ (7,185)	\$ 8,193	\$ 8,835	\$ 958
Futures	8,309	–	–	8,309	–	–	–	–	–
Options purchased	76	108	158	342	9	–	9	16	2
Subtotal	\$ 14,686	\$ 22,834	\$ 99,652	\$ 137,172	\$ 15,387	\$ (7,185)	\$ 8,202	\$ 8,851	\$ 960
Foreign exchange									
Swap contracts	561	1,884	5,169	7,614	522	(786)	(264)	1,516	159
Forward contracts	753	70	–	823	8	(2)	6	52	5
Futures	5,185	–	–	5,185	–	–	–	–	–
Credit derivatives	7	219	24	250	4	(1)	3	–	–
Equity contracts									
OTC contracts	116	67	7	190	3	(25)	(22)	72	7
Futures	16,320	–	–	16,320	–	–	–	–	–
Subtotal including accrued interest	\$ 37,628	\$ 25,074	\$ 104,852	\$ 167,554	\$ 15,924	\$ (7,999)	\$ 7,925	\$ 10,491	\$ 1,131
Less accrued interest	–	–	–	–	452	(372)	80	–	–
<b>Total</b>	<b>\$ 37,628</b>	<b>\$ 25,074</b>	<b>\$ 104,852</b>	<b>\$ 167,554</b>	<b>\$ 15,472</b>	<b>\$ (7,627)</b>	<b>\$ 7,845</b>	<b>\$ 10,491</b>	<b>\$ 1,131</b>
<b>As at December 31, 2010</b>									
Interest rate contracts									
Swap contracts	\$ 5,548	\$ 16,903	\$ 62,296	\$ 84,747	\$ 3,547	\$ (2,935)	\$ 612	\$ 1,640	\$ 171
Futures	2,596	–	–	2,596	–	–	–	–	–
Options purchased	–	180	–	180	–	–	–	1	–
Subtotal	\$ 8,144	\$ 17,083	\$ 62,296	\$ 87,523	\$ 3,547	\$ (2,935)	\$ 612	\$ 1,641	\$ 171
Foreign exchange									
Swap contracts	1,186	1,620	5,689	8,495	595	(556)	39	596	60
Forward contracts	1,069	–	–	1,069	39	(8)	31	24	2
Futures	3,643	–	–	3,643	–	–	–	–	–
Credit derivatives	–	7	24	31	–	(1)	(1)	–	–
Equity contracts									
OTC contracts	201	48	13	262	14	(3)	11	38	4
Futures	9,714	–	–	9,714	–	–	–	–	–
Subtotal including accrued interest	\$ 23,957	\$ 18,758	\$ 68,022	\$ 110,737	\$ 4,195	\$ (3,503)	\$ 692	\$ 2,299	\$ 237
Less accrued interest	–	–	–	–	195	(216)	(21)	–	–
<b>Total</b>	<b>\$ 23,957</b>	<b>\$ 18,758</b>	<b>\$ 68,022</b>	<b>\$ 110,737</b>	<b>\$ 4,000</b>	<b>\$ (3,287)</b>	<b>\$ 713</b>	<b>\$ 2,299</b>	<b>\$ 237</b>
<b>As at January 1, 2010</b>									
Interest rate contracts									
Swap contracts	\$ 3,561	\$ 13,989	\$ 46,326	\$ 63,876	\$ 2,227	\$ (1,800)	\$ 427	\$ 1,046	\$ 110
Futures	885	–	–	885	–	–	–	–	–
Options purchased	111	189	–	300	1	–	1	1	–
Subtotal	\$ 4,557	\$ 14,178	\$ 46,326	\$ 65,061	\$ 2,228	\$ (1,800)	\$ 428	\$ 1,047	\$ 110
Foreign exchange									
Swap contracts	1,617	2,065	6,230	9,912	440	(803)	(363)	569	58
Forward contracts	6,039	141	–	6,180	155	(14)	141	85	8
Futures	757	–	–	757	–	–	–	–	–
Embedded derivatives	–	–	–	–	–	(2)	(2)	–	–
Credit derivatives	21	8	25	54	–	(1)	(1)	–	–
Equity contracts									
OTC contracts	154	81	40	275	18	(1)	17	25	2
Futures	2,078	–	–	2,078	–	–	–	–	–
Subtotal including accrued interest	\$ 15,223	\$ 16,473	\$ 52,621	\$ 84,317	\$ 2,841	\$ (2,621)	\$ 220	\$ 1,726	\$ 178
Less accrued interest	–	–	–	–	134	(170)	(36)	–	–
<b>Total</b>	<b>\$ 15,223</b>	<b>\$ 16,473</b>	<b>\$ 52,621</b>	<b>\$ 84,317</b>	<b>\$ 2,707</b>	<b>\$ (2,451)</b>	<b>\$ 256</b>	<b>\$ 1,726</b>	<b>\$ 178</b>

<sup>(1)</sup> Credit risk equivalent is the sum of replacement cost and the potential future credit exposure. Replacement cost represents the current cost of replacing all contracts with a positive fair value. The amounts take into consideration legal contracts that permit offsetting of positions. The potential future credit exposure is calculated based on a formula prescribed by OSFI.

<sup>(2)</sup> Risk-weighted amount represents the credit risk equivalent, weighted according to the creditworthiness of the counterparty, as prescribed by OSFI.



The gross notional amount and the fair value of derivative contracts by the underlying risk exposure for all derivatives in hedging and non-hedging relationships are summarized in the following table.

As at		December 31, 2011			December 31, 2010			January 1, 2010		
		Notional amount	Fair value		Notional amount	Fair value		Notional amount	Fair value	
Type of hedge	Instrument type		Assets	Liabilities		Assets	Liabilities		Assets	Liabilities
<b>Qualifying hedging relationships</b>										
Fair value hedges	Interest rate swaps	\$ 8,294	\$ 150	\$ 1,905	\$ 2,903	\$ 58	\$ 223	\$ 1,951	\$ 14	\$ 73
	Foreign currency swaps	71	–	28	472	53	19	1,064	47	79
	Forward contracts	–	–	–	148	–	–	–	–	–
Cash flow hedges	Interest rate swaps	119	–	8	352	3	–	1,108	39	–
	Foreign currency swaps	8	1	–	13	1	–	67	–	4
	Forward contracts	205	4	–	139	29	–	278	45	–
	Equity contracts	48	1	11	116	5	3	91	10	–
Net investment hedges	Interest rate swaps	650	216	–	650	63	–	–	–	–
	Foreign currency swaps	810	–	225	972	19	76	322	–	43
	Forward contracts	–	–	–	202	3	4	5,377	110	13
Total derivatives in hedging relationships		\$ 10,205	\$ 372	\$ 2,177	\$ 5,967	\$ 234	\$ 325	\$ 10,258	\$ 265	\$ 212
<b>Non-hedging relationships</b>										
	Interest rate swaps	\$ 119,458	\$ 14,559	\$ 4,911	\$ 80,843	\$ 3,233	\$ 2,504	\$ 60,817	\$ 2,046	\$ 1,574
	Interest rate futures	8,309	–	–	2,596	–	–	885	–	–
	Interest rate options	342	9	–	180	–	–	300	2	–
	Foreign currency swaps	6,725	523	523	7,037	516	451	8,459	391	660
	Currency rate futures	5,185	–	–	3,643	–	–	757	–	–
	Forward contracts	618	3	2	580	7	4	525	–	2
	Equity contracts	142	2	13	146	10	2	184	3	–
	Credit default swaps	250	4	1	31	–	1	54	–	1
	Equity futures	16,320	–	–	9,714	–	–	2,078	–	–
	Embedded derivatives	–	–	–	–	–	–	–	–	2
Total derivatives in non-hedging relationships		\$ 157,349	\$ 15,100	\$ 5,450	\$ 104,770	\$ 3,766	\$ 2,962	\$ 74,059	\$ 2,442	\$ 2,239
<b>Total derivatives</b>		<b>\$ 167,554</b>	<b>\$ 15,472</b>	<b>\$ 7,627</b>	<b>\$ 110,737</b>	<b>\$ 4,000</b>	<b>\$ 3,287</b>	<b>\$ 84,317</b>	<b>\$ 2,707</b>	<b>\$ 2,451</b>

### Embedded derivatives

Certain insurance contracts contain features that are classified as embedded derivatives and are measured separately at fair value through profit or loss including reinsurance contracts related to guaranteed minimum income benefits and contracts containing certain credit and interest rate features.

Certain reinsurance contracts related to guaranteed minimum income benefits are considered embedded derivatives requiring separate measurement at fair value through profit or loss as the financial component contained in the reinsurance contracts does not contain significant insurance risk. At December 31, 2011, reinsurance ceded guaranteed minimum income benefits had a fair value of \$1,682 (December 31, 2010 – \$1,111 and January 1, 2010 – \$1,093) and reinsurance assumed guaranteed minimum income benefits had a fair value of \$123 (December 31, 2010 – \$85 and January 1, 2010 – \$85). Claims recovered under reinsurance ceded contracts offset the claim expenses and claims paid on the reinsurance assumed are reported as contract benefits.

The Company's credit and interest rate embedded derivatives promise to pay the returns on a portfolio of assets to the contract holder and contain a credit and interest rate risk that is a financial risk embedded in the underlying insurance contract. At December 31, 2011, these embedded derivatives had a fair value of \$116 (December 31, 2010 – \$96 and January 1, 2010 – \$61).

Other financial instruments classified as embedded derivatives but exempt from separate measurement at fair value include variable universal life and variable life products, minimum guaranteed credited rates, no lapse guarantees, guaranteed annuitization options, CPI indexing of benefits, and segregated fund minimum guarantees other than reinsurance ceded/assumed guaranteed minimum income benefits. These embedded derivatives are measured and reported within insurance contract liabilities and are exempt from separate fair value measurement as they either contain insurance risk and/or are closely related to the insurance host contract.

## Note 6 Income Taxes

Components of the income tax recovery are as follows.

For the years ended December 31,	2011	2010
<b>Current tax</b>		
Current year	\$ 184	\$ (133)
Adjustments to prior year	(71)	(192)
	\$ 113	\$ (325)
<b>Deferred tax</b>		
Reversal of temporary differences	(210)	(474)
<b>Income tax recovery</b>	\$ (97)	\$ (799)

Income (loss) before income taxes by jurisdiction is as follows.

For the years ended December 31,	2011	2010
Canada	\$ 524	\$ 593
U.S.	(779)	(4,063)
Other foreign countries	403	1,145
<b>Income (loss) before income taxes</b>	\$ 148	\$ (2,325)

Components of the income tax expense (recovery) are as follows.

For the years ended December 31,	2011	2010
Canadian income tax expense (recovery)		
Current	\$ 320	\$ (511)
Deferred	(370)	366
	\$ (50)	\$ (145)
U.S. income tax expense (recovery)		
Current	\$ (276)	\$ 135
Deferred	159	(948)
	\$ (117)	\$ (813)
Other foreign income tax expense		
Current	\$ 69	\$ 51
Deferred	1	108
	\$ 70	\$ 159
<b>Income tax recovery</b>	\$ (97)	\$ (799)

The effective income tax rate reported in the Consolidated Statements of Income (Loss) varies from the Canadian tax rate of 28 per cent for the year ended December 31, 2011 (2010 – 30 per cent) for the following reasons:

### Reconciliation of income tax (recovery) expense

For the years ended December 31,	2011	2010
Net income (loss) before income taxes	\$ 148	\$ (2,325)
Income tax expense (recovery) at Canadian statutory tax rate	\$ 41	\$ (697)
Increase (decrease) in income taxes due to:		
Tax-exempt investment income	(166)	(131)
Differences in tax rate on income not subject to tax in Canada	(164)	(509)
General business tax credit	(54)	(58)
Goodwill impairment	233	810
Other adjustment to current tax related to current tax for prior year	(71)	(192)
Unused tax losses not recognized as deferred tax assets	14	21
Other differences	70	(43)
<b>Income tax recovery</b>	\$ (97)	\$ (799)

The amount of income taxes paid in cash during the year ended December 31, 2011 was \$255 (2010 – \$103).

Income taxes are included in the consolidated financial statements as follows.

<b>For the years ended December 31,</b>	<b>2011</b>	2010
Consolidated Statements of Income (Loss)		
Income tax recovery	<b>\$ (97)</b>	\$ (799)
Consolidated Statements of Changes in Equity		
Tax benefit of share issue cost	<b>3</b>	5
Consolidated Statements of Comprehensive Income (Loss)		
OCI on AFS and cash flow hedges	<b>(73)</b>	(192)
Impact of changes in foreign exchange rates	<b>(12)</b>	73
<b>Income taxes</b>	<b>\$ (179)</b>	\$ (913)

As at December 31, 2011, the Company has approximately \$1,034 of current tax payable included in other liabilities (December 31, 2010 – \$1,189 and January 1, 2010 – \$1,669) and a current tax recoverable of \$14 included in other assets (December 31, 2010 – \$12 and January 1, 2010 – \$10).

### Unrecognized tax positions

Changes in the amount of unrecognized tax positions are as follows.

<b>For the years ended December 31,</b>	<b>2011</b>	2010
Balance, January 1	<b>\$ 3,332</b>	\$ 3,230
Additions based on tax positions related to the current year	<b>343</b>	341
Additions for tax positions of prior years	<b>10</b>	227
Reductions for tax positions of prior years	<b>(97)</b>	(353)
Impact of changes in foreign exchange rates	<b>55</b>	(113)
<b>Balance, December 31</b>	<b>\$ 3,643</b>	\$ 3,332

Included in the balance of unrecognized tax positions as at December 31, 2011 are \$1,367 (December 31, 2010 – \$1,273 and January 1, 2010 – \$1,331) of unrecognized benefits that, if recognized, would affect the Company's effective tax rate.

Also included in the balance of unrecognized tax positions as at December 31, 2011 are \$2,276 (December 31, 2010 – \$2,059 and January 1, 2010 – \$1,899) of tax positions for which the ultimate deductibility is highly certain but for which there is uncertainty about the timing of such deductibility. Because of the impact of deferred tax accounting, the disallowance of the shorter deductibility period would not materially affect the annual effective tax rate but could accelerate the payment of cash to the taxing authorities to an earlier period.

The amount of change in unrecognized tax benefits over the next twelve months cannot be determined.

The Company recognizes interest accrued related to uncertain tax benefits in interest expense (part of other operating costs and expenses) and penalties in income tax expense. During the year ended December 31, 2011, the Company recognized approximately \$191 (December 31, 2010 – \$61 and January 1, 2010 – \$258) in interest expense. The Company has approximately \$1,216 of accrued interest as at December 31, 2011 (December 31, 2010 – \$1,036 and January 1, 2010 – \$983). The Company has not recognized any material amounts of penalties during the years ended December 31, 2011 and 2010.

The Company is an investor in a number of leasing transactions and has established provisions for possible disallowance of the tax treatment and for interest on past due taxes. The Company continues to believe that deductions originally claimed in relation to these arrangements are appropriate. Should the tax attributes of the Company's lease transactions be fully denied, the maximum after-tax exposure amounts to the interest and other charges are estimated to be an additional US\$127 as at December 31, 2011.

The Company files income tax returns for all its operations with the major jurisdictions being Canada and U.S. Canadian tax authorities have completed examinations of tax returns filed for all years prior to 2007 and there are no outstanding appeals for years prior to 1999. In the U.S., the Internal Revenue Services ("IRS") has completed and settled its examinations for the years prior to 2004. The Company has filed protests with the IRS Appeals Division of various adjustments raised by the IRS in its examinations for the years 2004 to 2007 and the appeal process continues. Examinations of Canadian tax returns for the year 2007 and U.S. income tax returns for the years 2008 to 2009 are currently ongoing. Returns for all subsequent years have not been examined.

### Deferred taxes

#### (i) Recognized deferred tax assets and liabilities

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and they relate to the same tax authority on the same taxable entity.

As at	December 31,		January 1,
	2011	2010	2010
Deferred tax assets			
Loss carry forward	\$ 733	\$ 1,190	\$ 1,024
Actuarial liabilities	4,495	1,768	1,673
Tax credits	497	545	475
Accrued interest	446	380	322
<b>Deferred tax assets</b>	<b>\$ 6,171</b>	<b>\$ 3,883</b>	<b>\$ 3,494</b>
Deferred tax liability			
Real estate	\$ (439)	\$ (424)	\$ (256)
Securities and other investments	(3,622)	(1,681)	(1,916)
Sale of investments	(323)	(373)	(430)
Intangible assets	(584)	(580)	(586)
Other	(212)	(92)	(77)
<b>Deferred tax liability</b>	<b>\$ (5,180)</b>	<b>\$ (3,150)</b>	<b>\$ (3,265)</b>
<b>Net deferred tax asset</b>	<b>\$ 991</b>	<b>\$ 733</b>	<b>\$ 229</b>

(ii) The movement in the net deferred tax asset (liability) was as follows.

#### Deferred tax assets and liabilities

	Real estate	Securities and other investments	Sales of investment assets	Intangible assets	Actuarial liabilities	Loss carry-forwards	Accrued interest	Tax credits	Other	Total
<b>Balance at January 1, 2011</b>	\$ (424)	\$ (1,681)	\$ (373)	\$ (580)	\$ 1,768	\$ 1,190	\$ 380	\$ 545	\$ (92)	\$ 733
Recognized in net income	(10)	(2,000)	50	7	2,802	(516)	60	(63)	(120)	210
Recognized in OCI	-	-	-	-	-	-	-	-	28	28
Recognized in equity	-	-	-	-	36	-	-	-	(20)	16
Impact of changes in foreign exchange rates	(5)	59	-	(11)	(111)	59	6	15	(8)	4
<b>Balance at December 31, 2011</b>	<b>\$ (439)</b>	<b>\$ (3,622)</b>	<b>\$ (323)</b>	<b>\$ (584)</b>	<b>\$ 4,495</b>	<b>\$ 733</b>	<b>\$ 446</b>	<b>\$ 497</b>	<b>\$ (212)</b>	<b>\$ 991</b>
<b>Balance at January 1, 2010</b>	\$ (256)	\$ (1,916)	\$ (430)	\$ (586)	\$ 1,673	\$ 1,024	\$ 322	\$ 475	\$ (77)	\$ 229
Recognized in net income	(174)	84	57	(18)	171	209	76	95	(26)	474
Recognized in OCI	-	111	-	-	-	-	-	-	54	165
Recognized in equity	-	-	-	-	4	-	-	-	(46)	(42)
Impact of changes in foreign exchange rates	6	40	-	24	(80)	(43)	(18)	(25)	3	(93)
<b>Balance at December 31, 2010</b>	<b>\$ (424)</b>	<b>\$ (1,681)</b>	<b>\$ (373)</b>	<b>\$ (580)</b>	<b>\$ 1,768</b>	<b>\$ 1,190</b>	<b>\$ 380</b>	<b>\$ 545</b>	<b>\$ (92)</b>	<b>\$ 733</b>

The aggregate of deferred tax assets where the Company has suffered losses in either the current or preceding year and where the recognition is dependent on future taxable profits and feasible management actions is \$1,144 as at December 31, 2011 (2010 – \$1,412). The Company's continuing recognition of these deferred tax assets are based on future taxable profits in the relevant jurisdictions.

As at December 31, 2011, the Company has approximately \$2,806 (December 31, 2010 – \$3,939 and January 1, 2010 – \$2,844) of tax loss carry forwards available of which \$2,800 expire between the years 2013 and 2030 while \$6 have no expiry date. Capital loss carry forwards in the amount of \$5 (December 31, 2010 – nil and January 1, 2010 – \$452) expire in the year 2030. A tax benefit related to these tax loss carry forwards, in the amount of \$733 (December 31, 2010 – \$1,190 and January 1, 2010 – \$1,024), has been recognized in deferred income taxes as at December 31, 2011, and a benefit of \$119 (December 31, 2010 – \$105 and January 1, 2010 – \$82) has not been recognized.

As at December 31, 2011, the Company has recognized approximately \$497 (December 31, 2010 – \$545 and January 1, 2010 – \$475) of tax credit carry forwards available which expire between the years 2021 and 2031.

As at December 31, 2011, the aggregate amount of taxable temporary differences associated with investments in subsidiaries for which deferred tax liabilities have not been recognized amounted to \$4,032 (2010 – \$5,900 and January 1, 2010 – \$8,936).

The Company is subject to income tax laws in various jurisdictions. Tax laws are complex and potentially subject to different interpretations by the taxpayer and the relevant tax authority. The provision for income taxes and deferred income taxes represents management's interpretation of the relevant tax laws and its estimate of current and future income tax implications of the transactions and events during the year. The Company may be required to change its provision for income taxes or deferred income tax balances when the ultimate deductibility of certain items is successfully challenged by taxing authorities or if estimates used in determining the amount of deferred tax asset to recognize change significantly, or when receipt of new information indicates the need for adjustment in the amount of deferred income taxes to be recognized. Additionally, future events, such as changes in tax laws, tax regulations, or interpretations of such laws or regulations, could have an impact on the provision for income taxes, deferred tax balances and the effective tax rate. Any such changes could materially affect the amounts reported in the consolidated financial statements in the period these changes occur.

## Note 7 Goodwill and Intangible Assets

Intangible assets include those with definite lives such as distribution networks, fund management contracts, capitalized software and other contractual rights and those with indefinite lives such as the John Hancock brand name and certain fund management contracts. Software intangible assets are amortized on a straight-line basis over their estimated useful lives of three to five years. Distribution networks and other finite life intangible assets are amortized over their estimated useful lives in relation to the associated gross margin from the related business. Indefinite life intangible assets are not amortized but are subject to an impairment test.

The following table outlines the carrying amounts of the goodwill and intangible assets

	Gross carrying amount	Accumulated amortization	Net carrying amount
<b>As at December 31, 2011</b>			
<b>Goodwill</b>	<b>\$ 3,404</b>	<b>\$ –</b>	<b>\$ 3,404</b>
<b>Indefinite life intangible assets</b>			
Brand	\$ 610	\$ –	\$ 610
Fund management contracts and other	464	–	464
	<b>\$ 1,074</b>	<b>\$ –</b>	<b>\$ 1,074</b>
<b>Finite life intangible assets</b>			
Distribution networks	\$ 639	\$ 96	\$ 543
Software	941	678	263
Other intangible assets	245	87	158
	<b>\$ 1,825</b>	<b>\$ 861</b>	<b>\$ 964</b>
<b>Total intangible assets</b>	<b>\$ 2,899</b>	<b>\$ 861</b>	<b>\$ 2,038</b>
<b>Total goodwill and intangible assets</b>	<b>\$ 6,303</b>	<b>\$ 861</b>	<b>\$ 5,442</b>
<b>As at December 31, 2010</b>			
<b>Goodwill</b>	\$ 3,990	\$ –	\$ 3,990
<b>Indefinite life intangible assets</b>			
Brand	\$ 597	\$ –	\$ 597
Fund management contracts and other	457	–	457
	<b>\$ 1,054</b>	<b>\$ –</b>	<b>\$ 1,054</b>
<b>Finite life intangible assets</b>			
Distribution networks	\$ 611	\$ 72	\$ 539
Software	809	576	233
Other intangible assets	169	78	91
	<b>\$ 1,589</b>	<b>\$ 726</b>	<b>\$ 863</b>
<b>Total intangible assets</b>	<b>\$ 2,643</b>	<b>\$ 726</b>	<b>\$ 1,917</b>
<b>Total goodwill and intangible assets</b>	<b>\$ 6,633</b>	<b>\$ 726</b>	<b>\$ 5,907</b>
<b>As at January 1, 2010</b>			
<b>Goodwill</b>	\$ 6,389	\$ –	\$ 6,389
<b>Indefinite life intangible assets</b>			
Brand	\$ 628	\$ –	\$ 628
Fund management contracts and other	471	–	471
	<b>\$ 1,099</b>	<b>\$ –</b>	<b>\$ 1,099</b>
<b>Finite life intangible assets</b>			
Distribution networks	\$ 630	\$ 55	\$ 575
Software	727	488	239
Other intangible assets	172	69	103
	<b>\$ 1,529</b>	<b>\$ 612</b>	<b>\$ 917</b>
<b>Total intangible assets</b>	<b>\$ 2,628</b>	<b>\$ 612</b>	<b>\$ 2,016</b>
<b>Total goodwill and intangible assets</b>	<b>\$ 9,017</b>	<b>\$ 612</b>	<b>\$ 8,405</b>

In the fourth quarter of 2011, the Company updated its 2012 business plan including in-force and new business embedded values. The Company uses these measures in determining the recoverable amount of its businesses in its annual goodwill impairment testing completed during the fourth quarter. The current economic environment, including the persistent low interest rates, reduced the recoverable amounts of the Company's life insurance businesses, principally in the U.S. In particular, these updates resulted in an impairment of the \$665 remaining goodwill allocated to the U.S. Life Insurance business.

In 2010, the Company recorded goodwill impairment charges of \$734 upon transition to IFRS on January 1, 2010 attributable to the U.S. Life Insurance CGU, and \$2,330 in the third quarter of 2010 attributable to the U.S. Life Insurance, U.S. Variable Annuity and Fixed Products and Canadian Individual Life CGUs.

The Company has 14 CGUs or groups of CGUs to which goodwill has been allocated and tested. The carrying value of goodwill for significant CGUs is identified separately in the table below.

CGU or Group of CGUs	Balance January 1, 2011	Goodwill impairment	Effect of changes in foreign exchange rates	Balance, December 31, 2011
Hong Kong Individual Life and Wealth	\$ –	\$ –	\$ –	\$ –
Other Asia	131	–	1	132
Japan Insurance, Variable Annuities and Wealth	430	–	33	463
Canadian Individual Life	355	–	–	355
Canadian Affinity Markets	83	–	–	83
Canadian Wealth (excluding Manulife Bank of Canada)	750	–	–	750
Manulife Bank of Canada	–	–	–	–
Canadian Group Benefits and Savings	826	–	–	826
U.S. Life Insurance	646	(665)	19	–
U.S. Long-Term Care	267	–	7	274
U.S. Variable Annuities and Fixed Products	–	–	–	–
U.S. Mutual Funds and Retirement Plan Services	360	–	8	368
Reinsurance International Group Program	67	–	1	68
Corporate and other	75	–	10	85
<b>Total</b>	<b>\$ 3,990</b>	<b>\$ (665)</b>	<b>\$ 79</b>	<b>\$ 3,404</b>

CGU or Group of CGUs	Balance, January 1, 2010	Acquisition of subsidiaries	Goodwill impairment	Effect of changes in foreign exchange rates	Balance, December 31, 2010
Hong Kong Individual Life and Wealth	\$ –	\$ –	\$ –	\$ –	\$ –
Other Asia	143	–	–	(12)	131
Japan Insurance, Variable Annuities and Wealth	394	–	–	36	430
Canadian Individual Life	505	–	(150)	–	355
Canadian Affinity Markets	83	–	–	–	83
Canadian Wealth (excluding Manulife Bank of Canada)	752	(2)	–	–	750
Manulife Bank of Canada	–	–	–	–	–
Canadian Group Benefits and Savings	826	–	–	–	826
U.S. Life Insurance	1,412	–	(727)	(39)	646
U.S. Long-Term Care	282	–	–	(15)	267
U.S. Variable Annuities and Fixed Products	1,464	–	(1,453)	(11)	–
U.S. Mutual Funds and Retirement Plan Services	379	–	–	(19)	360
Reinsurance International Group Program	70	–	–	(3)	67
Corporate and other	79	2	–	(6)	75
<b>Total</b>	<b>\$ 6,389</b>	<b>\$ –</b>	<b>\$ (2,330)</b>	<b>\$ (69)</b>	<b>\$ 3,990</b>

The valuation techniques, significant assumptions and sensitivities applied in the goodwill impairment testing are described below:

#### Valuation techniques

The recoverable value of each CGU or group of CGUs at December 31, 2011 was based on value-in-use for all of the U.S. based CGUs or groups of CGUs and the Canadian Individual Life CGU and fair value less costs to sell for all other CGUs or groups of CGUs (December 31, 2010 and January 1, 2010 – value-in-use for all of the U.S. based CGUs or groups of CGUs and the Canadian Individual Life CGU and fair value less costs to sell for all other CGUs or groups of CGUs).

#### (i) Income approach (value-in-use)

The Company has used an actuarial appraisal method for the purposes of goodwill testing. Under this approach, an appraisal value is determined from a projection of future distributable earnings derived from both the in-force business and new business expected to be sold in the future, and therefore, reflects the economic value for each CGU or group of CGUs' profit potential under a set of assumptions. This approach requires assumptions including sales and revenue growth rates, capital requirements, interest rates, equity returns, mortality, morbidity, policyholder behaviour, tax rates and discount rates.

#### Significant assumptions

##### Growth

The assumptions used were based on the Company's internal plan and Canadian actuarial valuation basis. To calculate the embedded value, the Company discounted projected earnings from each in-force contract and valued ten years of new business growing at expected Plan levels, consistent with the periods used for forecasting long-term businesses such as insurance. For goodwill impairment



testing purposes, in determining new business cash flows, the Company did not add a growth factor for those product lines not currently targeted for growth. In arriving at its projections, the Company considered past experience, economic trends such as interest rates, equity returns and product mix as well as industry and market trends. Where growth rate assumptions for new business cash flows were used in the embedded value calculations, they ranged from zero per cent to 10 per cent (December 31, 2010 – four per cent to 12 per cent and January 1, 2010 – seven per cent).

#### *Interest rates*

The Company uses a similar methodology for measuring insurance contracts in determining projected expected interest rates based on prevailing market rates at the valuation date.

#### *Tax rates*

The tax rates applied to the projections reflected intercompany transfer pricing agreements currently in effect which were assumed to be transferable to another market participant and amounted to 35 per cent (December 31, 2010 and January 1, 2010 – 26 per cent to 35 per cent). Tax assumptions are sensitive to changes in tax laws as well as assumptions about the jurisdictions in which profits are earned. It is possible that actual tax rates could differ from those assumed.

#### *Discount rates*

The discount rate assumed in determining the value-in-use, for applicable CGUs or groups of CGUs, was 10 per cent on an after-tax basis or 14 per cent on a pre-tax basis (December 31, 2010 and January 1, 2010 – 12 per cent and 14 per cent on a pre-tax basis for the Canadian and U.S. jurisdictions, respectively).

#### *(ii) Fair values*

Where applicable, the Company determined the fair value of the CGU or group of CGUs using an earnings-based approach which incorporated the forecasted earnings, excluding interest and equity market impacts and normalized new business expenses multiplied by an earnings multiple derived from the observable price-to-earnings multiples of comparable financial institutions. The price-to-earnings multiples used by the Company for testing ranged from 10 to 14 (December 31, 2010 – 10 to 16 and January 1, 2010 – 10 to 18).

The key assumptions described above may change as economic and market conditions change.

Going forward, the impact of economic conditions and changes in product mix suggest a lower margin of recoverable value in excess of carrying value attributable to the Company's Canadian Individual Life CGU. As a result of these factors and the granular level of goodwill testing under IFRS, more frequent impairment charges could occur in the future. Any material change in the discount rates, cash flow projections used in the determination of embedded values or reductions in market-based earnings multiples may result in further impairment charges, which could be material.

#### **Finite life intangible assets**

The estimated useful lives of the finite life intangible assets range from three to 68 years. Amortization expense was \$121 for the year ended December 31, 2011 (2010 – \$114). Amortization expense for existing finite life intangible assets is estimated to range from \$30 to \$150 in each of the next five years.

## **Note 8 Insurance Contract Liabilities and Reinsurance Assets**

### **(a) Insurance contract liabilities and reinsurance assets**

Insurance contract liabilities are reported gross of reinsurance ceded and the ceded liabilities are reported separately as a reinsurance asset. Insurance contract liabilities include actuarial liabilities as well as benefits payable, provision for unreported claims and policyholder amounts on deposit. The components of gross and net insurance contract liabilities are shown below.

<b>As at</b>	December 31,		January 1,
	<b>2011</b>	2010	2010
Gross actuarial liabilities	<b>\$ 180,973</b>	\$ 149,674	\$ 139,980
Gross benefits payable and provision for unreported claims	<b>2,684</b>	2,478	2,556
Gross policyholder amounts on deposit	<b>6,709</b>	6,160	5,407
Gross insurance contract liabilities	<b>\$ 190,366</b>	\$ 158,312	\$ 147,943
Impact of reinsurance asset	<b>(10,728)</b>	(7,832)	(8,044)
<b>Net insurance contract liabilities</b>	<b>\$ 179,638</b>	\$ 150,480	\$ 139,899

Net insurance contract liabilities represent the amount which, together with estimated future premiums and net investment income, will be sufficient to pay estimated future benefits, policyholder dividends and refunds, taxes (other than income taxes) and expenses on policies in force.

Net insurance contract liabilities under IFRS retain the existing valuation methodology that was used under prior Canadian generally accepted accounting principles. Net actuarial liabilities are determined using CALM, as required by the Canadian Institute of Actuaries. Liabilities are set equal to the statement of financial position value of the assets required to support them.

The determination of net actuarial liabilities is based on an explicit projection of cash flows using current best estimate assumptions for each material cash flow item and contingency. Investment returns are projected using the current asset portfolios and projected re-investment strategies.

Each assumption is adjusted by a margin for adverse deviation. For fixed income returns, this margin is established by scenario testing that is generally done on a deterministic basis, testing a range of prescribed and company-developed scenarios. For minimum guarantees on segregated fund products, the margin for adverse deviation for investment returns is done stochastically. For other assumptions, this margin is established by directly adjusting the best estimate assumption.

Cash flows used in the net actuarial valuation adjust the gross policy cash flows to reflect the projected cash flows from ceded reinsurance. The cash flow impact of ceded reinsurance varies depending upon the amount of reinsurance, the structure of the reinsurance treaties, the expected economic benefit from the treaty cash flows and the impact of margins for adverse deviation. The gross actuarial liabilities are determined by discounting the gross policy cash flows using the same discount rate as the net CALM model discount rate.

The reinsurance asset is determined by taking the difference between the gross insurance contract liabilities and the net insurance contract liabilities. The reinsurance asset represents the benefit derived from reinsurance arrangements in force at the date of the Consolidated Statement of Financial Position.

The period used for the projection of cash flows is the policy lifetime for most individual insurance contracts. For other types of contracts a shorter projection period may be used, limiting the period to the term of the liability over which the Company is exposed to material insurance risk without the ability to adjust premiums or policy charges. Where the projection period is less than the policy lifetime, actuarial liabilities may be reduced by an allowance for acquisition expenses expected to be recovered from policy cash flows beyond the projection period used for the liabilities. Such allowances are tested for recoverability using assumptions that are consistent with other components of the actuarial valuation.

## (b) Composition

The composition of insurance contract liabilities and reinsurance assets by line of business and reporting segment is as follows.

Gross insurance contract liabilities as at December 31, 2011	Individual insurance		Annuities and pensions	Other insurance contract liabilities <sup>(1)</sup>	Total, net of reinsurance ceded	Total reinsurance ceded	Total, gross of reinsurance ceded
	Participating	Non- participating					
Asia Division	\$ 16,033	\$ 5,270	\$ 3,957	\$ 1,473	\$ 26,733	\$ 306	\$ 27,039
Canadian Division	8,497	15,112	15,951	7,584	47,144	1,185	48,329
U.S. Insurance	20,257	28,306	19	24,020	72,602	5,976	78,578
U.S. Wealth Management	–	–	32,778	51	32,829	1,998	34,827
Corporate and other	–	178	97	55	330	1,263	1,593
<b>Total, net of reinsurance ceded</b>	<b>\$ 44,787</b>	<b>\$ 48,866</b>	<b>\$ 52,802</b>	<b>\$ 33,183</b>	<b>\$ 179,638</b>	<b>\$ 10,728</b>	<b>\$ 190,366</b>
<b>Total reinsurance ceded</b>	<b>(5)</b>	<b>7,445</b>	<b>2,052</b>	<b>1,236</b>	<b>10,728</b>		
<b>Total, gross of reinsurance ceded</b>	<b>\$ 44,782</b>	<b>\$ 56,311</b>	<b>\$ 54,854</b>	<b>\$ 34,419</b>	<b>\$ 190,366</b>		

### December 31, 2010

Asia Division	\$ 14,239	\$ 3,792	\$ 2,310	\$ 1,038	\$ 21,379	\$ 288	\$ 21,667
Canadian Division	8,164	13,123	14,091	6,939	42,317	2,302	44,619
U.S. Insurance	19,398	20,974	23	17,424	57,819	3,591	61,410
U.S. Wealth Management	–	–	27,697	53	27,750	1,412	29,162
Corporate and other	–	1,186	–	29	1,215	239	1,454
<b>Total, net of reinsurance ceded</b>	<b>\$ 41,801</b>	<b>\$ 39,075</b>	<b>\$ 44,121</b>	<b>\$ 25,483</b>	<b>\$ 150,480</b>	<b>\$ 7,832</b>	<b>\$ 158,312</b>
<b>Total reinsurance ceded</b>	<b>612</b>	<b>4,450</b>	<b>1,464</b>	<b>1,306</b>	<b>7,832</b>		
<b>Total, gross of reinsurance ceded</b>	<b>\$ 42,413</b>	<b>\$ 43,525</b>	<b>\$ 45,585</b>	<b>\$ 26,789</b>	<b>\$ 158,312</b>		

### January 1, 2010

Asia Division	\$ 13,209	\$ 2,383	\$ 1,381	\$ 295	\$ 17,268	\$ 209	\$ 17,477
Canadian Division	7,349	11,583	13,281	6,632	38,845	2,546	41,391
U.S. Insurance	20,540	19,012	27	14,277	53,856	3,614	57,470
U.S. Wealth Management	–	–	28,405	56	28,461	1,405	29,866
Corporate and other	–	1,204	–	265	1,469	270	1,739
<b>Total, net of reinsurance ceded</b>	<b>\$ 41,098</b>	<b>\$ 34,182</b>	<b>\$ 43,094</b>	<b>\$ 21,525</b>	<b>\$ 139,899</b>	<b>\$ 8,044</b>	<b>\$ 147,943</b>
<b>Total reinsurance ceded</b>	<b>602</b>	<b>4,659</b>	<b>1,454</b>	<b>1,329</b>	<b>8,044</b>		
<b>Total, gross of reinsurance ceded</b>	<b>\$ 41,700</b>	<b>\$ 38,841</b>	<b>\$ 44,548</b>	<b>\$ 22,854</b>	<b>\$ 147,943</b>		

<sup>(1)</sup> Other insurance contract liabilities include group insurance and individual and group health including long-term care insurance.

Separate sub-accounts were established for participating policies in-force at the demutualization of MLI and John Hancock Life Insurance Company. These sub-accounts permit this participating business to be operated as separate “closed blocks” of participating policies. As at December 31, 2011, \$27,739 (December 31, 2010 – \$26,287 and January 1, 2010 – \$26,787) of both assets and insurance contract liabilities related to these closed blocks of participating policies.

In addition to the participating policies related to the in-force “closed blocks”, there are other participating insurance blocks. For these other participating insurance blocks, transfers to shareholders are governed by local regulations and the best estimate projections of policyholder dividends are provided for in the insurance contract liabilities. Actual dividend scales are managed consistent with the Company’s participating policyholder dividend policy and are approved annually by each subsidiary’s Board of Directors. Total policyholder dividends were \$1,317 in 2011 (2010 – \$1,354).

## (c) Assets backing insurance contract liabilities, other liabilities and capital

Assets are segmented and matched to liabilities with similar underlying characteristics by product line and major currency. The Company has established target investment strategies and asset mixes for each asset segment supporting insurance contract liabilities which take into account the risk attributes of the liabilities supported by the assets and expectations of market performance. Liabilities with rate and term guarantees are predominantly backed by fixed-rate instruments on a cash flow matching basis for a targeted duration horizon. Longer duration cash flows on these liabilities as well as on adjustable products such as participating life insurance are backed by a broader range of asset classes, including equity and other non-fixed income investments. The Company’s equity is invested in a range of debt and equity investments, both public and private.

Changes in the fair value of assets backing net insurance contract liabilities that are not judged by the Company to be other than temporary would have a limited impact on the Company’s net income wherever there is an effective matching of the assets and liabilities, as these changes would be substantially offset by corresponding changes in the value of the actuarial liabilities. The fair value of assets backing net insurance contract liabilities as at December 31, 2011, excluding reinsurance assets, was estimated at \$183,126 (December 31, 2010 – \$152,992 and January 1, 2010 – \$141,458).

The fair value of assets backing capital and other liabilities as at December 31, 2011 was estimated at \$283,664 (December 31, 2010 – \$275,352 and January 1, 2010 – \$266,970).

The carrying value of total assets backing net insurance contract liabilities, other liabilities and capital was as follows.

As at December 31, 2011	Individual insurance		Annuities and pensions	Other insurance contract liabilities <sup>(1)</sup>	Other liabilities <sup>(2)</sup>	Capital <sup>(3)</sup>	Total
	Participating	Non-participating					
<b>Assets</b>							
Bonds	\$ 25,242	\$ 25,996	\$ 29,230	\$ 15,775	\$ 4,861	\$ 19,383	\$ 120,487
Stocks	4,433	2,844	204	466	386	1,910	10,243
Mortgages	4,430	4,252	7,707	3,803	14,192	639	35,023
Private placements	2,882	5,351	7,651	3,371	514	525	20,294
Real estate	2,088	2,824	803	1,526	101	124	7,466
Other	5,712	7,599	7,207	8,242	233,428	6,401	268,589
<b>Total</b>	<b>\$ 44,787</b>	<b>\$ 48,866</b>	<b>\$ 52,802</b>	<b>\$ 33,183</b>	<b>\$ 253,482</b>	<b>\$ 28,982</b>	<b>\$ 462,102</b>

#### As at December 31, 2010

<b>Assets</b>							
Bonds	\$ 21,876	\$ 21,069	\$ 23,117	\$ 12,673	\$ 6,406	\$ 16,419	\$ 101,560
Stocks	4,676	2,718	185	460	290	2,146	10,475
Mortgages	4,457	4,153	7,407	3,892	12,234	694	32,837
Private placements	2,759	4,711	7,851	3,215	521	520	19,577
Real estate	1,926	2,381	699	1,202	129	16	6,353
Other	6,107	4,043	4,862	4,041	225,973	8,939	253,965
<b>Total</b>	<b>\$ 41,801</b>	<b>\$ 39,075</b>	<b>\$ 44,121</b>	<b>\$ 25,483</b>	<b>\$ 245,553</b>	<b>\$ 28,734</b>	<b>\$ 424,767</b>

#### As at January 1, 2010

<b>Assets</b>							
Bonds	\$ 21,005	\$ 16,240	\$ 20,600	\$ 8,001	\$ 6,335	\$ 12,926	\$ 85,107
Stocks	4,211	2,447	107	392	288	2,243	9,688
Mortgages	4,526	4,040	7,617	3,855	10,519	601	31,158
Private placements	2,748	4,308	8,687	2,955	676	606	19,980
Real estate	2,081	2,235	728	803	121	20	5,988
Other	6,527	4,912	5,355	5,519	216,545	15,221	254,079
<b>Total</b>	<b>\$ 41,098</b>	<b>\$ 34,182</b>	<b>\$ 43,094</b>	<b>\$ 21,525</b>	<b>\$ 234,484</b>	<b>\$ 31,617</b>	<b>\$ 406,000</b>

<sup>(1)</sup> Other insurance contract liabilities include group insurance and individual and group health including long-term care insurance.

<sup>(2)</sup> Other liabilities are non-insurance contract liabilities which include bank deposits, long-term debt, deferred tax liabilities, derivatives, investment contracts, non-exempt embedded derivatives and other miscellaneous liabilities.

<sup>(3)</sup> Capital is defined in note 15.

#### (d) Significant insurance contract liability valuation assumptions

The determination of insurance contract liabilities involves the use of estimates and assumptions. Insurance contract liabilities have two major components: a best estimate amount and a provision for adverse deviation. In conjunction with prudent business practices to manage both business and investment risks, the selection and monitoring of appropriate assumptions are designed to minimize the Company's exposure to measurement uncertainty.

## Best estimate assumptions

Best estimate assumptions are made with respect to mortality and morbidity, investment returns, rates of policy termination, operating expenses and certain taxes. Actual experience is monitored to ensure that the assumptions remain appropriate and assumptions are changed as warranted. Assumptions are discussed in more detail in the following table:

Nature of factor and assumption methodology	Risk management
<p><b>Mortality and morbidity</b></p>	<p>Mortality relates to the occurrence of death. Mortality is a key assumption for life insurance and certain forms of annuities. Mortality assumptions are based on the Company's internal experience as well as past and emerging industry experience. Assumptions are differentiated by sex, underwriting class, policy type and geographic market. For North American insurance products, assumptions are made for future mortality improvements.</p> <p>Morbidity relates to the occurrence of accidents and sickness for insured risks. Morbidity is a key assumption for long-term care insurance, disability insurance, critical illness and other forms of individual and group health benefits. Morbidity assumptions are based on the Company's internal experience as well as industry past and emerging experience and are established for each type of morbidity risk and geographic market.</p> <p>The Company maintains underwriting standards to determine the insurability of applicants. Claim trends are monitored on an ongoing basis. Exposure to large claims is managed by establishing policy retention limits, which vary by market and geographic location. Policies in excess of the limits are reinsured with other companies.</p> <p>Mortality is monitored monthly and the overall 2011 experience was favourable when compared to the Company's assumptions. Morbidity is also monitored monthly and the overall 2011 experience was unfavourable when compared to the Company's assumptions, primarily related to long-term care experience in the United States.</p>
<p><b>Investment returns</b></p>	<p>The Company segments assets to support liabilities by business segment and geographic market and establishes investment strategies for each liability segment. The projected cash flows from these assets are combined with projected cash flows from future asset purchases/sales to determine expected rates of return on these assets for future years. The investment strategies are based on the target investment policies for each segment and the re-investment returns are derived from current and projected market rates for fixed interest investments and a projected outlook for non-fixed interest assets.</p> <p>Investment return assumptions include expected future asset credit losses on fixed income investments. Credit losses are projected based on past Company and industry experience as well as specific reviews of the current investment portfolio.</p> <p>Investment return assumptions for each asset class also incorporate expected investment management expenses that are derived from internal cost studies. The costs are attributed to each asset class to develop unitized assumptions per dollar of asset for each asset class.</p> <p>The Company's policy of closely matching the cash flows of assets with those of the corresponding liabilities is designed to mitigate the Company's exposure to future changes in interest rates. The interest rate risk positions in business segments are monitored on an ongoing basis. Under CALM, the re-investment rate is developed using interest rate scenario testing and reflects the interest rate risk positions.</p> <p>In 2011, the movement in interest rates adversely impacted the Company's net income.</p> <p>The exposure to credit losses is managed against policies that limit concentrations by issuer, corporate connections, ratings, sectors and geographic regions. On participating policies and some non-participating policies, credit loss experience is passed back to policyholders through the investment return crediting formula. For other policies, the premiums and benefits reflect the Company's assumed level of future credit losses at contract inception or most recent contract adjustment date. The Company holds explicit provisions in actuarial liabilities for credit risk including provisions for adverse deviation.</p> <p>In 2011, credit loss experience on bonds and mortgages was favourable when compared to the Company's assumptions.</p> <p>Stocks, real estate and other non-fixed income assets are used to support liabilities where investment return experience is passed back to policyholders through dividends or credited investment return adjustments. Stocks, real estate, oil and gas and other non-fixed income assets are also used to support long-dated obligations in the Company's annuity and pensions businesses and for long-dated insurance obligations on contracts where the investment return risk is borne by the Company.</p> <p>In 2011, investment experience on common stocks backing policyholder liabilities was unfavourable but this was offset by favourable experience on real estate, oil and gas and other non-fixed income assets.</p> <p>In 2011, investment experience for segregated fund businesses from changes in the market value of funds under management was unfavourable.</p> <p>In 2011, investment expense experience was favourable when compared to the Company's assumptions.</p>

Nature of factor and assumption methodology		Risk management
<b>Policyholder behaviour</b>	<p>Policies are terminated through lapses and surrenders, where lapses represent the termination of policies due to non-payment of premiums and surrenders represent the voluntary termination of policies by policyholders. Premium persistency represents the level of ongoing deposits on contracts where there is policyholder discretion as to the amount and timing of deposits. Policy termination and premium persistency assumptions are primarily based on the Company's recent experience adjusted for expected future conditions. Assumptions reflect differences by type of contract within each geographic market.</p>	<p>The Company seeks to design products that minimize financial exposure to lapse, surrender and other policyholder behaviour risk. The Company monitors lapse, surrender and other policyholder behaviour experience.</p> <p>In aggregate, 2011 policyholder behaviour experience was unfavourable when compared to the Company's assumptions used in the computation of actuarial liabilities.</p>
<b>Expenses and taxes</b>	<p>Operating expense assumptions reflect the projected costs of maintaining and servicing in-force policies, including associated overhead expenses. The expenses are derived from internal cost studies projected into the future with an allowance for inflation. For some developing businesses, there is an expectation that unit costs will decline as these businesses grow.</p> <p>Taxes reflect assumptions for future premium taxes and other non-income related taxes. For income taxes, policy liabilities are adjusted only for temporary tax timing and permanent tax rate differences on the cash flows available to satisfy policy obligations.</p>	<p>The Company prices its products to cover the expected costs of servicing and maintaining them. In addition, the Company monitors expenses monthly, including comparisons of actual expenses to expense levels allowed for in pricing and valuation.</p> <p>Maintenance expenses for 2011 were unfavourable when compared to the Company's assumptions used in the computation of actuarial liabilities.</p> <p>The Company prices its products to cover the expected cost of taxes.</p>
<b>Policyholder dividends, experience rating refunds, and other adjustable policy elements</b>	<p>The best estimate projections for policyholder dividends and experience rating refunds, and other adjustable elements of policy benefits are determined to be consistent with management's expectation of how these elements will be managed should experience emerge consistently with the best estimate assumptions used for mortality and morbidity, investment returns, rates of policy termination, operating expenses and taxes.</p>	<p>The Company monitors policy experience and adjusts policy benefits and other adjustable elements to reflect this experience.</p> <p>Policyholder dividends are reviewed annually for all businesses under a framework of Board-approved policyholder dividend policies.</p>
<b>Foreign currency</b>	<p>Foreign currency risk results from a mismatch of the currency of liabilities and the currency of the assets designated to support these obligations. Where a currency mismatch exists, the assumed rate of return on the assets supporting the liabilities is reduced to reflect the potential for adverse movements in foreign exchange rates.</p>	<p>The Company generally matches the currency of its assets with the currency of the liabilities they support, with the objective of mitigating the risk of loss arising from currency exchange rates.</p>

The Company's practice is to review actuarial assumptions on an annual basis as part of its review of methods and assumptions (note 8(h)). Where changes are made to assumptions (see section h) the full impact is recognized in income immediately.

#### **(e) Sensitivity of insurance contract liabilities to changes in non-economic assumptions**

The sensitivity of after-tax income to changes in non-economic assumptions underlying policy liabilities is shown below, assuming that there is a simultaneous change in the assumption across all business units.

In practice, experience for each assumption will frequently vary by geographic market and business and assumption updates are made on a business/geographic specific basis. Actual results can differ materially from these estimates for a variety of reasons including the interaction among these factors when more than one changes, changes in actuarial and investment return and future investment activity assumptions, changes in business mix, effective tax rates and other market factors, and the general limitations of internal models.

Most participating business is excluded from this analysis because of the ability to pass both favourable and adverse experience to the policyholders through the participating dividend adjustment.



## Sensitivity of insurance contract liabilities to changes in non-economic assumptions

As at December 31,	Decrease in after-tax income	
	2011	2010
<b>Policy related assumptions</b>		
2% adverse change in future mortality rates <sup>(1),(3)</sup>		
Products where an increase in rates increases insurance contract liabilities	\$ (200)	\$ (300)
Products where a decrease in rates increases insurance contract liabilities	(300)	(300)
5% adverse change in future morbidity rates <sup>(2),(3)</sup>	(1,200)	(1,100)
10% adverse change in future termination rates <sup>(3)</sup>	(1,200)	(1,000)
5% increase in future expense levels	(300)	(300)

<sup>(1)</sup> An increase in mortality rates will generally increase policy liabilities for life insurance contracts whereas a decrease in mortality rates will generally increase policy liabilities for policies with longevity risk such as payout annuities.

<sup>(2)</sup> No amounts related to morbidity risk are included for policies where the policy liability provides only for claims costs expected over a short period, generally less than one year, such as Group Life and Health.

<sup>(3)</sup> The impacts of the sensitivities on long-term care for morbidity, mortality and lapse are assumed to be moderated by partial offsets from the Company's ability to contractually raise premium rates in such events, subject to state regulatory approval.

### (f) Provision for adverse deviation assumptions

The assumptions made in establishing insurance contract liabilities reflect expected best estimates of future experience. To recognize the uncertainty in these best estimate assumptions, to allow for possible mis-estimation of and deterioration in experience and to provide a greater degree of assurance that the insurance contract liabilities are adequate to pay future benefits, the Appointed Actuary is required to include a margin in each assumption.

Under Canadian IFRS reporting new business profits are capitalized at issue of a policy decreasing the income that would be recognized at inception of the policy and releasing it into future earnings as the policy is released from risk. Minimum requirements are prescribed by the Canadian Institute of Actuaries for determining margins related to interest rate risk. Specific guidance is also provided for other risks such as market, credit, mortality and morbidity risks. For other risks which are not specifically addressed by the Canadian Institute of Actuaries, a range is provided of five per cent to 20 per cent of the expected experience assumption. The Company uses assumptions within the permissible ranges, with the determination of the level set taking into account the risk profile of the business. On occasion, in specific circumstances for additional prudence, a margin may exceed the high end of the range, which is permissible under the Standards of Practice.

Each margin is reviewed annually for continued appropriateness.

### (g) Change in insurance contract liabilities

The change in insurance contract liabilities was a result of the following business activities and changes in actuarial estimates.

	Net actuarial liabilities	Other insurance contract liabilities <sup>(1)</sup>	Net insurance contract liabilities	Reinsurance asset	Gross insurance contract liabilities
<b>For the year ended December 31, 2011</b>					
Balance at January 1	\$ 142,446	\$ 8,034	\$ 150,480	\$ 7,832	\$ 158,312
New policies	2,350	–	2,350	192	2,542
Normal in-force movement	21,284	533	21,817	2,626	24,443
Changes in methods and assumptions	1,545	3	1,548	(91)	1,457
Impact of changes in foreign exchange rates	3,224	219	3,443	169	3,612
<b>Balance at December 31</b>	<b>\$ 170,849</b>	<b>\$ 8,789</b>	<b>\$ 179,638</b>	<b>\$ 10,728</b>	<b>\$ 190,366</b>
<b>For the year ended December 31, 2010</b>					
Balance at January 1	\$ 132,519	\$ 7,380	\$ 139,899	\$ 8,044	\$ 147,943
New policies	3,133	–	3,133	399	3,532
Normal in-force movement	7,817	888	8,705	538	9,243
Changes in methods and assumptions	2,888	(9)	2,879	(879)	2,000
Impact of changes in foreign exchange rates	(3,911)	(225)	(4,136)	(270)	(4,406)
<b>Balance at December 31</b>	<b>\$ 142,446</b>	<b>\$ 8,034</b>	<b>\$ 150,480</b>	<b>\$ 7,832</b>	<b>\$ 158,312</b>

<sup>(1)</sup> Other insurance contract liabilities is comprised of benefits payable and provision for unreported claims and policyholder amounts on deposit.

## (h) Changes in actuarial methods and assumptions

The Company examines the assumptions used in determining insurance contract liabilities on an ongoing basis to ensure they appropriately reflect emerging experience and changes in risk profile. Annually the Company conducts a comprehensive review of all actuarial methods and assumptions. Changes to actuarial methods and assumptions used in determining insurance contract liabilities will result in a change to the projected value of policy cash flows and, therefore, to insurance contract liabilities. The net impact of changes in actuarial methods and assumptions was an increase in reserves backing policyholder liabilities of \$1,515 (2010 – \$2,876). These amounts are net of the impact of the reinsurance assets on policy liabilities of \$91 (2010 – \$879). These pre-tax amounts were reported in the Corporate and other segment.

In 2011, the \$1,515 impact on actuarial liabilities for changes in assumptions and model enhancements included increases for policyholder behaviour assumptions, investment returns, expenses and refinements in modeling of liability cash flows and net decreases in policy liabilities for mortality. Actuarial liabilities decreased by \$412 for updates to mortality assumptions, including a release for updates to most mortality assumptions and the implementation of mortality and morbidity improvements for non-annuity business, offset by updates to older age U.S. life mortality. Actuarial liabilities increased by \$549 for updates to policyholder behaviour assumptions on variable annuity and segregated fund guarantee products as well as updated lapse rates and premium persistency assumptions for several insurance businesses. Actuarial liabilities increased by \$997 for updates to investment return assumptions, most notably for updates to the ultimate re-investment rate assumption, updates to interest rates used in the commutation of guaranteed minimum withdrawal benefit business in Canada and updates to certain non-fixed income assumptions (including future non-fixed income acquisitions). Actuarial liabilities increased by \$141 for updates to expenses, mainly related to U.S. Life maintenance expenses and updated modeling for the anticipated costs of letters of credit. A number of offsetting modeling items resulted in a reserve increase of \$240 and included reserve increases for updates to the modeling of certain payout annuities and refinements to the modeling of guaranteed minimum withdrawal benefit amounts, with offset for the impact of system conversions in the U.S.

In 2010, the \$2,876 impact on actuarial liabilities for changes in assumptions and model enhancements included increases for mortality/morbidity, policyholder behaviour, investment returns and refinements in modeling of liability cash flows, with decreases in policy liabilities for expenses. Actuarial liabilities increased by \$903 for changes to mortality/morbidity assumptions, driven by morbidity increases in the Long-Term Care business that were partially offset by mortality updates in Canadian Individual Insurance. Actuarial liabilities increased by \$650 for updates to policyholder behaviour assumptions, most significantly for policyholder behaviour assumptions on variable annuity and segregated fund guarantee products, and in Canadian Individual Insurance for renewable term business. Actuarial liabilities increased by \$1,459 for updates to volatility and mean return assumptions for variable annuity business and from reductions in the ultimate re-investment rates and for spread assumptions on corporate bonds. Actuarial liabilities were reduced by \$153 from updates to investment and policy maintenance expenses. A number of business specific modeling refinements were made to improve the projection of the future cash flows on in-force business, resulting in a net increase in insurance contract liabilities of \$17. Included in these amounts were refinements to modeling of liability cash flows offset by model refinements for the calculation of deferred tax provisions for asset timing differences in the U.S.

## (i) Insurance contracts contractual obligations

Insurance contracts give rise to obligations fixed by agreement. As at December 31, 2011, the Company's contractual obligations and commitments relating to insurance contracts are as follows:

Payments due by period	Less than 1 year	1 to 3 years	3 to 5 years	Over 5 years	Total
Insurance contract liabilities <sup>(1)</sup>	\$ 8,713	\$ 9,178	\$ 11,758	\$ 477,508	\$ 507,157

<sup>(1)</sup> Insurance contract liability cash flows include estimates related to the timing and payment of death and disability claims, policy surrenders, policy maturities, annuity payments, minimum guarantees on segregated fund products, policyholder dividends, commissions and premium taxes offset by contractual future premiums on in-force contracts. These estimated cash flows are based on the best estimate assumptions used in the determination of insurance contract liabilities. These amounts are undiscounted and reflect recoveries from reinsurance agreements. Due to the use of assumptions, actual cash flows may differ from these estimates. Cash flows include embedded derivatives measured separately at fair value.

## Note 9 Investment Contract Liabilities

Investment contract liabilities are contractual obligations made by the Company that do not contain significant insurance risk and are measured either at fair value or at amortized cost.

### Investment contract liabilities measured at fair value

Investment contract liabilities measured at fair value comprise certain investment savings and pension products sold primarily in Hong Kong, Japan, China, Taiwan and U.S. Fixed Products. The carrying value of investment contract liabilities measured at fair value are reflected below.

As at	December 31,		January 1,
	2011	2010	2010
Asia	\$ 743	\$ 812	\$ 877
United States	5	5	5
<b>Investment contract liabilities</b>	<b>\$ 748</b>	<b>\$ 817</b>	<b>\$ 882</b>

The change in investment contract liabilities measured at fair value was a result of the following.

<b>For the years ended December 31,</b>	<b>2011</b>	2010
Balance at January 1	<b>\$ 817</b>	\$ 882
New policies	<b>4</b>	2
Changes in methods and assumptions	<b>(1)</b>	1
Redemptions, surrenders and maturities	<b>(91)</b>	(43)
Impact of changes in foreign exchange rates	<b>19</b>	(25)
<b>Balance at December 31</b>	<b>\$ 748</b>	\$ 817

For the year ended December 31, 2011, the net gain relating to investment contract liabilities at fair value was \$1 (2010 – loss of \$1).

### Investment contract liabilities measured at amortized cost

Investment contract liabilities measured at amortized cost comprise medium term notes sold in the U.S. and several annuity certain products sold in Canada and the U.S. Annuity certain products considered investment contracts are those that provide guaranteed income payments for a contractually determined period of time and are not contingent on survivorship.

Investment contract liabilities measured at amortized cost are shown below. The fair value associated with these contracts is also shown for comparative purposes.

<b>As at</b>	December 31,				January 1,	
	<b>2011</b>		2010		2010	
	Amortized cost	Fair value	Amortized cost	Fair value	Amortized cost	Fair value
U.S. medium term notes	<b>\$ 463</b>	<b>\$ 495</b>	\$ 1,078	\$ 1,123	\$ 1,966	\$ 2,060
U.S. annuity certain products	<b>1,073</b>	<b>1,005</b>	836	769	655	667
Canadian annuity certain products	<b>256</b>	<b>277</b>	259	288	275	289
<b>Investment contract liabilities</b>	<b>\$ 1,792</b>	<b>\$ 1,777</b>	\$ 2,173	\$ 2,180	\$ 2,896	\$ 3,016

The change in investment contract liabilities measured at amortized cost was a result of the following business activities.

<b>For the years ended December 31,</b>	<b>2011</b>	2010
Balance at January 1	<b>\$ 2,173</b>	\$ 2,896
New policy deposits	<b>269</b>	293
Interest	<b>105</b>	122
Withdrawals	<b>(793)</b>	(1,035)
Fees	<b>2</b>	3
Other	<b>10</b>	(2)
Impact of changes in foreign exchange rates	<b>26</b>	(104)
<b>Balance at December 31</b>	<b>\$ 1,792</b>	\$ 2,173

For the year ended December 31, 2011, the net loss relating to investment contracts measured at amortized cost was \$117 (2010 – \$123).

Medium term notes offer a specified guaranteed fixed or floating rate of return based on external market indices and are comprised of the following contractual terms.

<b>As at</b>	Issue date	Maturity date	December 31,		January 1,
			<b>2011</b>		2010
			Carrying value		Carrying value
2.050% JPY Medium term notes	June 8, 2000	June 8, 2010	<b>\$ –</b>	\$ –	\$ 227
7.900% USD Medium term notes	June 30, 2000	July 2, 2010	–	–	544
4.125% USD Medium term notes	October 8, 2003	October 15, 2010	–	–	53
4.280% SGD Medium term notes	February 22, 2001	February 22, 2011	–	79	76
6.500% USD Medium term notes	February 28, 2001	March 1, 2011	–	305	320
6.000% GBP Medium term notes	May 11, 2001	July 12, 2011	–	239	261
EURIBOR3 + 35bps EUR Medium term notes	June 26, 2002	June 25, 2012	<b>68</b>	69	78
5.000% USD Medium term notes	September 24, 2003	September 30, 2013	<b>51</b>	50	53
4.670% HKD Medium term notes	March 16, 2004	March 17, 2014	<b>33</b>	32	34
5.250% USD Medium term notes	February 18, 2003	February 25, 2015	<b>311</b>	304	320
<b>Total carrying value</b>			<b>\$ 463</b>	\$ 1,078	\$ 1,966
<b>Fair value</b>			<b>\$ 495</b>	\$ 1,123	\$ 2,060

The carrying value of the medium term notes is amortized at the effective interest rates which exactly discount the contractual cash flows to the net carrying amount of the liabilities at the date of issue.

The fair value of the medium term notes is determined using a discounting cash flow approach based on current market interest rates adjusted for the Company's own credit standing.

The carrying value of annuity certain products is amortized at a rate that exactly discounts the projected actual cash flows to the net carrying amount of the liability at the date of issue.

The fair value of annuity certain products is determined by projecting cash flows according to the contract terms and discounting the cash flows at current market rates adjusted for the Company's own credit standing.

### Investment contracts contractual obligations

Investment contracts give rise to obligations fixed by agreement. As at December 31, 2011, the Company's contractual obligations and commitments relating to investment contracts are as follows:

Payments due by period	Less than 1 year	1 to 3 years	3 to 5 years	Over 5 years	Total
Investment contract liabilities <sup>(1)</sup>	\$ 272	\$ 641	\$ 575	\$ 2,261	\$ 3,749

<sup>(1)</sup> Due to the nature of the products, the timing of net cash flows may be before contract maturity. Cash flows are undiscounted.

## Note 10 Risk Management

Manulife Financial is a financial institution offering insurance, wealth and asset management products and services, which subjects the Company to a broad range of risks. The Company manages these risks within an enterprise-wide risk management framework. The Company's goal in managing risk is to strategically optimize risk taking and risk management to support long-term revenue, earnings and capital growth. The Company seeks to achieve this by capitalizing on business opportunities that are aligned with the Company's risk taking philosophy, risk appetite and return expectations, by identifying, measuring and monitoring key risks taken, and by executing risk control and mitigation programs.

### (a) Market risk

#### Market risk management strategy overview

The Company's overall strategy to manage its market risks incorporates several component strategies, each targeted to manage one or more of the market risks arising from the Company's businesses. The following table outlines the Company's key market risks and identifies the risk management strategies which contribute to managing these risks. At an enterprise level, these strategies are designed to manage the Company's aggregate exposures to market risks against economic capital, regulatory required capital and earnings at risk targets.

	Publicly traded equity performance risk	Interest rate risk	Alternative non-fixed income asset performance risk	Foreign exchange risk
Product design and pricing	X	X	X	X
Variable annuity guarantee dynamic hedging	X	X		X
Macro equity risk hedging	X			X
Asset liability management	X	X	X	X
Foreign exchange management				X

#### Market risk factors

##### Publicly traded equity performance risk

Publicly traded equity performance risk arises from a variety of sources, including guarantees associated with certain variable annuity and segregated fund products, asset based fees, and investments in publicly traded equities supporting both general fund products and surplus segment.

The Company's most significant source of equity risk arises from variable annuity and segregated funds with guarantees, where the guarantees are linked to the performance of the underlying funds. Guaranteed benefits are contingent and only payable upon death, maturity, permitted withdrawal or annuitization. If equity markets decline or even if they increase by an amount lower than that assumed in the Company's actuarial valuation, additional liabilities may need to be established to cover the contingent liabilities, resulting in a reduction in shareholders' net income and regulatory capital ratios. Further, if equity markets do not recover to the amount of the guarantees by the dates the liabilities are due, the accrued liabilities will need to be paid out in cash. In addition, a sustained flat or decline in public equity markets would likely reduce asset based fee revenues related to variable annuities and segregated funds with guarantees and related to other wealth and insurance products.

If equity market volatility remains high, the costs of hedging the guarantees would likely increase. Further, the variable annuity dynamic hedging strategy is designed to hedge public equity and bond fund performance and interest rate movements. However, the Company has chosen to maintain certain risks unhedged (such as the realized market volatility), and therefore higher levels of equity and interest rate volatility will create losses on dynamically hedged business.

Where publicly traded equity investments are used to support policy liabilities, the policy valuation incorporates projected investment returns on these assets. If actual returns are lower than the expected returns, the Company's policy liabilities will increase, reducing net income attributed to shareholders.

Further, for products where the investment strategy applied to future cash flows in the policy valuation includes investing a specified portion of future cash flows in publicly traded equities, a decline in the value of publicly traded equities relative to other assets could require the Company to change the investment mix assumed for future cash flows, increasing policy liabilities and reducing net income attributed to shareholders. In addition, a reduction in the outlook for expected future returns for publicly traded equities, which could result from a fundamental change in future expected economic growth, would increase policy liabilities and reduce net income attributed to shareholders. In addition, to the extent publicly traded equities are held as AFS, other than temporary impairments that arise will reduce income.

### **Interest rate and spread risk**

Interest rate and spread risk arises from general fund guaranteed benefit products, general fund adjustable benefit products with minimum rate guarantees, general fund products with guaranteed surrender values, segregated fund products with minimum benefit guarantees and from surplus fixed income investments.

Interest rate and spread risk arises within the general fund primarily due to the uncertainty of future returns on investments to be made as assets mature and as recurring premiums are received and must be re-invested to support longer dated liabilities. Interest rate risk also arises due to minimum rate guarantees and guaranteed surrender values on products where investment returns are generally passed through to policyholders.

A general decline in interest rates, without a change in corporate bond spreads and swap spreads, will reduce the assumed yield on future investments used in the valuation of policy liabilities, resulting in an increase in policy liabilities and a reduction in net income. A general increase in interest rates, without a change in corporate bond spreads and swap spreads, will result in a decrease in policy liabilities and an increase in net income. In addition, decreases in corporate bond spreads and increases in swap spreads will result in an increase in policy liabilities and a reduction in net income. An increase in corporate bond spreads and a decrease in swap spreads will have the opposite impact. The impact of changes in interest rates and in spreads may be partially offset by changes to credited rates on adjustable products that pass through investment returns to policyholders.

For segregated fund and variable annuity products, a sustained increase in interest rate volatility or a decline in interest rates would also likely increase the costs of hedging the benefit guarantees provided.

### **Alternative non-fixed income asset performance risk**

Alternative non-fixed income asset performance risk arises from general fund investments in commercial real estate, timber properties, agricultural properties, oil and gas properties, and private equities.

Where these assets are used to support policy liabilities, the policy valuation incorporates projected investment returns on these assets. Non-fixed income assumptions vary by asset class and generally have a similar impact on policy liabilities as public equities would. If actual returns are lower than the expected returns, the Company's policy liabilities will increase, reducing net income attributed to shareholders. Further, for products where the investment strategy applied to future cash flows in the policy valuation includes investing a specified portion of future policy cash flows in alternative non-fixed income assets, a decline in the value of these assets relative to other assets could require the Company to change the investment mix assumed for future cash flows, increasing policy liabilities and reducing net income. In addition, a reduction in the outlook for expected future returns for alternative non-fixed income assets, which could result from a fundamental change in future expected economic growth, would increase policy liabilities and reduce net income attributed to shareholders.

### **Foreign exchange risk**

The Company's results are reported in Canadian dollars. A substantial portion of its business is transacted in currencies other than Canadian dollars, mainly U.S. dollars, Hong Kong dollars and Japanese yen. If the Canadian dollar strengthens, reported earnings would decline and the Company's reported shareholders' equity would decline. Further, to the extent that the resultant change in available capital is not offset by a change in required capital, the Company's regulatory capital ratios would be reduced. A weakening of the Canadian dollar against the foreign currencies in which the Company does business would have the opposite effect, and would increase reported Canadian dollar earnings and shareholders' equity, and would potentially increase the Company's regulatory capital ratios.

### **Market risk management strategies**

#### **Product design and pricing**

The Company's product design and pricing standards and guidelines are designed with the objective of aligning its product offerings with its risk taking philosophy and tolerances, and in particular, that incremental risk generated from new sales aligns with its strategic

risk objectives and risk targets. The specific design features of its product offerings, including level of benefit guarantees, policyholder options, fund offerings and availability restrictions as well as its associated investment strategies help to mitigate the level of underlying risk. The Company regularly reviews and modifies all key features within its product offerings, including premiums and fee charges with a goal of meeting both profit and risk targets. New product initiatives, new business reinsurance arrangements and material insurance underwriting initiatives must be reviewed and approved by the Chief Risk Officer or key individuals within Credit Risk Management.

### **Variable annuity guarantee dynamic hedging strategy**

The variable annuity dynamic hedging strategy is designed to hedge the sensitivity of variable annuity guarantee policy liabilities and available capital, to both public equity and bond fund performance and interest rate movements. The objective of the dynamic hedging strategy is to offset as closely as possible, the change in the Company's internally defined economic value of guarantees with the profit and loss from its hedge asset portfolio. The internal economic value of guarantees moves in close tandem with, but not exactly as, the variable annuity guarantee policy liabilities, as it reflects best estimate liabilities and does not include any liability provisions for adverse deviations.

The Company's current hedging approach is to short exchange-traded equity index and government bond futures and execute currency futures and lengthening interest rate swaps to hedge sensitivity of policy liabilities to fund performance and interest rate movements arising from variable annuity guarantees. The Company dynamically rebalances these hedge instruments as market conditions change, in order to maintain the hedged position within established limits. The Company may consider the use of additional hedge instruments opportunistically in the future.

The Company's variable annuity guarantee dynamic hedging strategy is not designed to completely offset the sensitivity of policy liabilities to all risks associated with the guarantees embedded in these products. The profit (loss) on the hedge instruments will not completely offset the underlying losses (gains) related to the guarantee liabilities hedged because:

- Policyholder behaviour and mortality experience are not hedged;
- Provisions for adverse deviation in the policy liabilities are not hedged;
- A portion of interest rate risk is not hedged;
- Fund performance on a small portion of the underlying funds is not hedged due to lack of availability of effective exchange-traded hedge instruments;
- Performance of the underlying funds hedged may differ from the performance of the corresponding hedge instruments;
- Correlations between interest rates and equity markets could lead to unfavourable material second order impacts;
- Unfavourable hedge rebalancing costs can be incurred during periods of high volatility from equity markets, bond markets and/or interest rates. The impact is magnified when these impacts occur concurrently; and
- Not all other risks are hedged.

### **Macro equity risk hedging strategy**

The macro equity risk hedging strategy is designed to hedge a portion of the Company's earnings sensitivity to public equity market movements arising from the following sources in order to maintain its overall earnings sensitivity to public equity market movements below targeted levels:

- General fund equity holdings backing non-participating liabilities;
- Variable life insurance;
- Variable annuity guarantees not dynamically hedged;
- Unhedged provisions for adverse deviation related to variable annuity guarantees dynamically hedged;
- Variable annuity fees not associated with guarantees; and
- Fees on segregated funds without guarantees, mutual funds and institutional assets managed.

The Company currently executes its macro equity risk hedging strategy by shorting equity futures and executing currency futures, and rolling them over at maturity. The Company may consider the use of alternative long maturity instruments opportunistically in the future. The notional value of equity futures contracts that were shorted as part of the Company's macro equity risk hedging strategy as at December 31, 2011 was approximately \$5.6 billion. Management intends to increase the amount of macro equity hedges on a time-scheduled and market-trigger basis. Management also intends to increase the amount of hedges in order to maintain its overall earnings sensitivity to equity market movements below targeted levels should markets decline.

### **Asset liability management strategy**

The Company's asset liability management strategy is designed to help ensure the market risks embedded in its assets and liabilities held in the Company's general fund are effectively managed and that risk exposures arising from these assets and liabilities are maintained below targeted levels. The embedded market risks include risks related to the level and movement of interest rates and credit spreads, publicly traded equity performance, alternative non-fixed income asset performance and foreign exchange rate movements.

General fund product liabilities are segmented into groups with similar characteristics that are supported by specific asset segments. Each segment is managed to a target investment strategy appropriate for the premium and benefit pattern, policyholder options and guarantees, and crediting rate strategies of the products they support. Similar strategies are established for assets in the Company's surplus account. The strategies are set using portfolio analysis techniques intended to optimize returns, subject to considerations



related to regulatory and economic capital requirements, and risk tolerances. They are designed to achieve broad diversification across asset classes and individual investment risks while being suitably aligned with the liabilities they support. The strategies encompass asset mix, quality rating, term profile, liquidity, currency and industry concentration targets.

### **Foreign exchange risk management strategy**

The Company's foreign exchange risk management strategy is designed to hedge the sensitivity of its regulatory capital ratios to movements in foreign exchange rates. In particular, the objective of the strategy is to offset, within acceptable tolerance levels, changes in required capital with changes in available capital that result from movements in foreign exchange rates. These changes occur when assets and liabilities related to business conducted in currencies other than Canadian dollars are translated to Canadian dollars at year end exchange rates.

The Company's policy is to generally match the currency of its assets with the currency of the liabilities they support, and similarly, the Company has a policy of generally matching the currency of the assets in its shareholders' equity account to the currency of its required capital. Where assets and liabilities are not matched, forward contracts are used to stabilize the Company's capital ratios and its capital adequacy relative to economic capital when foreign exchange rates change.

### **Sensitivities and risk exposure measures**

**Caution related to sensitivities:** In these consolidated financial statements, the Company has provided sensitivities and risk exposure measures for certain risks. These include the sensitivity due to specific changes in market prices and interest rate levels projected using internal models as at a specific date, and are measured relative to a starting level reflecting the Company's assets and liabilities at that date and the actuarial factors, investment returns and investment activity assumed in the future. The risk exposures measure the impact of changing one factor at a time and assume that all other factors remain unchanged. Actual results can differ significantly from these estimates for a variety of reasons including the interaction among these factors when more than one changes, changes in actuarial and investment return and future investment activity assumptions, actual experience differing from the assumptions, changes in business mix, effective tax rates and other market factors, and the general limitations of its internal models. For these reasons, these sensitivities should only be viewed as directional estimates of the underlying sensitivities for the respective factors based on the assumptions outlined below. Given the nature of these calculations, the Company cannot provide assurance that the actual impact on net income attributed to shareholders will be as indicated.

### **Variable annuity and segregated fund guarantees**

The table below provides information related to the Company's variable annuities and segregated funds products with guarantees. Under IFRS, the guarantees associated with these products are considered to be embedded derivatives. However, as these guarantees either contain significant insurance risk and/or are closely related to the host contract, the embedded derivatives are not required to be accounted for separately at fair value in the Company's consolidated financial statements. Variable annuity and segregated fund guarantees make up the most material portion of the embedded derivatives exempt from separate measurement at fair value.

Variable annuity products with Guaranteed Minimum Death Benefit ("GMDB") features guarantee the contract holder a minimum payment on death of, depending on the contract features: (a) the total deposits made to the contract adjusted for any partial withdrawals; (b) the total deposits made to the contract adjusted for any partial withdrawals plus a minimum return; or (c) the highest contract fund value on a prior specified anniversary date adjusted for any withdrawals following that specified anniversary date.

Variable annuity products with Guaranteed Minimum Accumulation Benefit ("GMAB") features guarantee the contract holder a minimum payment at the end of a specified term of either, depending on the contract features: (a) the total deposits made to the contract adjusted for any partial withdrawals; or (b) the highest contract fund valued on a prior specified anniversary date adjusted for any withdrawals following that specified anniversary date.

Variable annuity products with Guaranteed Minimum Income Benefit ("GMIB") features provide a guaranteed minimum lifetime annuity, which may be elected by the contract holder after a stipulated waiting year (seven to 15 years). The Company ceased selling products with this guarantee in 2004.

Variable annuity products with Guaranteed Minimum Withdrawal Benefit ("GMWB") features provide contract holders a minimum annual withdrawal amount over a specified time period or in some cases for as long as they live or as long as either they or their spouse lives, of a specified percentage of a benefit base, equaling total deposits adjusted for prior withdrawals in excess of specified allowed amounts. In some cases, depending on contract features, the benefit base may be increased at specified dates either (a) to the contract fund value if higher, or (b) by specified amounts in the case where no withdrawals are made by the contract holder.

## Variable annuity and segregated fund guarantees

As at December 31,

	2011			2010		
	Guarantee value	Fund value	Amount at risk <sup>(4)</sup>	Guarantee value	Fund value	Amount at risk <sup>(4)</sup>
Guaranteed minimum income benefit <sup>(1)</sup>	\$ 7,518	\$ 5,358	\$ 2,163	\$ 8,202	\$ 6,359	\$ 1,856
Guaranteed minimum withdrawal benefit	66,655	56,954	9,907	62,382	57,331	6,391
Guaranteed minimum accumulation benefit	23,509	23,030	2,813	23,902	25,152	1,980
Gross living benefits <sup>(2)</sup>	\$ 97,682	\$ 85,342	\$ 14,883	\$ 94,486	\$ 88,842	\$ 10,227
Gross death benefits <sup>(3)</sup>	15,202	11,614	3,232	16,279	12,736	2,813
Total gross of reinsurance and dynamic hedging	\$ 112,884	\$ 96,956	\$ 18,115	\$ 110,765	\$ 101,578	\$ 13,040
Living benefits reinsured	\$ 6,491	\$ 4,622	\$ 1,871	\$ 7,108	\$ 5,506	\$ 1,611
Death benefits reinsured	4,360	3,430	1,104	4,924	4,070	1,052
Total reinsured	\$ 10,851	\$ 8,052	\$ 2,975	\$ 12,032	\$ 9,576	\$ 2,663
Total, net of reinsurance	\$ 102,033	\$ 88,904	\$ 15,140	\$ 98,733	\$ 92,002	\$ 10,377
Living benefits dynamically hedged	\$ 55,522	\$ 50,550	\$ 6,346	\$ 44,606	\$ 44,827	\$ 2,685
Death benefits dynamically hedged	5,133	3,461	739	4,685	3,032	424
Total dynamically hedged	\$ 60,655	\$ 54,011	\$ 7,085	\$ 49,291	\$ 47,859	\$ 3,109
Living benefits retained	\$ 35,669	\$ 30,170	\$ 6,666	\$ 42,772	\$ 38,509	\$ 5,931
Death benefits retained	5,709	4,723	1,389	6,670	5,634	1,337
<b>Total, net of reinsurance and dynamic hedging</b>	<b>\$ 41,378</b>	<b>\$ 34,893</b>	<b>\$ 8,055</b>	<b>\$ 49,442</b>	<b>\$ 44,143</b>	<b>\$ 7,268</b>

<sup>(1)</sup> Contracts with guaranteed long-term care benefits are included in this category.

<sup>(2)</sup> Where a policy includes both living and death benefits, the guarantee in excess of the living benefit is included in the death benefit category as outlined in footnote (3).

<sup>(3)</sup> Death benefits include stand-alone guarantees and guarantees in excess of living benefit guarantees where both death and living benefits are provided on a policy.

<sup>(4)</sup> Amount at risk (in-the-money amount) is the excess of guarantee values over fund values on all policies where the guarantee value exceeds the fund value. This amount is not currently payable. For GMDB, the net amount at risk is defined as the current GMDB in excess of the current account balance. For GMIB, the net amount at risk is defined as the excess of the current annuitization income base over the current account value. For all guarantees, the net amount at risk is floored at zero at the single contract level.

The insurance and investment contract liability established for these benefits was \$10,021 at December 31, 2011 (2010 – \$3,101). These insurance and investment contract liabilities include the liabilities for both the hedged and the unhedged business. For unhedged business, insurance and investment contract liabilities were \$3,586 at December 31, 2011 (2010 – \$2,083). The insurance and investment contract liabilities for the hedged block were \$6,435 at December 31, 2011 (2010 – \$1,018). The increase in the liabilities for the hedged business was primarily due to the adverse impact of interest rate movements on the cost of hedging associated with the dynamic hedging program that is reflected in IFRS hedged reserves and the adverse impact from basis changes. The year-over-year increase in liabilities related to the unhedged block was due primarily to the adverse impacts from basis changes and interest rate movements, offset by the favourable impact of improved public equity markets.

## Variable life insurance guarantees

Deposits related to variable life insurance contracts are invested in segregated fund accounts and for certain policies, the Company guarantees a minimum death benefit if certain specified premiums are paid by the policyholder, regardless of segregated fund account performance.

The following table shows selected information regarding the variable life insurance contracts referred to above.

As at December 31,

Life insurance contracts with guaranteed benefits	2011	2010
<i>In the event of death</i>		
Account value	\$ 7,930	\$ 7,920
Net amount at risk <sup>(1)</sup>	\$ 366	\$ 359
Average attained age of contract holders	52	51

<sup>(1)</sup> The net amount at risk for these policies is defined as the excess of the sum insured over the current account value, when the account value is zero or where contracts specify guarantees to cover the cost of insurance in the event of insufficient account value.

## Investment categories for variable contracts with guarantees

Variable contracts with guarantees are invested, at the policyholder's discretion subject to contract limitations, in various fund types within the segregated fund accounts and other investments. The account balances by investment category are set out below.

As at December 31,

Investment category	2011	2010
Equity funds	\$ 34,123	\$ 37,400
Balanced funds	55,921	57,411
Bond funds	10,296	10,430
Money market funds	3,027	2,805
Other fixed interest rate investments	1,519	1,452
<b>Total</b>	<b>\$ 104,886</b>	<b>\$ 109,498</b>

### Benefits incurred and paid for variable contracts with guarantees

For the year ended December 31, 2011, the Company incurred and paid death benefits of \$108 (2010 – \$160) and living benefits of \$100 (2010 – \$202).

### Publicly traded equity performance risk – risk exposure measures

The tables below show the potential impact on net income attributed to shareholders resulting from an immediate 10, 20 and 30 per cent changes in market values of publicly traded equities followed by a return to the expected level of growth assumed in the valuation of insurance and investment contract liabilities, including embedded derivatives. The potential impact is shown before and after taking into account the impact of the change in markets on the hedge assets. While the Company cannot reliably estimate the amount of the change in dynamically hedged variable annuity liabilities that will not be offset by the profit or loss on the dynamic hedge assets, the Company makes certain assumptions for the purposes of estimating the impact on net income attributed to shareholders. The Company assumes that for a 10, 20 and 30 per cent decrease in the market value of equities, the profit from the hedge assets is assumed to offset 80, 75 and 70 per cent, respectively, of the loss arising from the change in the liabilities associated with the guarantees dynamically hedged. For a 10, 20 and 30 per cent market increase in the market value of equities, the loss on the dynamic hedges is assumed to be 120, 125 and 130 per cent of the gain from the dynamically hedged variable annuity liabilities, respectively.

### Potential impact on net income attributed to shareholders arising from changes to public equity returns<sup>(1)</sup>

As at December 31, 2011	-30%	-20%	-10%	+10%	+20%	+30%
Net impact assuming the change in the value of the hedge assets completely offsets the change in the dynamically hedged variable annuity guarantee liabilities <sup>(2)</sup>	\$ (2,050)	\$ (1,280)	\$ (600)	\$ 500	\$ 910	\$ 1,220
Impact of assuming the change in value of the dynamic hedge assets does not completely offset the change in the dynamically hedged variable annuity guarantee liabilities <sup>(3)</sup>	(950)	(500)	(180)	(140)	(300)	(480)
Net impact assuming the change in value of the dynamic hedge assets does not completely offset the change in the dynamically hedged variable annuity guarantee liabilities <sup>(2), (3)</sup>	\$ (3,000)	\$ (1,780)	\$ (780)	\$ 360	\$ 610	\$ 740

### As at December 31, 2010

Net impact assuming the change in the value of the hedge assets completely offsets the change in the dynamically hedged variable annuity guarantee liabilities <sup>(2)</sup>	\$ (2,430)	\$ (1,470)	\$ (660)	\$ 520	\$ 920	\$ 1,040
Impact of assuming the change in value of the dynamic hedge assets does not completely offset the change in the dynamically hedged variable annuity guarantee liabilities <sup>(3)</sup>	(500)	(240)	(80)	(60)	(110)	(170)
Net impact assuming the change in value of the dynamic hedge assets does not completely offset the change in the dynamically hedged variable annuity guarantee liabilities <sup>(2), (3)</sup>	\$ (2,930)	\$ (1,710)	\$ (740)	\$ 460	\$ 810	\$ 870

<sup>(1)</sup> See "Caution related to sensitivities" above.

<sup>(2)</sup> The impact for component related to general fund equities is at a point-in-time and does not include: (i) any potential impact on public equity weightings; (ii) any gains or losses on public equities held in the Corporate and other segment; or (iii) any gains or losses on public equity investments held in Manulife Bank of Canada. The sensitivities assume that the participating policy funds are self-supporting and generate no material impact on net income attributed to shareholders as a result of changes in equity markets.

<sup>(3)</sup> For a 10, 20 and 30 per cent market decrease the gain on the dynamic hedge assets is assumed to be 80, 75 and 70 per cent of the loss from the dynamically hedged variable annuity liabilities associated with insurance contracts, respectively. For a 10, 20 and 30 per cent market increase, the loss on the dynamic hedges is assumed to be 120, 125 and 130 per cent of the gain from the dynamically hedged variable annuity insurance and investment contract liabilities, respectively.

Exposures at December 31, 2011 increased as compared to December 31, 2010 primarily due to the underperformance of equity markets in 2011 relative to returns assumed in the valuation models, offset by additional hedging of in-force business.

### Interest rate risk – risk exposure measures

The following table shows the potential impact on net income attributed to shareholders of a change of one per cent, in current government, swap and corporate rates for all maturities across all markets with no change in credit spreads between government, swap and corporate rates, and with a floor of zero on government rates, relative to the rates assumed in the valuation of insurance and investment contract liabilities, including embedded derivatives. The Company assumes no change to the URR.

**Potential impact on annual net income attributed to shareholders of an immediate one per cent parallel change in interest rates relative to rates assumed in the valuation of insurance and investment contract liabilities, including embedded derivatives<sup>(1)</sup>**

As at December 31,	2011		2010	
	-100bp	+100bp	-100bp	+100bp
General fund products <sup>(2)</sup>	\$ (500)	\$350	\$ (1,400)	\$1,200
Variable annuity guarantees <sup>(3)</sup>	(500)	350	(400)	300
<b>Total</b>	<b>\$ (1,000)</b>	<b>\$ 700</b>	<b>\$ (1,800)</b>	<b>\$ 1,500</b>

<sup>(1)</sup> See "Caution related to sensitivities" above.

<sup>(2)</sup> The sensitivities assume that the participating insurance and investment contract funds are self-supporting and generate no material impact on net income attributed to shareholders as a result of changes in interest rates.

<sup>(3)</sup> For variable annuity liabilities that are dynamically hedged, it is assumed that interest rate hedges are rebalanced at 20 basis point intervals.

The decline in exposures was primarily driven by the actions to extend the duration of the Company's fixed income investments supporting insurance contract liabilities.

The potential impact on annual net income attributed to shareholders provided in the table above does not include any impact arising from the sale of fixed income assets held in the Company's surplus segment. Changes in the market value of these assets may provide a natural economic offset to the interest rate risk arising from the Company's product liabilities. In order for there to also be an accounting offset, the Company would need to realize a portion of the AFS fixed income unrealized gains or losses.

Reserves are determined by testing a range of future interest rate scenarios, including those prescribed by actuarial standards of practice. These future scenarios are derived from interest rates and spreads at the end of the quarter. The scenario that produces the highest reserve requirement determines the reserve held at the end of the quarter and is called the booking scenario. Following changes in interest rates and corporate spreads during 2011, should interest rates and spreads further decline in parallel and by the amounts indicated, the future interest rate scenario that would produce the highest reserve, or booking scenario, could change in some jurisdictions to a scenario where then current interest rates, spreads and investment in corporate bonds prevail for the lifetime of the business. This compares to the Company's current booking scenario which begins with current rates grading to a URR with corporate bond spreads that grade to an expected long-term level over five years and a linear reduction in future investment in corporate bonds to zero over 20 years.

The impact of the change in the booking scenario, should interest rates and spreads decline in parallel and by the amounts indicated, is incorporated into the earnings sensitivities shown above. For this reason, the impact of changes less than the amounts indicated are unlikely to be linear relative to this estimate. The change in booking scenario added approximately \$500 to the impact of a 100 basis point decline in interest rates and \$300 to the impact of a 50 basis point reduction in corporate spreads. Actual results in the future will be affected by a wide variety of factors and no simple formula can accurately predict the potential impact.

**Potential impact on annual net income attributed to shareholders arising from changes to corporate spreads<sup>(1),(2)</sup>**

As at December 31,	2011		2010	
	-50bp	+50bp	-50bp	+50bp
Corporate spreads <sup>(3),(4),(5)</sup>	\$ (900)	\$ 500	\$ (500)	\$ 400

<sup>(1)</sup> See "Caution related to sensitivities" above.

<sup>(2)</sup> The sensitivity was estimated as 50% of the sensitivity to a 100 basis point change. Actual results may differ materially from these estimates.

<sup>(3)</sup> The impact on net income attributed to shareholders assumes no gains or losses are realized on AFS fixed income assets held in the surplus segment and excludes the impact arising from changes in off-balance sheet bond fund value arising from changes in credit spreads. The sensitivities assume that the participating policy funds are self-supporting and generate no material impact on net income attributed to shareholders as a result of changes in corporate spreads.

<sup>(4)</sup> Corporate spreads are assumed to grade to the long term average over five years.

<sup>(5)</sup> Sensitivities are based on projected asset and liability cash flows at the beginning of the quarter adjusted for the estimated impact of new business and investment market and activities during the quarter. Any true-up to these estimates, as a result of the final asset and liability cash flows to be used in the next quarter's projection, are reflected in the next quarter's sensitivities.

**Potential impact on annual net income attributed to shareholders arising from changes to swap spreads<sup>(1),(2),(3)</sup>**

As at December 31,	2011		2010	
	-20bp	+20bp	-20bp	+20bp
Swap spreads	\$ 600	\$ (600)	\$ 200	\$ (200)

<sup>(1)</sup> See "Caution related to sensitivities" above.

<sup>(2)</sup> The impact on net income attributed to shareholders assumes no gains or losses are realized on AFS fixed income assets held in the surplus segment and excludes the impact arising from changes in off-balance sheet bond fund value arising from changes in swap spreads. The sensitivities assume that the participating policy funds are self-supporting and generate no material impact on net income attributed to shareholders as a result of changes in swap spreads.

<sup>(3)</sup> Sensitivities are based on projected asset and liability cash flows at the beginning of the quarter adjusted for the estimated impact of new business and investment market and activities during the quarter. Any true-up to these estimates, as a result of the final asset and liability cash flows to be used in the next quarter's projection, are reflected in the next quarter's sensitivities.

### Alternative non-fixed income asset performance risk – risk exposure measures

The following table shows the potential impact on net income attributed to shareholders resulting from changes in market values of alternative non-fixed income assets different than the expected levels assumed in the valuation of insurance and investment contract liabilities.

### Potential impact on net income attributed to shareholders arising from changes in alternative non-fixed income asset returns<sup>(1),(2)</sup>

As at December 31,	2011		2010	
	-10%	+10%	-10%	+10%
Real estate, agriculture and timber assets	\$ (750)	\$ 750	\$ (500)	\$ 600
Private equities and other non-fixed income assets	(550)	550	(400)	400
<b>Alternative non-fixed income assets</b>	<b>\$ (1,300)</b>	<b>\$ 1,300</b>	<b>\$ (900)</b>	<b>\$ 1,000</b>

<sup>(1)</sup> See "Caution related to sensitivities" above.

<sup>(2)</sup> This impact is calculated as at a point-in-time and does not include: (i) any potential impact on non-fixed income asset weightings; (ii) any gains or losses on non-fixed income investments held in the Corporate and other segment; or (iii) any gains or losses on non-fixed income investments held in Manulife Bank of Canada.

The increased sensitivity from December 31, 2010 to December 31, 2011 is primarily related to the drop in fixed income rates (reducing the rate at which funds can reinvest) as well as the change in foreign exchange rates.

### (b) Foreign currency risk for financial instruments

The Company generally matches the currency of its assets with the currency of the insurance and investment contract liabilities they support, with the objective of mitigating risk of loss arising from currency exchange rate changes. The Company's unmatched currency exposure was primarily limited to its foreign denominated AFS bonds and private equity investments. As at December 31, 2011, the Company did not have a material unmatched currency exposure related to these foreign denominated AFS bonds and private equity investments.

### (c) Liquidity risk

Liquidity risk is the risk that sufficient funds are not available to meet both expected and unexpected cash and/or collateral demands in a timely and cost-effective manner. Under stressed conditions, unexpected cash demands could arise primarily from an increase in the level of policyholders either systemically terminating policies with cash surrender values or not renewing policies when they mature, deposit withdrawals and from an increase in the level of borrowers renewing or extending their loans when they mature.

The Company's liquidity risk management strategies are designed to ensure that sufficient funds are readily available to meet its financial obligations as they come due. Liquidity risk is mitigated through the Company's holdings of cash or cash equivalents, investment grade marketable securities and its broad access to various funding sources. The Company maintains centralized pools of high quality liquid assets and investment grade marketable securities to support its operations and contingent liquidity demands. Funding is obtained through premiums, deposits, asset securitization, and bank credit and other funding programs.

The Company mitigates liquidity risk by maintaining operating and strategic liquidity levels above minimum internal requirements. Minimum operating liquidity is set at a level of one month's operating cash outflows. Strategic liquidity is established based on immediate and longer term liquidity requirements under stress conditions whereby policyholder liabilities and unencumbered liquid assets are risk-adjusted for their potential for withdrawals and convertibility to cash respectively. Pledged assets are not considered as available liquid assets to support obligations in either operating or strategic liquidity measures.

The following table outlines the maturity of the Company's significant financial liabilities.

### Maturity of financial liabilities<sup>(1),(2)</sup>

As at December 31, 2011	Less than 1 year	1 to 3 years	3 to 5 years	Over 5 years	Total
Long-term debt	\$ 12	\$ 1,348	\$ 2,053	\$ 2,090	\$ 5,503
Capital instruments	–	–	–	3,668	3,668
Derivative liabilities	115	342	387	6,783	7,627
Bank deposits	15,073	1,253	1,684	–	18,010

<sup>(1)</sup> The amounts shown above are net of the related unamortized deferred issue costs.

<sup>(2)</sup> Class A preferred shares, Series 1 are redeemable by the Company by payment of cash or issuance of MFC common shares and are convertible at the option of the holder into MFC common shares on or after December 15, 2015. These shares have not been included in the above table.

### (d) Credit risk

Credit risk is the risk of loss due to the inability or unwillingness of a borrower or counterparty to fulfill its payment obligation to the Company. Worsening or continued poor economic conditions could result in defaults or downgrades, and could lead to increased provisions or impairments related to the Company's general fund invested assets, reinsurance and other receivables, and an increase in provisions for future credit impairments to be included in actuarial liabilities. Counterparty credit exposure arises primarily from derivatives and reinsurance activities.

The Company's exposure to credit risk is managed through risk management policies and procedures which include a defined credit evaluation and adjudication process, delegated credit approval authorities and established exposure limits by borrower, corporate connection, quality rating, industry and geographic region. Reinsurance counterparty exposure is measured as both current exposure and potential future exposures reflecting the level of ceded liabilities. Reinsurance and insurance counterparties must also meet minimum risk rating criteria.

The Company also ensures where warranted that loans, including mortgages, private placement and bank loans, are secured by collateral, the nature of which depends on the credit risk of the counterparty.

An allowance for losses on loans is established when a loan becomes impaired. Provisions for loan losses are calculated to reduce the carrying value of the loans to estimated net realizable value. The establishment of such provisions takes into consideration normal historical credit loss levels and future expectations, with an allowance for adverse deviations. In addition, actuarial liabilities include general provisions for credit losses from future asset impairments. Impairments are identified through regular monitoring of all credit related exposures, considering such information as general market conditions, industry and borrower specific credit events and any other relevant trends or conditions. Allowance for losses on reinsurance contracts is established when a reinsurance counterparty becomes unable or unwilling to fulfill its contractual obligations to the Company. The allowance for loss is based on current recoverables and ceded actuarial liabilities.

Credit risk associated with derivative counterparties is discussed in note 10(h).

### Credit exposure

The following table outlines the gross carrying amount of financial instruments subject to credit exposure, without taking into account any collateral held or other credit enhancements.

As at	December 31,		January 1,
	2011	2010	2010
Bonds			
FVTPL	\$ 99,682	\$ 84,339	\$ 70,937
AFS	20,805	17,221	14,170
Loans			
Mortgages	35,023	32,837	31,158
Private placements	20,294	19,577	19,980
Policy loans	6,827	6,486	6,609
Bank loans	2,288	2,353	2,457
Derivative assets	15,472	4,000	2,707
Accrued investment income	1,802	1,642	1,583
Other financial assets	2,802	2,361	2,402
<b>Total</b>	<b>\$ 204,995</b>	<b>\$ 170,816</b>	<b>\$ 152,003</b>

### Credit quality

For mortgages and private placements, the Company evaluates credit quality through regular monitoring of credit related exposures, considering both qualitative and quantitative factors in assigning an internal risk rating. These ratings are updated at least annually.

A write-off is recorded when internal risk ratings indicate that a loss represents the most likely outcome. The assets are designated as non-accrual and an allowance is established based on an analysis of the security and repayment sources.

The following table summarizes the recorded investment by credit quality indicator.

As at December 31, 2011	AAA	AA	A	BBB	BB	B & lower	Total
Loans (excluding Manulife Bank of Canada)							
Private placements	\$ 608	\$ 2,436	\$ 5,902	\$ 8,977	\$ 1,178	\$ 1,193	\$ 20,294
Mortgages	2,262	1,802	3,835	12,546	714	419	21,578
<b>Total</b>	<b>\$ 2,870</b>	<b>\$ 4,238</b>	<b>\$ 9,737</b>	<b>\$ 21,523</b>	<b>\$ 1,892</b>	<b>\$ 1,612</b>	<b>\$ 41,872</b>

#### As at December 31, 2010

Loans (excluding Manulife Bank of Canada)							
Private placements	\$ 422	\$ 2,150	\$ 5,653	\$ 9,099	\$ 1,002	\$ 1,251	\$ 19,577
Mortgages	2,454	1,736	3,229	12,762	810	359	21,350
<b>Total</b>	<b>\$ 2,876</b>	<b>\$ 3,886</b>	<b>\$ 8,882</b>	<b>\$ 21,861</b>	<b>\$ 1,812</b>	<b>\$ 1,610</b>	<b>\$ 40,927</b>

#### As at January 1, 2010

Loans (excluding Manulife Bank of Canada)							
Private placements	\$ 420	\$ 2,273	\$ 5,333	\$ 9,313	\$ 931	\$ 1,710	\$ 19,980
Mortgages	2,522	1,892	3,321	12,608	788	368	21,499
<b>Total</b>	<b>\$ 2,942</b>	<b>\$ 4,165</b>	<b>\$ 8,654</b>	<b>\$ 21,921</b>	<b>\$ 1,719</b>	<b>\$ 2,078</b>	<b>\$ 41,479</b>



For loans and mortgages held by Manulife Bank of Canada, the Company assigns an internal risk rating ranging from "1 – little or no risk" to "8 – doubtful". The internal risk ratings are updated at least annually and reflect the credit quality of the lending asset including such factors as original credit score and product characteristics.

Full or partial write-offs of loans are recorded when management believes there is no realistic prospect of full recovery. Write-offs, net of recoveries, are deducted from the allowance for credit losses. All impairments are captured in the allowance for credit losses.

The following table summarizes the recorded investment by credit quality indicator.

As at December 31, 2011	1	2	3	4 & lower	Total
Manulife Bank of Canada					
Mortgages	\$ –	\$ 9,766	\$ 3,605	\$ 74	\$ 13,445
Bank loans	–	414	1,840	34	2,288
<b>Total</b>	<b>\$ –</b>	<b>\$ 10,180</b>	<b>\$ 5,445</b>	<b>\$ 108</b>	<b>\$ 15,733</b>
<b>As at December 31, 2010</b>					
Manulife Bank of Canada					
Mortgages	\$ –	\$ 9,424	\$ 2,011	\$ 52	\$ 11,487
Bank loans	–	443	1,878	32	2,353
<b>Total</b>	<b>\$ –</b>	<b>\$ 9,867</b>	<b>\$ 3,889</b>	<b>\$ 84</b>	<b>\$ 13,840</b>
<b>As at January 1, 2010</b>					
Manulife Bank of Canada					
Mortgages	\$ –	\$ 7,360	\$ 2,269	\$ 30	\$ 9,659
Bank loans	–	502	1,921	34	2,457
<b>Total</b>	<b>\$ –</b>	<b>\$ 7,862</b>	<b>\$ 4,190</b>	<b>\$ 64</b>	<b>\$ 12,116</b>

### Past due or credit impaired financial assets

The Company provides for credit risk by establishing allowances against the carrying value of impaired loans and recognizing impairment losses on AFS bonds. Impairment losses on AFS bonds are recognized in income on an individual basis when there is objective evidence of impairment. Impairment is considered to have occurred when it is deemed probable that the Company will not be able to collect all amounts due according to the contractual terms of the bond. In addition, the Company reports as an impairment certain declines in the fair value of bonds designated as FVTPL which it deems represent an impairment.

The following table summarizes the carrying value, or impaired value, in the case of impaired bonds, of the Company's financial assets that are considered past due or impaired.

As at December 31, 2011	Past due but not impaired			Total impaired
	Less than 90 days	90 days and greater	Total	
Bonds				
FVTPL	\$ –	\$ –	\$ –	\$ 166
AFS	1	–	1	43
Loans				
Private placements	117	–	117	182
Mortgages and bank loans	139	67	206	91
Other financial assets	21	56	77	4
<b>Total</b>	<b>\$ 278</b>	<b>\$ 123</b>	<b>\$ 401</b>	<b>\$ 486</b>
<b>As at December 31, 2010</b>				
Bonds				
FVTPL	\$ 1	\$ 3	\$ 4	\$ 152
AFS	–	–	–	34
Loans				
Private placements	304	–	304	265
Mortgages and bank loans	53	64	117	83
Other financial assets	16	24	40	2
<b>Total</b>	<b>\$ 374</b>	<b>\$ 91</b>	<b>\$ 465</b>	<b>\$ 536</b>
<b>As at January 1, 2010</b>				
Bonds				
FVTPL	\$ 50	\$ –	\$ 50	\$ 139
AFS	78	3	81	7
Loans				
Private placements	152	1	153	361
Mortgages and bank loans	56	49	105	118
Other financial assets	4	32	36	–
<b>Total</b>	<b>\$ 340</b>	<b>\$ 85</b>	<b>\$ 425</b>	<b>\$ 625</b>

The following table summarizes the Company's loans that are considered impaired.

### Impaired loans

	Recorded investment <sup>(1)</sup>	Unpaid principal balance	Related allowance	Average recorded investment <sup>(1)</sup>	Interest income recognized
<b>As at and for the year ended December 31, 2011</b>					
Private placements	\$ 223	\$ 336	\$ 41	\$ 251	\$ –
Mortgages and bank loans	144	143	53	163	–
<b>Total</b>	<b>\$ 367</b>	<b>\$ 479</b>	<b>\$ 94</b>	<b>\$ 414</b>	<b>\$ –</b>
<b>As at and for the year ended December 31, 2010</b>					
Private placements	\$ 349	\$ 421	\$ 84	\$ 445	\$ –
Mortgages and bank loans	117	124	34	186	–
<b>Total</b>	<b>\$ 466</b>	<b>\$ 545</b>	<b>\$ 118</b>	<b>\$ 631</b>	<b>\$ –</b>

<sup>(1)</sup> Recorded investment is the carrying amount of the investment after any direct write-offs, but before deducting any related allowance for impairment.

### Allowance for loan losses

For the years ended December 31,	2011			2010		
	Mortgages and bank loans	Private placements	Total	Mortgages and bank loans	Private placements	Total
<b>Balance, January 1</b>	\$ 34	\$ 84	\$ 118	\$ 55	\$ 128	\$ 183
Provisions	45	18	63	45	70	115
Recoveries	(21)	(46)	(67)	(11)	(33)	(44)
Write-offs <sup>(1)</sup>	(5)	(15)	(20)	(55)	(81)	(136)
<b>Balance, December 31</b>	<b>\$ 53</b>	<b>\$ 41</b>	<b>\$ 94</b>	<b>\$ 34</b>	<b>\$ 84</b>	<b>\$ 118</b>

<sup>(1)</sup> Includes disposals and impact of changes in foreign exchange rates.

### Troubled debt restructurings

The Company may from time to time grant concessions or agree to modified terms with a borrower experiencing financial difficulty, which constitutes troubled debt restructurings. The revised terms of these troubled debt restructurings may include an extension of the maturity date, a reduced interest rate, a deferral of interest due, or covenant modifications and waivers. These loans are considered for impairment in accordance with the Company's normal and customary credit review process, and any changes in terms from the restructurings are considered in determining whether any adjustments to allowances for credit losses are needed. Recording of impairment may not always be required, particularly if the loan has been impaired in a prior period. If the loan has been previously impaired and the Company expects the borrower to perform in accordance with the restructured terms, the resultant financial impact to the Company is generally not material.

For the year ended December 31, 2011, the Company had four mortgages and three unsecured private placements modified in restructurings, with total pre-modification and post-modification recorded investment amounts of \$82 and \$79, respectively.

### (e) Concentration risk

The geographic concentration of the Company's insurance and investment contract liabilities, including embedded derivatives, is shown below. The disclosure is based on the countries in which the business is written.

	Gross liabilities	Reinsurance assets	Net liabilities
<b>As at December 31, 2011</b>			
United States and Canada	\$ 163,819	\$ (10,545)	\$ 153,274
Asia and other	29,327	(183)	29,144
<b>Total insurance and investment contract liabilities, including embedded derivatives</b>	<b>\$ 193,146</b>	<b>\$ (10,728)</b>	<b>\$ 182,418</b>
<b>As at December 31, 2010</b>			
United States and Canada	\$ 137,859	\$ (7,517)	\$ 130,342
Asia and other	23,624	(315)	23,309
<b>Total insurance and investment contract liabilities, including embedded derivatives</b>	<b>\$ 161,483</b>	<b>\$ (7,832)</b>	<b>\$ 153,651</b>
<b>As at January 1, 2010</b>			
United States and Canada	\$ 132,747	\$ (7,809)	\$ 124,938
Asia and other	19,119	(235)	18,884
<b>Total insurance and investment contract liabilities, including embedded derivatives</b>	<b>\$ 151,866</b>	<b>\$ (8,044)</b>	<b>\$ 143,822</b>

## (f) Securities lending, repurchase and reverse repurchase transactions

The Company engages in securities lending to generate fee income. Collateral, which exceeds the market value of the loaned securities, is retained by the Company until the underlying security has been returned to the Company. The market value of the loaned securities is monitored on a daily basis with additional collateral obtained or refunded as the market value of the underlying loaned securities fluctuates. As at December 31, 2011, the Company had loaned securities (which are included in invested assets) with a market value of \$1,274 (December 31, 2010 – \$1,650 and January 1, 2010 – \$1,221). The Company holds collateral with a current market value that exceeds the value of securities lent in all cases.

The Company engages in repurchase and reverse repurchase transactions to generate fee income and to take possession of securities to cover short positions in similar instruments. As at December 31, 2011, the Company had engaged in reverse repurchase transactions of \$64 (December 31, 2010 – \$578 and January 1, 2010 – \$2,590) which are recorded as a short-term receivable. There were outstanding repurchase agreements of \$624 as at December 31, 2011 (December 31, 2010 – \$461 and January 1, 2010 – nil).

## (g) Credit default swaps

The Company replicates exposure to specific issuers by selling credit protection via credit default swaps (“CDSs”) in order to complement its cash bond investing. The Company will not employ CDS to leverage in its CDS program and, therefore, will not write CDS protection in excess of its government bond holdings. A CDS is a derivative instrument representing an agreement between two parties to exchange the credit risk of a single specified entity or an index based on the credit risk of a group of entities (all commonly referred to as the “reference entity” or a portfolio of “reference entities”), in return for a periodic premium. CDS contracts typically have a five year term.

The following table provides details of the credit default swap protection sold by type of contract and external agency rating for the underlying reference security.

As at December 31, 2011	Notional amount <sup>(2)</sup>	Fair value	Weighted average maturity (in years) <sup>(3)</sup>
Single name CDSs <sup>(1)</sup>			
Corporate debt			
AAA	\$ 25	\$ 1	5.0
AA	87	2	5.0
A	107	1	5.0
Total single name CDSs	\$ 219	\$ 4	5.0
<b>Total CDS protection sold</b>	<b>\$ 219</b>	<b>\$ 4</b>	<b>5.0</b>

<sup>(1)</sup> The rating agency designations are based on S&P where available followed by Moody's, DBRS, and Fitch. If no rating is available from a rating agency, then an internally developed rating is used.

<sup>(2)</sup> Notional amounts represent the maximum future payments the Company would have to pay its counterparties assuming a default of the underlying credit and zero recovery on the underlying issuer obligation.

<sup>(3)</sup> The weighted average maturity of the credit default swaps is weighted based on notional amounts.

The Company has also purchased credit protection with a total notional amount of \$32 and a fair value of \$(1). The average credit rating of the counterparties guaranteeing the underlying credit is A+ and the weighted average maturity is 5.5 years.

## (h) Derivatives

The Company's exposure to loss on derivatives is limited to the amount of any net gains that may have accrued with a particular counterparty. Gross derivative counterparty exposure is measured as the total fair value (including accrued interest) of all outstanding contracts in a gain position excluding any offsetting contracts in negative positions and the impact of collateral on hand. The Company seeks to limit the risk of credit losses from derivative counterparties by: establishing a minimum acceptable counterparty credit rating of A- from external rating agencies; entering into master netting arrangements which permit the offsetting of contracts in a loss position in the case of a counterparty default; and entering into Credit Support Annex agreements, whereby collateral must be provided when the exposure exceeds a certain threshold. All contracts are held with counterparties rated A- or higher. As at December 31, 2011, the percentage of the Company's derivative exposure which was with counterparties rated AA- or higher amounted to 26 per cent (December 31, 2010 – 33 per cent and January 1, 2010 – 28 per cent). The Company's exposure to credit risk was mitigated by \$8,922 fair value of collateral held as security as at December 31, 2011 (December 31, 2010 – \$1,226 and January 1, 2010 – \$1,150).

As at December 31, 2011, the largest single counterparty exposure, without taking into account the impact of master netting agreements or the benefit of collateral held, was \$3,029 (December 31, 2010 – \$954 and January 1, 2010 – \$561). The net exposure to this counterparty, after taking into account master netting agreements and the fair value of collateral held, was \$7 (December 31, 2010 – \$31 and January 1, 2010 – \$9). As at December 31, 2011, the total maximum credit exposure related to derivatives across all counterparties, without taking into account the impact of master netting agreements and the benefit of collateral held, was \$15,924 (December 31, 2010 – \$4,195 and January 1, 2010 – \$2,841). Net exposure across all counterparties, after taking into account master netting agreements and the benefit of fair value of collateral held, was \$293 (December 31, 2010 – \$239 and January 1, 2010 – \$154).

### (i) Risk concentrations

The Company establishes enterprise-wide investment portfolio level targets and limits with the objective of ensuring that portfolios are diversified across asset classes and individual investment risks. The Company monitors actual investment positions and risk exposures for concentration risk and reports such findings to the Executive Risk Committee and the Risk Committee of the Board of Directors.

As at	December 31,		January 1,
	2011	2010	2010
Bonds and private placements rated as investment grade BBB or higher <sup>(1)</sup>	95%	95%	95%
Government bonds as a per cent of total bonds	47%	42%	31%
Government private placements as a per cent of total private placements	11%	10%	8%
Highest exposure to a single non-government bond and private placement issuer	\$ 723	\$ 622	\$ 696
Largest single issuer as a per cent of the total stock portfolio	1%	2%	7%
Income producing commercial office properties (2011 – 82% of total real estate, December 31, 2010 – 81% and January 1, 2010 – 81%)	\$ 6,127	\$ 5,134	\$ 4,862
Largest concentration of mortgages and real estate <sup>(2)</sup> – Ontario, Canada (2011 – 26%, December 31, 2010 – 27% and January 1, 2010 – 26%)	\$ 11,230	\$ 10,477	\$ 9,749

<sup>(1)</sup> Investment grade bonds and private placements include 28% rated A, 19% rated AA and 30% rated AAA (December 31, 2010 – 29%, 17% and 28% and January 1, 2010 – 32%, 17% and 20%, respectively) based on external ratings where available.

<sup>(2)</sup> Mortgages and real estate are diversified geographically and by property type.

The following table shows the distribution of the bond and private placement portfolio by sector and industry.

### Bonds and private placements

As at	December 31,				January 1,	
	2011		2010		2010	
	Carrying value	% of total	Carrying value	% of total	Carrying value	% of total
Government and agency	\$ 58,904	42	\$ 44,926	37	\$ 27,789	26
Financial	21,161	15	20,544	17	21,457	20
Utilities	20,114	14	17,503	14	16,805	16
Energy	9,158	6	8,477	7	8,272	8
Industrial	7,116	5	6,405	5	5,870	6
Consumer (non-cyclical)	6,686	5	5,496	5	5,407	5
Securitized	5,734	4	6,787	6	7,692	7
Other	11,908	9	10,999	9	11,795	12
<b>Total</b>	<b>\$ 140,781</b>	<b>100</b>	<b>\$ 121,137</b>	<b>100</b>	<b>\$ 105,087</b>	<b>100</b>

### (j) Insurance risk

Insurance risk is the risk of loss due to actual experience differing from the experience assumed when a product was designed and priced with respect to claims, policyholder behaviour and expenses. A variety of assumptions are made related to the future level of claims, policyholder behaviour, expenses and sales levels when products are designed and priced as well as in the determination of actuarial liabilities. The development of assumptions for future claims is based on Company and industry experience and predictive models; assumptions for policyholder behaviours are based on Company experience and predictive models. Such assumptions require a significant amount of professional judgment and, therefore, actual experience may be materially different than the assumptions made by the Company. Claims may be impacted by the unusual onset of disease or illness, natural disasters, large-scale manmade disasters and acts of terrorism. Policyholder premium payment patterns, policy renewal, withdrawal and surrender activity is influenced by many factors including market and general economic conditions, and the availability and price of other products in the marketplace.

Manulife Financial manages insurance risk through global product design, pricing standards and guidelines and a global life underwriting manual. Each business unit establishes underwriting policies and procedures, including criteria for approval of risks and claims adjudication policies and procedures. Effective June 29, 2010, the Company increased its global retention limit for individual life insurance from US\$20 to US\$30 and for survivorship life insurance from US\$25 to US\$35. Lower limits are applied in some markets and jurisdictions. Manulife Financial further reduces exposure to claims concentrations by applying geographical aggregate retention limits for certain covers.

### (k) Reinsurance risk

In the normal course of business, the Company limits the amount of loss on any one policy by reinsuring certain levels of risk with other insurers. In addition, the Company accepts reinsurance from other reinsurers. Reinsurance ceded does not discharge the Company's liability as the primary insurer. Failure of reinsurers to honour their obligations could result in losses to the Company; consequently, allowances are established for amounts deemed uncollectible. In order to minimize losses from reinsurer insolvency, the Company monitors the concentration of credit risk both geographically and with any one reinsurer. In addition, the Company selects reinsurers with high credit ratings.

## **Note 11 Fair Value of Financial Instruments**

Financial instruments refer to both on- and off-balance sheet instruments and may be assets or liabilities. These assets or liabilities are contracts that ultimately give rise to a right for one party to receive an asset and an obligation for another party to deliver an asset. Fair values reflect management's best estimates of the amounts at which instruments could be exchanged in a current transaction between willing parties and are generally calculated based on the characteristics of the instrument and the current economic and competitive environment.

The fair values and the basis for determining the fair values of invested assets, derivatives, long-term debt and liabilities for preferred shares and capital instruments are disclosed in notes 4, 5, 12 and 13, respectively.

The fair value of bank deposits is estimated at \$18,100 as at December 31, 2011 (December 31, 2010 – \$16,380 and January 1, 2010 – \$14,752), compared to a carrying value of \$18,010 as at December 31, 2011 (December 31, 2010 – \$16,300 and January 1, 2010 – \$14,734). The fair value of these financial instruments is determined by discounting the contractual cash flows, using market interest rates currently offered for deposits with similar terms and conditions.

The carrying values of accrued investment income, outstanding premiums, miscellaneous assets, policy benefits in the course of settlement, provision for unreported claims, policyholder amounts on deposit and other liabilities approximate their fair values due to their short-term nature.

### **Financial instruments measured at fair value on the Consolidated Statements of Financial Position**

The Company categorizes its fair value measurements according to a three level hierarchy. The hierarchy prioritizes the inputs used by the Company's valuation techniques for determining the fair value of the financial instrument. A level is assigned to each fair value measurement based on the lowest level input significant to the fair value measurement in its entirety. The three levels of the fair value hierarchy are defined as follows:

Level 1 – Fair value measurements that reflect unadjusted, quoted prices in active markets for identical assets and liabilities that the Company has the ability to access at the measurement date. Valuations are based on quoted prices reflecting market transactions involving assets or liabilities identical to those being measured.

Level 2 – Fair value measurements using inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. These include quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets and liabilities in inactive markets, inputs that are observable that are not prices (such as interest rates, credit risks, etc.) and inputs that are derived from or corroborated by observable market data. Most bonds are classified within Level 2. Also, included in the Level 2 category are derivative instruments that are priced using models with observable market inputs, including interest rate swaps, equity swaps, and foreign currency forward contracts.

Level 3 – Fair value measurements using significant non-market observable inputs. These include valuations for assets and liabilities that are derived using data, some or all of which is not market observable, including assumptions about risk. Level 3 securities include less liquid securities such as structured asset-backed securities, commercial mortgage-backed securities ("CMBS") and other securities that have little or no price transparency. Embedded and complex derivative financial instruments are also included in Level 3.

In determining the fair value of its financial instruments, the Company uses observable market data, when available, and minimizes the use of unobservable inputs to the extent possible when determining fair value.

The following table presents the Company's assets and liabilities that are carried at fair value, categorized by level under the fair value hierarchy.

### Fair value of financial instruments

As at December 31, 2011	Total fair value	Level 1	Level 2	Level 3
<b>ASSETS</b>				
<b>Cash and short-term securities</b>				
FVTPL	\$ 568	\$ –	\$ 568	\$ –
AFS	8,473	–	8,473	–
Other	3,772	3,772	–	–
<b>Bonds</b>				
<b>FVTPL</b>				
Canadian government & agency	11,030	–	10,813	217
U.S. government & agency	20,108	–	19,895	213
Other government & agency	10,318	–	9,650	668
Corporate	53,091	–	51,090	2,001
Residential mortgage/asset-backed securities	313	–	17	296
Commercial mortgage/asset-backed securities	3,170	–	2,898	272
Other securitized assets	1,652	–	1,505	147
<b>AFS</b>				
Canadian government & agency	5,517	–	5,380	137
U.S. government & agency	7,904	–	7,902	2
Other government & agency	1,844	–	1,780	64
Corporate	5,017	–	4,738	279
Residential mortgage/asset-backed securities	94	–	13	81
Commercial mortgage/asset-backed securities	240	–	194	46
Other securitized assets	189	–	145	44
<b>Stocks</b>				
FVTPL	8,778	8,778	–	–
AFS	1,465	1,465	–	–
<b>Other invested assets<sup>(1)</sup></b>				
Private stocks FVTPL	4,062	1	–	4,061
Private stocks AFS	121	–	1	120
<b>Derivative assets</b>				
Interest rate contracts	14,934	–	14,848	86
Foreign exchange contracts	531	–	530	1
Equity contracts	3	–	–	3
Credit default swaps	4	–	–	4
<b>Segregated funds net assets<sup>(2)</sup></b>	<b>196,058</b>	<b>191,336</b>	<b>2,534</b>	<b>2,188</b>
<b>Total assets carried at fair value</b>	<b>\$ 359,256</b>	<b>\$ 205,352</b>	<b>\$ 142,974</b>	<b>\$ 10,930</b>
<b>LIABILITIES</b>				
<b>Derivative liabilities</b>				
Interest rate contracts	\$ 6,824	\$ –	\$ 6,748	\$ 76
Foreign exchange contracts	778	–	739	39
Equity contracts	24	–	–	24
Credit default swaps	1	–	–	1
<b>Investment contract liabilities</b>	<b>748</b>	<b>–</b>	<b>748</b>	<b>–</b>
<b>Total liabilities carried at fair value</b>	<b>\$ 8,375</b>	<b>\$ –</b>	<b>\$ 8,235</b>	<b>\$ 140</b>

<sup>(1)</sup> Only private stocks that are carried at fair value are included.

<sup>(2)</sup> Segregated funds net assets are recorded at fair value. Investment performance related to segregated funds net assets is fully offset by corresponding amounts credited to contract holders whose interest in the segregated funds net assets is recorded by the Company as segregated funds net liabilities.



## Fair value of financial instruments

As at December 31, 2010	Total fair value	Level 1	Level 2	Level 3
<b>ASSETS</b>				
<b>Cash and short-term securities</b>				
FVTPL	\$ 668	\$ –	\$ 668	\$ –
AFS	8,827	–	8,827	–
Other	2,354	2,354	–	–
<b>Bonds</b>				
<b>FVTPL</b>				
Canadian government & agency	10,044	–	9,884	160
U.S. government & agency	13,109	–	12,945	164
Other government & agency	7,591	–	6,994	597
Corporate	47,648	–	45,943	1,705
Residential mortgage/asset-backed securities	384	–	24	360
Commercial mortgage/asset-backed securities	4,127	–	3,697	430
Other securitized assets	1,436	–	1,276	160
<b>AFS</b>				
Canadian government & agency	5,177	–	5,143	34
U.S. government & agency	5,587	–	5,582	5
Other government & agency	1,417	–	1,357	60
Corporate	4,367	–	4,108	259
Residential mortgage/asset-backed securities	98	–	5	93
Commercial mortgage/asset-backed securities	438	–	366	72
Other securitized assets	137	–	85	52
<b>Stocks</b>				
FVTPL	8,892	8,891	1	–
AFS	1,583	1,583	–	–
<b>Other invested assets<sup>(1)</sup></b>				
Private stocks FVTPL	3,283	1	–	3,282
Private stocks AFS	80	–	–	80
<b>Derivative assets</b>				
Interest rate contracts	3,420	–	3,352	68
Foreign exchange contracts	565	–	565	–
Equity contracts	15	–	–	15
Credit default swaps	–	–	–	–
<b>Segregated funds net assets<sup>(2)</sup></b>	<b>199,120</b>	<b>194,805</b>	<b>2,194</b>	<b>2,121</b>
<b>Total assets carried at fair value</b>	<b>\$ 330,367</b>	<b>\$ 207,634</b>	<b>\$ 113,016</b>	<b>\$ 9,717</b>
<b>LIABILITIES</b>				
<b>Derivative liabilities</b>				
Interest rate contracts	\$ 2,727	\$ –	\$ 2,691	\$ 36
Foreign exchange contracts	554	–	511	43
Equity contracts	5	–	–	5
Credit default swaps	1	–	–	1
<b>Investment contract liabilities</b>	<b>817</b>	<b>–</b>	<b>817</b>	<b>–</b>
<b>Total liabilities carried at fair value</b>	<b>\$ 4,104</b>	<b>\$ –</b>	<b>\$ 4,019</b>	<b>\$ 85</b>

<sup>(1)</sup> Only private stocks that are carried at fair value are included.

<sup>(2)</sup> Segregated funds net assets are recorded at fair value. Investment performance related to segregated funds net assets is fully offset by corresponding amounts credited to contract holders whose interest in the segregated funds net assets is recorded by the Company as segregated funds net liabilities.

## Fair value of financial instruments

As at January 1, 2010	Total fair value	Level 1	Level 2	Level 3
<b>ASSETS</b>				
<b>Cash and short-term securities</b>				
FVTPL	\$ 651	\$ –	\$ 651	\$ –
AFS	16,124	–	16,124	–
Other	2,030	2,030	–	–
<b>Bonds</b>				
<b>FVTPL</b>				
Canadian government & agency	8,131	–	8,002	129
U.S. government & agency	5,365	–	5,044	321
Other government & agency	5,105	–	4,638	467
Corporate	45,780	–	44,164	1,616
Residential mortgage/asset-backed securities	421	–	32	389
Commercial mortgage/asset-backed securities	4,578	–	4,179	399
Other securitized assets	1,557	–	1,390	167
<b>AFS</b>				
Canadian government & agency	4,337	–	4,288	49
U.S. government & agency	2,230	–	2,228	2
Other government & agency	1,022	–	971	51
Corporate	5,690	–	5,447	243
Residential mortgage/asset-backed securities	105	–	6	99
Commercial mortgage/asset-backed securities	532	–	462	70
Other securitized assets	254	–	212	42
<b>Stocks</b>				
FVTPL	7,730	7,730	–	–
AFS	1,958	1,958	–	–
<b>Other invested assets<sup>(1)</sup></b>				
Private stocks FVTPL	2,544	–	–	2,544
Private stocks AFS	124	–	–	124
<b>Derivative assets</b>				
Interest rate contracts	2,101	–	2,029	72
Foreign exchange contracts	593	–	593	–
Equity contracts	13	–	2	11
Credit default swaps	–	–	–	–
<b>Segregated funds net assets<sup>(2)</sup></b>	<b>190,783</b>	<b>185,850</b>	<b>2,693</b>	<b>2,240</b>
<b>Total assets carried at fair value</b>	<b>\$ 309,758</b>	<b>\$ 197,568</b>	<b>\$ 103,155</b>	<b>\$ 9,035</b>
<b>LIABILITIES</b>				
<b>Derivative liabilities</b>				
Interest rate contracts	\$ 1,647	\$ –	\$ 1,623	\$ 24
Foreign exchange contracts	801	–	780	21
Equity contracts	–	–	–	–
Credit default swaps	1	–	–	1
Embedded derivatives – insurance contracts	2	–	–	2
<b>Investment contract liabilities</b>	<b>882</b>	<b>–</b>	<b>882</b>	<b>–</b>
<b>Total liabilities carried at fair value</b>	<b>\$ 3,333</b>	<b>\$ –</b>	<b>\$ 3,285</b>	<b>\$ 48</b>

<sup>(1)</sup> Only private stocks that are carried at fair value are included.

<sup>(2)</sup> Segregated funds net assets are recorded at fair value. Investment performance related to segregated funds net assets is fully offset by corresponding amounts credited to contract holders whose interest in the segregated funds net assets is recorded by the Company as segregated funds net liabilities.

### Assets and liabilities measured at fair value on the Consolidated Statements of Financial Position using significant unobservable inputs (Level 3)

The table below provides a fair value roll forward of the financial instruments for which significant unobservable inputs (Level 3) are used in the fair value measurement. The Company classifies the fair values of financial instruments within Level 3 if there are no observable markets for the instruments or, in the absence of active markets, the majority of the inputs used to determine fair value are based on the Company's own assumptions about market participant assumptions. The Company prioritizes the use of market-based inputs over entity-based assumptions in determining Level 3 fair values and, therefore, the gains and losses in the tables below include changes in fair value due partly to observable and unobservable factors.

### Roll forward of financial instruments measured at fair value using significant unobservable inputs (Level 3)

The following table presents a roll forward for all financial instruments measured at fair value using significant unobservable inputs (Level 3) for the year ended December 31, 2011.

	Balance as at January 1, 2011	Net realized / unrealized gains (losses) included in:			Transfers			Currency movement	Balance as at December 31, 2011	Change in unrealized gains (losses) on instruments still held
		Net income <sup>(1)</sup>	OCI <sup>(2)</sup>	Purchases	Sales	Into Level 3	Out of Level 3 <sup>(3)</sup>			
<b>Bonds</b>										
<b>FVTPL</b>										
Canadian government & agency	\$ 160	\$ 31	\$ –	\$ 35	\$ –	\$ –	\$ (10)	\$ 1	\$ 217	\$ 30
U.S. government & agency	164	26	–	111	(32)	–	(59)	3	213	23
Other government & agency	597	(43)	–	132	(28)	1	–	9	668	(42)
Corporate	1,705	108	–	561	(381)	57	(118)	69	2,001	113
Residential mortgage/ asset-backed securities	360	15	–	–	(91)	5	–	7	296	15
Commercial mortgage/ asset-backed securities	430	(26)	–	–	(142)	2	–	8	272	2
Other securitized assets	160	6	–	–	(32)	15	(5)	3	147	22
	\$ 3,576	\$ 117	\$ –	\$ 839	\$ (706)	\$ 80	\$ (192)	\$ 100	\$ 3,814	\$ 163
<b>AFS</b>										
Canadian government & agency	\$ 34	\$ 47	\$ 14	\$ 495	\$ (468)	\$ 14	\$ –	\$ 1	\$ 137	\$ –
U.S. government & agency	5	–	–	2	–	–	(5)	–	2	–
Other government & agency	60	(2)	(1)	18	(25)	13	–	1	64	–
Corporate	259	(1)	9	71	(89)	46	(26)	10	279	–
Residential mortgage/ asset-backed securities	93	–	2	–	(18)	2	–	2	81	–
Commercial mortgage/ asset-backed securities	72	(4)	(2)	–	(21)	–	–	1	46	–
Other securitized assets	52	(7)	14	–	(2)	1	(15)	1	44	–
	\$ 575	\$ 33	\$ 36	\$ 586	\$ (623)	\$ 76	\$ (46)	\$ 16	\$ 653	\$ –
<b>Other invested assets</b>										
Private stocks FVTPL	\$ 3,282	\$ 182	\$ –	\$ 879	\$ (346)	\$ –	\$ (3)	\$ 67	\$ 4,061	\$ 152
Private stocks AFS	80	1	(21)	57	(1)	–	–	4	120	–
	\$ 3,362	\$ 183	\$ (21)	\$ 936	\$ (347)	\$ –	\$ (3)	\$ 71	\$ 4,181	\$ 152
<b>Net derivatives</b>	\$ (2)	\$ (2)	\$ (21)	\$ 13	\$ –	\$ –	\$ (39)	\$ 5	\$ (46)	\$ 8
<b>Segregated funds net assets</b>	2,121	38	–	22	(41)	–	–	48	2,188	44
	\$ 9,632	\$ 369	\$ (6)	\$ 2,396	\$ (1,717)	\$ 156	\$ (280)	\$ 240	\$ 10,790	\$ 367

<sup>(1)</sup> These amounts are included in investment income on the Consolidated Statement of Income (Loss), except for the segregated funds amount which is included in the investment related section of the changes in net assets for segregated funds (note 23).

<sup>(2)</sup> These amounts are included in accumulated other comprehensive income (loss) on the Consolidated Statement of Financial Position.

<sup>(3)</sup> For financial assets that are transferred into and/or out of Level 3, the Company uses the fair value of the assets at the beginning of the year.

The following table presents a roll forward for all financial instruments measured at fair value using significant unobservable inputs (Level 3) for the year ended December 31, 2010.

	Balance as at January 1, 2010	Net realized / unrealized gains (losses) included in:				Transfers			Balance as at December 31, 2010	Change in unrealized gains (losses) on instruments still held
		Net income <sup>(1)</sup>	OCI <sup>(2)</sup>	Purchases	Sales	Into Level 3 <sup>(3)</sup>	Out of Level 3 <sup>(3)</sup>	Currency movement		
<b>Bonds</b>										
<b>FVTPL</b>										
Canadian government & agency	\$ 129	\$ 12	\$ –	\$ 22	\$ –	\$ –	\$ –	\$ (3)	\$ 160	\$ 12
U.S. government & agency	321	(5)	–	387	–	–	(534)	(5)	164	(5)
Other government & agency	467	33	–	151	(49)	–	–	(5)	597	34
Corporate	1,616	100	–	247	(112)	46	(244)	52	1,705	46
Residential mortgage/ asset-backed securities	389	89	–	–	(100)	–	–	(18)	360	122
Commercial mortgage/ asset-backed securities	399	107	–	–	(52)	–	(1)	(23)	430	118
Other securitized assets	167	44	–	–	(41)	–	(1)	(9)	160	74
	\$ 3,488	\$ 380	\$ –	\$ 807	\$ (354)	\$ 46	\$ (780)	\$ (11)	\$ 3,576	\$ 401
<b>AFS</b>										
Canadian government & agency	\$ 49	\$ 16	\$ (8)	\$ –	\$ (21)	\$ –	\$ –	\$ (2)	\$ 34	\$ –
U.S. government & agency	2	–	–	5	–	–	(2)	–	5	–
Other government & agency	51	–	2	15	(10)	–	–	2	60	–
Corporate	243	(1)	15	14	(52)	50	(15)	5	259	–
Residential mortgage/ asset-backed securities	99	(12)	34	–	(23)	–	–	(5)	93	–
Commercial mortgage/ asset-backed securities	70	2	7	–	(3)	–	–	(4)	72	–
Other securitized assets	42	(1)	16	–	(2)	–	–	(3)	52	–
	\$ 556	\$ 4	\$ 66	\$ 34	\$ (111)	\$ 50	\$ (17)	\$ (7)	\$ 575	\$ –
<b>Other invested assets</b>										
Private stocks FVTPL	\$ 2,544	\$ 190	\$ –	\$ 1,121	\$ (443)	\$ –	\$ –	\$ (130)	\$ 3,282	\$ 207
Private stocks AFS	124	(28)	6	8	(27)	–	–	(3)	80	–
	\$ 2,668	\$ 162	\$ 6	\$ 1,129	\$ (470)	\$ –	\$ –	\$ (133)	\$ 3,362	\$ 207
<b>Net derivatives</b>										
Segregated funds net assets	\$ 35	\$ (14)	\$ (9)	\$ –	\$ –	\$ –	\$ (9)	\$ (5)	\$ (2)	\$ (11)
	2,240	(13)	(2)	18	(75)	63	–	(110)	2,121	7
	\$ 8,987	\$ 519	\$ 61	\$ 1,988	\$ (1,010)	\$ 159	\$ (806)	\$ (266)	\$ 9,632	\$ 604

<sup>(1)</sup> These amounts are included in investment income on the Consolidated Statement of Income (Loss), except for the segregated funds amount which is included in the investment related section of the changes in net assets for segregated funds (note 23).

<sup>(2)</sup> These amounts are included in accumulated other comprehensive income (loss) on the Consolidated Statement of Financial Position.

<sup>(3)</sup> For financial assets that are transferred into and/or out of Level 3, the Company uses the fair value of the assets at the beginning of the year.

The Company may hedge positions with offsetting positions that are classified in a different level. For example, the gains and losses for assets and liabilities in the Level 3 category presented in the tables above may not reflect the effect of offsetting gains and losses on hedging instruments that have been classified by the Company in the Level 1 and Level 2 categories.

The transfers into Level 3 primarily result from securities that were impaired during the year or securities where a lack of observable market data (versus the previous year) resulted in reclassifying assets into Level 3. The transfers from Level 3 primarily result from observable market data now being available from the entire term structure of the bond, thus eliminating the need to extrapolate market data beyond observable points.

## Note 12 Long-Term Debt

As at	December 31,		January 1,
	2011	2010	2010
3.40% Senior notes (US\$600)	\$ 607	\$ 593	\$ –
4.90% Senior notes (US\$500)	505	493	–
4.079% Medium term notes	897	896	–
4.896% Medium term notes	998	997	996
7.768% Medium term notes	597	597	597
5.161% Medium term notes	549	549	548
5.505% Medium term notes	399	399	399
4.67% Medium term notes	350	350	349
4.448% fixed/floating Senior debentures	575	548	548
Other notes payable	26	419	419
<b>Total long-term debt<sup>(1)</sup></b>	<b>\$ 5,503</b>	<b>\$ 5,841</b>	<b>\$ 3,856</b>
<b>Fair value</b>	<b>\$ 5,728</b>	<b>\$ 6,081</b>	<b>\$ 4,130</b>

<sup>(1)</sup> Carrying values have been adjusted for those instruments designated as hedged items in fair value hedge relationships.

The fair value of long-term debt is determined using quoted market prices where available. For debt instruments that do not have quoted prices, the fair value is determined with reference to quoted prices of a debt instrument with similar characteristics or utilizing a model to discount cash flows based on current market interest rates.

The carrying value of the long-term debt reflects an unamortized fair value increment of nil (December 31, 2010 – US\$4 and January 1, 2010 – US\$7), which arose as a result of the acquisition of John Hancock. The amortization of the fair value adjustment is recorded in interest expense in these consolidated financial statements.

The cash amount of interest paid during the year ended December 31, 2011 was \$289 (2010 – \$215). Issue costs are amortized over the term of the debt.

### (a) 3.40% Senior notes

On September 17, 2010, MFC issued US\$600 in 3.40% senior notes which mature September 17, 2015 and are redeemable in whole or in part by MFC at any time at the greater of par or the fair value of the debt calculated as the sum of the present values of the remaining scheduled payments of principal and interest to be redeemed discounted from their respective scheduled payment dates at the U.S. Government treasury bond yield plus 30 basis points, in each case together with accrued and unpaid interest.

These US\$ senior notes have been designated as a hedge of the Company's net investment in its U.S. operations to reduce the earnings volatility that would otherwise arise from the translation of the U.S. denominated debt into Canadian dollars.

### (b) 4.90% Senior notes

On September 17, 2010, MFC issued US\$500 in 4.90% senior notes which mature September 17, 2020 and are redeemable in whole or in part by MFC at any time at the greater of par or the fair value of the debt calculated as the sum of the present values of the remaining scheduled payments of principal and interest to be redeemed discounted from their respective scheduled payment dates at the U.S. Government treasury bond yield plus 35 basis points, in each case together with accrued and unpaid interest.

These US\$ senior notes have been designated as a hedge of the Company's net investment in its U.S. operations to reduce the earnings volatility that would otherwise arise from the translation of the U.S. denominated debt into Canadian dollars.

### (c) 4.079% Medium term notes

On August 20, 2010, MFC issued \$900 in 4.079% medium term notes which mature August 20, 2015 and are redeemable in whole or in part by MFC at any time at the greater of par or the fair value of the debt based on the yield on Government of Canada bonds plus 46 basis points, in each case together with accrued and unpaid interest.

### (d) 4.896% Medium term notes

On June 2, 2009, MFC issued \$1,000 in 4.896% medium term notes which mature June 2, 2014 and are redeemable in whole or in part by MFC at any time at the greater of par or the fair value of the debt based on the yield on Government of Canada bonds plus 57.5 basis points, in each case together with accrued and unpaid interest.

### (e) 7.768% Medium term notes

On April 8, 2009, MFC issued \$600 in 7.768% medium term notes which mature April 8, 2019 and are redeemable in whole or in part by MFC at any time at the greater of par or the fair value of the debt based on the yield on Government of Canada bonds plus 125 basis points, in each case together with accrued and unpaid interest.

### (f) 5.161% Medium term notes

On June 26, 2008, MFC issued \$550 in 5.161% medium term notes which mature June 26, 2015 and are redeemable in whole or in part by MFC at any time at the greater of par or the fair value of the debt based on the yield on Government of Canada bonds plus 36 basis points, in each case together with accrued and unpaid interest.

**(g) 5.505% Medium term notes**

Also on June 26, 2008, MFC issued \$400 in 5.505% medium term notes which mature on June 26, 2018 and are redeemable in whole or in part by MFC at any time at the greater of par or the fair value of the debt based on the yield on Government of Canada bonds plus 39 basis points, in each case together with accrued and unpaid interest.

**(h) 4.67% Medium term notes**

On March 28, 2006, MFC issued \$350 in 4.67% medium term notes which mature March 28, 2013 and are redeemable in whole or in part by MFC at any time at the greater of par or the fair value of the debt based on the yield on Government of Canada bonds plus 11 basis points, in each case together with accrued and unpaid interest.

**(i) 4.448 % fixed/floating senior debentures**

On December 14, 2006, Manulife Finance (Delaware) L.P. ("MFLP"), a wholly owned partnership, issued \$550 of senior debentures which mature on December 15, 2026 and bear interest at the rate of 4.448% per annum payable semi-annually until December 15, 2016 and thereafter at the 90-day Bankers' Acceptance rate plus 1.50%, payable quarterly.

The senior debentures are redeemable in whole or in part, prior to December 15, 2016 at the greater of par or the fair value of the debt based on the yield on Government of Canada bonds plus 14 basis points and on or after December 15, 2016 at par, in each case together with accrued and unpaid interest. Upon certain tax changes, the senior debentures are redeemable as a whole, at the fair market value, together with accrued and unpaid interest.

**(j) Other notes payable**

Other notes payable are comprised of fixed rate notes bearing interest at rates ranging from 5.8% to 12.1% and maturing in varying amounts to 2017. A 6.822% senior note issued April 26, 2001, with face value of \$220, matured May 31, 2011. A 6.646% senior note issued October 16, 2001, with face value of \$175, matured November 30, 2011.

**(k) Aggregate maturities of long-term debt**

As at	December 31,		January 1,
	2011	2010	2010
Less than one year	\$ 12	\$ 407	\$ 6
One to two years	350	–	403
Two to three years	998	350	–
Three to four years	2,053	997	349
Four to five years	–	2,050	996
Greater than five years	2,090	2,037	2,102
<b>Total</b>	<b>\$ 5,503</b>	<b>\$ 5,841</b>	<b>\$ 3,856</b>

**Note 13 Liabilities for Preferred Shares and Capital Instruments**

As at	December 31,		January 1,
	2011	2010	2010
Preferred shares – Class A Shares, Series 1	\$ 344	\$ 344	\$ 344
Manulife Financial Capital Securities – Series A	60	60	60
Manulife Financial Capital Securities – Series B	940	940	940
Manulife Financial Capital Trust II Notes – Series 1	993	991	989
Surplus notes – 7.375% U.S. dollar	481	471	497
Subordinated debentures – 4.21% fixed/floating Canadian dollar	547	–	–
Subordinated debentures – 6.24% fixed/floating Canadian dollar	–	550	550
Subordinated debentures – 5.059% fixed/floating Canadian dollar	647	648	642
<b>Total</b>	<b>\$ 4,012</b>	<b>\$ 4,004</b>	<b>\$ 4,022</b>
<b>Fair value</b>	<b>\$ 4,077</b>	<b>\$ 4,105</b>	<b>\$ 4,166</b>

The fair value of liability instruments is determined using quoted market prices.

The carrying value of the surplus notes reflects an unamortized fair value increment of US\$39 (December 31, 2010 – US\$41 and January 1, 2010 – US\$43), which arose as a result of the acquisition of John Hancock Financial Services, Inc. The amortization of the fair value adjustment is recorded in interest expense.

The cash amount of interest, including dividends on the Class A, Series 1 preferred shares, paid during the year ended December 31, 2011 was \$238 (2010 – \$257).

Issue costs are amortized over the term of the underlying instruments.



## **Maturity profile of capital instruments**

There are no scheduled maturities for any of the outstanding capital instruments within the next five years.

### **Preferred shares**

On June 19, 2003, MFC issued 14 million Class A Shares, Series 1 ("Series 1 Preferred Shares") at a price of \$25.00 per share, for an aggregate amount of \$350. The Series 1 Preferred Shares are non-voting and are entitled to non-cumulative preferential cash dividends payable quarterly, if and when declared, at a per annum rate of 4.10%. With regulatory approval, the Series 1 Preferred Shares may be redeemed by MFC, in whole or in part, at declining premiums that range from \$1.25 to nil per Series 1 Preferred Share, by either payment of cash or the issuance of MFC common shares. On or after December 19, 2015, the Series 1 Preferred Shares will be convertible at the option of the holder into MFC common shares, the number of which is determined by a prescribed formula, and is subject to the right of MFC prior to the conversion date to redeem for cash or find substitute purchasers for such preferred shares. The prescribed formula is the face amount of the Series 1 Preferred Shares divided by the greater of \$2.00 and 95% of the then market price of MFC common shares.

### **Manulife Financial Capital Securities**

On December 10, 2001, Manulife Financial Capital Trust (the "Trust"), a wholly owned open-end trust, issued 60,000 Manulife Financial Capital Securities ("MaCS") – Series A and 940,000 MaCS – Series B.

Each MaCS – Series A entitles the holder to receive fixed cash distributions payable semi-annually in the amount of \$35.00 representing an annual yield of 7%. Each MaCS – Series B entitles the holder to receive fixed cash distributions payable semi-annually in the amount of \$33.50 representing an annual yield of 6.70%.

On any distribution date prior to June 30, 2012, the Trust may redeem, with regulatory approval, any outstanding MaCS series, in whole or in part, at the greater of par or the present value of the debt based on the yield on uncallable Government of Canada bonds plus 0.40% in the case of MaCS – Series A and 0.32% in the case of MaCS – Series B. On or after June 30, 2012, the Trust may redeem any outstanding MaCS series at par, together with any unpaid interest.

Each MaCS is exchangeable at the option of the holder into 40 newly issued MLI Class A Shares Series 2, in the case of MaCS – Series A, or 40 newly issued MLI Class A Shares Series 4, in the case of MaCS – Series B, under certain circumstances.

Under certain circumstances, each MaCS will be automatically exchanged, without the consent of the holders, for 40 MLI Class A Shares Series 3, in the case of MaCS – Series A, and 40 MLI Class A Shares Series 5, in the case of MaCS – Series B.

The MaCS may be redeemed with regulatory approval in whole, upon the occurrence of certain tax or regulatory capital changes, at the option of the Trust.

On or after June 30, 2051, the MLI Class A Shares Series 2 and Series 3 will be convertible at the option of the holder into MFC common shares. On or after December 31, 2012, the MLI Class A Shares Series 4 and Series 5 will be convertible at the option of the holder into MFC common shares. In each case, the number of MFC common shares is determined by the face amount of the MLI Class A Shares divided by the greater of \$1.00 and 95% of the then market price of MFC common shares.

The MaCS – Series A and MaCS – Series B constitute Tier 1 regulatory capital.

The Trust is consolidated in the Company's consolidated financial statements (see note 18).

### **Manulife Financial Capital Trust II Notes – Series 1**

On July 10, 2009, Manulife Financial Capital Trust II ("Trust II") issued \$1,000 in subordinated notes. The notes mature on December 31, 2108 and interest is payable semi-annually on June 30 and December 31. From July 10, 2009 to December 30, 2019, the rate of interest is 7.405% per annum. On December 31, 2019 and on every fifth anniversary after December 31, 2019 (the "Interest Reset Date"), the rate of interest will be reset to the yield on five year Government of Canada bonds plus 5%.

On or after December 31, 2014, Trust II may redeem the notes, with regulatory approval, in whole or in part, on any day that is not an Interest Reset Date, at the greater of the par or the present value of the debt based on the yield on uncallable Government of Canada bonds plus 1% if the redemption is prior to December 31, 2019, or 2% if the redemption date is after December 31, 2019, in each case together with accrued and unpaid interest. Trust II may redeem the notes, on or after December 31, 2019, with regulatory approval, on an Interest Reset Date at par, together with accrued and unpaid interest.

Trust II is consolidated in the Company's consolidated financial statements (see note 18).

Under certain circumstances, each note will be automatically exchanged, without the consent of the holders, for 40 Class 1 Series 1 MLI preferred shares. The notes constitute Tier I regulatory capital.

### **U.S. dollar surplus notes**

On February 25, 1994, John Hancock Mutual Life Insurance Company, now John Hancock Life Insurance Company (U.S.A.), issued US\$450 of 7.375% surplus notes maturing on February 15, 2024. Any payment of interest or principal on the surplus notes requires prior approval from the Commissioner of the Office of Financial and Insurance Regulation of the State of Michigan.

**Subordinated debentures 4.21% fixed/floating Canadian dollar**

On November 18, 2011, MLI issued \$550 in subordinated fixed/floating debentures, which mature November 18, 2021. The debentures bear interest at a fixed rate of 4.21% per annum, payable semi-annually for five years and thereafter at the 90-day Bankers' Acceptance rate plus 2.65% payable quarterly. With regulatory approval, MLI may redeem the debentures, in whole or in part, on or after November 18, 2016, at par, together with accrued and unpaid interest. The subordinated debentures form part of the Company's Tier 2B regulatory capital.

**Subordinated debentures 6.24% fixed/floating Canadian dollar**

On February 16, 2011, debentures bearing interest at a fixed rate of 6.24% for 10 years and thereafter at the 90-day Bankers' Acceptance rate plus 1% were redeemed at par plus accrued interest to the date of redemption.

**Subordinated debentures 5.059% fixed/floating Canadian dollar**

On December 14, 2006, MFLP issued \$650 of subordinated debentures which mature December 15, 2041. The subordinated debentures bear interest at the rate of 5.059% per annum, payable semi-annually until December 15, 2036 and thereafter at the 90-day Bankers' Acceptance rate plus 1%, payable quarterly.

With regulatory approval, MFLP may redeem the subordinated debentures, in whole or in part, at any time prior to December 15, 2036 at the greater of par or the present value of the debt based on the yield on Government of Canada bonds plus 26.5 basis points or on any interest payment date, on or after December 15, 2036 at par, in each case together with accrued and unpaid interest.

Upon certain tax changes, the subordinated debentures are redeemable as a whole, with regulatory approval, at the fair market value, together with accrued and unpaid interest.

The subordinated debentures form part of the Company's Tier 2B regulatory capital.

**Note 14 Share Capital**

The authorized capital of MFC consists of:

- (a) an unlimited number of common shares without nominal or par value; and
- (b) an unlimited number of Class A, Class B and Class 1 preferred shares without nominal or par value, issuable in series.

**Preferred shares**

On December 6, 2011 MFC issued 8 million Class 1 Shares Series 5 ("Class 1 Series 5 Preferred Shares") at a price of \$25 per share, for an aggregate amount of \$200. The Class 1 Series 5 Preferred Shares are entitled to non-cumulative preferential cash dividends, payable quarterly, if and when declared, at a per annum rate of 4.40% until December 19, 2016 after which the dividend rate will be reset every five years at a rate equal to the Government of Canada bond yield plus 2.90%. On December 19, 2016 and on December 19 every five years thereafter, the Class 1 Series 5 Preferred Shares will be convertible at the option of the holder into Class 1 Shares Series 6 ("Class 1 Series 6 Preferred Shares"). The Class 1 Series 6 Preferred Shares are entitled to non-cumulative preferential cash dividends, payable quarterly, if and when declared, at a rate equal to the three month Government of Canada Treasury Bill yield plus 2.90%. Subject to regulatory approval, MFC may redeem Class 1 Series 5 Preferred Shares, in whole or in part, at par, on December 19, 2016 and on December 19 every five years thereafter.

On March 11, 2011, MFC issued 8 million Class 1 Shares Series 3 ("Class 1 Series 3 Preferred Shares") at a price of \$25 per share, for an aggregate amount of \$200. The Class 1 Series 3 Preferred Shares are entitled to non-cumulative preferential cash dividends, payable quarterly, if and when declared, at a per annum rate of 4.20% until June 19, 2016, after which the dividend rate will be reset every five years at a rate equal to the five year Government of Canada bond yield plus 1.41%. On June 19, 2016 and on June 19 every five years thereafter, the Class 1 Series 3 Preferred Shares will be convertible at the option of the holder into Class 1 Shares Series 4 ("Class 1 Series 4 Preferred Shares"). The Class 1 Series 4 Preferred Shares are entitled to non-cumulative preferential cash dividends, payable quarterly, if and when declared, at a rate equal to the three month Government of Canada Treasury Bill yield plus 1.41%. Subject to regulatory approval, MFC may redeem Class 1 Series 3 Preferred Shares, in whole or in part, at par, on June 19, 2016 and on June 19 every five years thereafter.

On June 3, 2009, MFC issued 14 million Class 1 Shares Series 1 ("Class 1 Series 1 Preferred Shares") at a price of \$25 per share, for an aggregate amount of \$350. The Class 1 Series 1 Preferred Shares are entitled to non-cumulative preferential cash dividends, payable quarterly, if and when declared, at a per annum rate of 5.6% until September 19, 2014, after which the dividend rate will be reset every five years at a rate equal to the five year Government of Canada bond yield plus 3.23%. On September 19, 2014 and on September 19 every five years thereafter, the Class 1 Series 1 Preferred Shares will be convertible at the option of the holder into Class 1 Shares Series 2 ("Class 1 Series 2 Preferred Shares"). The Class 1 Series 2 Preferred Shares are entitled to non-cumulative preferential cash dividends, payable quarterly, if and when declared, at a rate equal to the three month Government of Canada Treasury Bill yield plus 3.23%. Subject to regulatory approval, MFC may redeem the Class 1 Series 1 Preferred Shares, in whole or in part, at par on September 19, 2014 and on September 19 every five years thereafter.

On March 4, 2009, MFC issued 18 million Class A Shares, Series 4 ("Series 4 Preferred Shares") at a price of \$25 per share, for an aggregate amount of \$450. The Series 4 Preferred Shares are entitled to non-cumulative preferential cash dividends, payable quarterly, if and when declared, at a per annum rate of 6.6% until June 19, 2014, after which the dividend rate will be reset every five

years at a rate equal to the five year Government of Canada bond yield plus 4.56%. On June 19, 2014 and on June 19 every five years thereafter, the Series 4 Preferred Shares will be convertible at the option of the holder into Class A Shares, Series 5 ("Series 5 Preferred Shares"). The Series 5 Preferred Shares are entitled to non-cumulative preferential cash dividends, payable quarterly, if and when declared, at a rate equal to the three month Government of Canada Treasury Bill yield plus 4.56%. Subject to regulatory approval, MFC may redeem the Series 4 Preferred Shares, in whole or in part, at par on June 19, 2014 and on June 19 every five years thereafter.

On January 3, 2006, MFC issued 12 million Class A Shares, Series 3 ("Series 3 Preferred Shares") at a price of \$25.00 per share, for an aggregate amount of \$300. The Series 3 Preferred Shares are non-voting and entitled to non-cumulative preferential cash dividends payable quarterly, if and when declared, at a per annum rate of 4.50%. With regulatory approval, the Series 3 Preferred Shares may be redeemed by MFC on or after March 19, 2011, in whole or in part, for cash, at declining premiums that range from \$1.00 to nil per share.

On February 18, 2005, MFC issued 14 million Class A Shares, Series 2 ("Series 2 Preferred Shares") at a price of \$25.00 per share, for an aggregate amount of \$350. The Series 2 Preferred Shares are non-voting and are entitled to non-cumulative preferential cash dividends payable quarterly, if and when declared, at a per annum rate of 4.65%. With regulatory approval, the Series 2 Preferred Shares may be redeemed by MFC on or after March 19, 2010, in whole or in part, for cash, at declining premiums that range from \$1.00 to nil per share.

### Common shares

On November 30, 2009, MFC issued 132 million common shares at \$19.00 per share. Net cash proceeds, after deducting commissions and fees of the issue, were \$2,413. Net proceeds including tax benefits were \$2,435.

On December 11, 2008, MFC issued 117 million common shares at \$19.40 per share. Net cash proceeds, after deducting commissions and fees of the issue, were \$2,190. Net proceeds including tax benefits were \$2,208.

On May 7, 2009, MFC announced amendments to its dividend reinvestment and share purchase plans. These plans provide registered common shareholders with a means to automatically reinvest the cash dividends paid on their common shares in the purchase of additional common shares. These plans are open to registered shareholders residing in Canada or the United States. MFC has the flexibility to fund the plans through open market purchases and treasury issuances.

For the years ended December 31,	2011		2010	
	Number of shares (in millions)	Amount	Number of shares (in millions)	Amount
<b>Common shares</b>				
Balance, January 1	1,778	\$ 19,254	1,758	\$ 18,937
Issued on exercise of stock options and deferred share units	–	2	1	3
Issued under dividend reinvestment and share purchase plans	23	304	19	314
<b>Balance, December 31</b>	<b>1,801</b>	<b>\$ 19,560</b>	<b>1,778</b>	<b>\$ 19,254</b>

On February 9, 2012, the Company's Board of Directors approved a quarterly dividend of \$0.13 per share on the common shares of MFC, payable on and after March 19, 2012 to shareholders of record at the close of business on February 22, 2012.

The Board also declared dividends on the following non-cumulative preferred shares, payable on or after March 19, 2012 to shareholders of record at the close of business on February 22, 2012.

- Class A Shares Series 1 – \$0.25625 per share
- Class A Shares Series 2 – \$0.29063 per share
- Class A Shares Series 3 – \$0.28125 per share
- Class A Shares Series 4 – \$0.4125 per share
- Class 1 Shares Series 1 – \$0.35 per share
- Class 1 Shares Series 3 – \$0.2625 per share
- Class 1 Shares Series 5 – \$0.313425 per share

### Note 15 Capital Management

Manulife Financial manages its capital on a total company basis as well as at each regulated entity level. Manulife Financial seeks to manage its capital with the objectives of:

- Operating with sufficient capital to be able to honour all policyholder and other obligations with a high degree of confidence;
- Securing stability and flexibility to operate, ensuring best access to capital markets and maintaining target credit ratings; and
- Seeking to optimize return on capital to meet shareholders' expectations, subject to constraints and considerations of adequate levels of capital established to meet the first two objectives.

In its assessments of capital adequacy, the Company typically adopts regulatory capital definitions and measures applicable to any given entity and jurisdiction in which an entity operates. These are supplemented by an internal capital measurement framework that reflects the Company's view of risk.

Annually the Board of Directors reviews and approves the Company's capital management policies. Each quarter, the Audit Committee reviews the Company's capital position. In addition, the Appointed Actuary discusses with the Board of Directors key sensitivities of the Company's capital ratios as assessed in the context of annual capital planning and Dynamic Capital Adequacy Testing ("DCAT") analysis. Operational oversight of capital management is provided by the Finance Committee, consisting of senior finance, risk management and investment executives and chaired by the Chief Actuary. The committee reviews issues and initiatives that affect the capital position of MFC's subsidiaries and the Company as a whole.

As part of its annual DCAT, the Company assesses the strength of its capital position under severe shock scenarios. The scenarios are determined each year to ensure their ongoing relevance to the Company's business and risk profile. The Company's DCAT typically includes assessments of shocks related to economic risks pertaining to the performance of equity markets, credit and interest rates, among others. The 2011 DCAT results demonstrate that the Company has sufficient assets to discharge policy liabilities in the various adverse scenarios tested. In addition to DCAT the Company periodically quantifies impacts of various stress scenarios the results of which inform its ongoing proactive capital management.

The measure of available capital in the table below serves as the foundation of the Company's capital management activities at the consolidated level. For regulatory reporting purposes, the numbers are further adjusted for various additions or deductions to capital as mandated by the guidelines issued by OSFI. The Company remains well within regulatory constraints on the composition of capital between equity and other instruments.

### Consolidated capital

As at	December 31,		January 1,
	2011	2010	2010
Total equity <sup>(1)</sup>	\$ 24,879	\$ 24,675	\$ 27,576
Less AOCI (loss) on cash flow hedges	(91)	(55)	(19)
Total equity less AOCI (loss) on cash flow hedges	\$ 24,970	\$ 24,730	\$ 27,595
Liabilities for preferred shares and capital instruments	4,012	4,004	4,022
<b>Total capital</b>	<b>\$ 28,982</b>	<b>\$ 28,734</b>	<b>\$ 31,617</b>

<sup>(1)</sup> Total equity includes unrealized gains and losses on AFS bonds and AFS equities, net of taxes. Starting in 2009, the current year net unrealized gain or loss on AFS bonds is not part of OSFI regulatory capital. As at December 31, 2011, the gain on AFS bonds, net of taxes, was \$193 (2010 – \$168).

In 2011, the Company's capital increased by \$248 compared to the prior year. The increase was primarily due to \$400 of preferred shares issued, the \$547 impact of a weaker Canadian dollar and \$245 of net income, partially offset by \$717 of shareholder dividends paid in cash and a \$229 decrease in unrealized gains on AFS securities. The \$550 of MLI subordinated debentures issued in the fourth quarter of 2011 offset the \$550 of MLI subordinated debentures redeemed in the first quarter of 2011. See note 13.

MFC issued senior debt of Canadian \$900 and US\$1,100 in 2010. While such funding may be deployed in subsidiaries as capital, at the MFC consolidated level senior indebtedness is typically not considered capital, consistent with the current OSFI guidelines.

### Note 16 Stock-Based Compensation

Under MFC's Executive Stock Option Plan ("ESOP"), stock options are granted to selected individuals. Options provide the holder with the right to purchase common shares of MFC at an exercise price equal to the higher of the prior day or prior five day average closing market price of common shares on the Toronto Stock Exchange on the date the options were granted. The options vest over a period not exceeding four years and expire not more than 10 years from the grant date. A total of 73,600,000 common shares have been reserved for issuance under the ESOP.

In 2000, MFC granted deferred share units ("DSUs") to certain employees under the ESOP. These DSUs vest over a three year period and each DSU entitles the holder to receive one common share on retirement or termination of employment. When dividends are paid on common shares, holders of DSUs are deemed to receive dividends at the same rate, payable in the form of additional DSUs. The number of these DSUs outstanding was 1.6 million as at December 31, 2011 (2010 – 1.8 million).

In addition, for certain new employees and pursuant to the Company's deferred compensation program, MFC grants DSUs under the ESOP which entitle the holder to receive cash payment equal to the value of the same number of common shares plus credited dividends on retirement or termination of employment. In 2011, the Company did not grant any DSUs (2010 – 17,000) to certain new hires which vest over a maximum period of five years. In 2011, 13,000 DSUs (2010 – 35,000) were granted to certain employees who elected to defer receipt of all or part of their annual bonus. These DSUs vested immediately. Also, in 2011, 49,000 DSUs (2010 – 20,000) were granted to certain employees to defer payment of all or part of their Restricted Share Units ("RSUs") and/or Performance Share Units ("PSUs"). These DSUs also vested immediately.

The fair values of the 0.2 million DSUs issued in the year were \$10.85 per unit, as at December 31, 2011 (0.2 million issued at \$17.15 per unit on December 31, 2010).

MFC's Global Share Ownership Plan ("GSOP") allows qualifying employees to choose to apply up to five per cent of their annual base earnings toward the purchase of common shares. MFC matches a percentage of the employee's eligible contributions up to a maximum amount. MFC's contributions vest immediately. All contributions are used to purchase common shares in the open market.

Under the Stock Plan for Non-Employee Directors, each eligible director may elect to receive his or her annual director's retainer and fees in DSUs or common shares in lieu of cash. Upon termination of Board service, an eligible director who has elected to receive DSUs will be entitled to receive cash equal to the value of the DSUs accumulated in his or her account or, at his or her direction, an equivalent number of common shares. A total of one million common shares have been reserved for issuance under this plan.

For the years ended December 31,

	2011	2010
	Number of DSUs (in thousands)	
Outstanding, January 1	3,098	4,943
Issued	173	157
Reinvested	121	157
Redeemed	(382)	(2,159)
<b>Outstanding, December 31</b>	<b>3,010</b>	<b>3,098</b>

Of the DSUs outstanding as at December 31, 2011, 1,580,000 (2010 – 1,813,000) entitle the holder to receive common shares, 874,000 (2010 – 859,000) entitle the holder to receive payment in cash and 556,000 (2010 – 426,000) entitle the holder to receive payment in cash or common shares, at the option of the holder.

MFC previously granted stock options to directors under the Director Equity Incentive Plan ("DEIP"). No stock options were granted under this plan in 2011, as a result of a decision made by the Board of Directors in 2004 to permanently discontinue stock option grants to directors. The number of options outstanding under the DEIP was 54,000 as at December 31, 2011 (2010 – 70,000).

For the year ended December 31, 2011, 4.5 million RSUs (2010 – 3.0 million) and 0.6 million PSUs (2010 – 0.7 million) were granted to certain eligible employees under MFC's Restricted Share Unit Plan. The fair values of the RSUs and PSUs granted in the year were \$10.85 per unit, as at December 31, 2011 (2010 – \$17.15 per unit). Each RSU/PSU entitles the recipient to receive payment equal to the market value of one common share, plus credited dividends, at the time of vesting, subject to any performance conditions.

RSUs granted in February 2011 vest on the date that is 34 months from the grant date (December 15, 2013), and the related compensation expense is recognized over this period, except where the employee is eligible to retire prior to a vesting date, in which case the cost is recognized over the period between the grant date and the date on which the employee is eligible to retire. Compensation expense related to RSUs was \$51 for the year ended December 31, 2011 (2010 – \$45).

PSUs granted in February 2011 vest on the date that is 34 months from the grant date (December 15, 2013), subject to performance conditions over the performance period. The related compensation expense is recognized over this period, except where the employee is eligible to retire prior to a vesting date, in which case the cost is recognized over the period between the grant date and the date on which the employee is eligible to retire. Compensation expense related to PSUs was \$(3) for the year ended December 31, 2011 (2010 – \$9).

	2011		2010	
	Number of options (in millions)	Weighted average exercise price	Number of options (in millions)	Weighted average exercise price
<b>Options outstanding</b>				
For the years ended December 31,				
Outstanding, January 1	36	\$ 24.68	35	\$ 24.72
Granted	4	\$ 18.90	6	\$ 19.40
Expired	(4)	\$ 23.10	(4)	\$ 17.81
Forfeited	(1)	\$ 21.77	(1)	\$ 21.54
<b>Outstanding, December 31</b>	<b>35</b>	<b>\$ 24.24</b>	<b>36</b>	<b>\$ 24.68</b>
<b>Exercisable, December 31</b>	<b>22</b>	<b>\$ 26.95</b>	<b>22</b>	<b>\$ 26.97</b>

	Options outstanding			Options exercisable		
	Number of options (in millions)	Weighted average exercise price	Weighted average remaining contractual life (in years)	Number of options (in millions)	Weighted average exercise price	Weighted average remaining contractual life (in years)
<b>As at December 31, 2011</b>						
\$14.79 - \$19.52	18	\$ 17.74	7.32	6	\$ 17.05	5.73
\$19.53 - \$25.45	6	\$ 22.41	1.54	6	\$ 22.42	1.17
\$25.46 - \$40.38	11	\$ 35.83	3.82	10	\$ 35.68	3.71
<b>Total</b>	<b>35</b>	<b>\$ 24.24</b>	<b>5.21</b>	<b>22</b>	<b>\$ 26.95</b>	<b>3.64</b>

The weighted average fair value of each option granted in 2011 has been estimated at \$4.52 (2010 – \$4.99) using the Black-Scholes option-pricing model. The pricing model uses the following assumptions for these options: risk-free interest rate of 2.9% (2010 –



3.0%), dividend yield of 3.25% (2010 – 2.75%), expected volatility of 30% (2010 – 30%) and expected life of 6.9 (2010 – 6.7) years. Expected volatility is estimated by evaluating a number of factors including historical volatility of the share price over multi-year periods.

The stock-based compensation expense recognized is shown in the following table.

For the years ended December 31,	2011	2010
Expense arising from equity-settled stock-based payment transactions	<b>\$ 23</b>	\$ 25
Expense arising from cash-settled stock-based payment transactions	<b>48</b>	59
<b>Total stock-based compensation expense</b>	<b>\$ 71</b>	\$ 84

The carrying amount of the liability relating to the cash-settled awards at December 31, 2011 is \$49 (2010 – \$96) and is included within other liabilities.

### Dilutive effect of stock-based compensation awards

For the years ended December 31,	2011	2010
<b>Diluted earnings (loss) per common share</b>	<b>\$ 0.02</b>	\$ (0.99)
Net income (loss) available to common shareholders	<b>\$ 44</b>	\$ (1,742)
Weighted average number of common shares (in millions)	<b>1,786</b>	1,765
Dilutive stock-based awards <sup>(1)</sup> (in millions)	<b>3</b>	–
Dilutive convertible instruments <sup>(2)</sup> (in millions)	–	–
<b>Weighted average number of diluted common shares<sup>(3)</sup> (in millions)</b>	<b>1,789</b>	1,765

<sup>(1)</sup> The dilutive effect of stock-based awards was calculated using the treasury stock method. This method calculates the number of incremental shares by assuming the outstanding stock-based awards are (i) exercised and (ii) then reduced by the number of shares assumed to be repurchased from the issuance proceeds, using the average market price of MFC common shares for the year. Excluded from the calculation were an average of 36 million (2010 – 41 million) anti-dilutive stock-based awards.

<sup>(2)</sup> The holders of the convertible preferred shares and MaCS series A and B have the right to redeem those instruments for MFC shares prior to the conversion date. However, these convertible instruments have been excluded from the calculation, as the conversions are anti-dilutive for the years ended December 31, 2011 and 2010.

<sup>(3)</sup> For the year ended December 31, 2010, the dilutive effect calculation utilizes the basic weighted average number of common shares because the loss for the year results in all awards being anti-dilutive.

### Note 17 Employee Future Benefits

The Company maintains a number of pension plans, both defined benefit and defined contribution, and post-employment benefit plans for its eligible employees and agents. These plans include broad-based pension plans for employees that are funded, supplemental pension plans for executives that are primarily unfunded, and other post-employment benefit plans that are also primarily unfunded.

The Company's funding policy for all applicable plans is to make at least the minimum annual contributions required by regulations of the countries in which the plans are offered. Actuarial valuations to determine employer required annual contributions for Canadian based registered pension plans are generally required at least once every three years. The most recent actuarial valuation of the main Canadian staff pension plan was performed as at December 31, 2010. The date of the next required actuarial valuation of the Canadian staff pension plan for funding purposes is December 31, 2013. Pension plans based in the United States require annual valuations, with the most recent valuation performed as at January 1, 2011. For 2012, the required funding for the Company's largest Canadian and U.S. pension plans is expected to be approximately \$40 million.

Assumptions and methods prescribed for regulatory funding purposes differ from those used for accounting purposes. The Company measures its defined benefit obligation and the fair value of plan assets for accounting purposes as at December 31 of each year.

### Pension and post-employment benefit plans

For the years ended December 31,	Pension benefits		Post-employment benefits	
	2011	2010	2011	2010
Changes in defined benefit obligation:				
Ending balance prior year	<b>\$ 3,743</b>	\$ 3,637	<b>\$ 785</b>	\$ 801
Current service cost	<b>62</b>	63	<b>8</b>	7
Past service cost	–	–	<b>(38)</b>	–
Interest cost	<b>174</b>	194	<b>37</b>	42
Plan participants' contributions	<b>1</b>	1	<b>5</b>	5
Actuarial (gains) losses	<b>199</b>	228	<b>24</b>	53
Benefits paid	<b>(265)</b>	(251)	<b>(59)</b>	(62)
Impact of changes in foreign exchange rates	<b>66</b>	(129)	<b>12</b>	(30)
Curtailements	–	–	–	(31)
<b>Defined benefit obligation, December 31</b>	<b>\$ 3,980</b>	\$ 3,743	<b>\$ 774</b>	\$ 785



	Pension benefits		Post-employment benefits	
	2011	2010	2011	2010
<b>For the years ended December 31,</b>				
Changes in plan assets:				
Fair value of plan assets, ending balance prior year	\$ 2,869	\$ 2,755	\$ 345	\$ 321
Expected return on plan assets	190	184	25	25
Employer contributions	107	99	54	58
Plan participants' contributions	1	1	5	5
Benefits paid	(265)	(251)	(59)	(62)
Actuarial gains (losses)	(19)	186	(18)	16
Impact of changes in foreign exchange rates	48	(105)	8	(18)
<b>Fair value of plan assets, December 31<sup>(1)</sup></b>	<b>\$ 2,931</b>	<b>\$ 2,869</b>	<b>\$ 360</b>	<b>\$ 345</b>

<sup>(1)</sup> The fair value of plan assets does not include the rabbi trust assets that support the non-qualified U.S. retirement plan obligations for certain executives and retired executives in respect of service prior to May 1, 2008. In the event of insolvency of the Company, the rabbi trust assets can be used to satisfy claims of general creditors. At December 31, 2011, assets in the rabbi trust with respect to these defined benefit obligations were \$351 (2010 – \$343) compared to the defined benefit obligations under the merged plan of \$360 (2010 – \$356).

	Pension benefits		Post-employment benefits	
	2011	2010	2011	2010
<b>As at December 31,</b>				
Deficit	\$ 1,049	\$ 874	\$ 414	\$ 440
Unrecognized net actuarial losses	(1,011)	(839)	(58)	(25)
Unrecognized prior service credit	–	–	19	–
Effect of asset limit	6	3	–	–
<b>Net defined benefit liability</b>	<b>\$ 44</b>	<b>\$ 38</b>	<b>\$ 375</b>	<b>\$ 415</b>

	Pension benefits		Post-employment benefits	
	2011	2010	2011	2010
<b>As at January 1, 2010</b>				
Deficit		\$ 882		\$ 480
Unrecognized net actuarial gains (losses)		(896)		10
<b>Net defined benefit (asset) liability</b>		<b>\$ (14)</b>		<b>\$ 490</b>

### Amounts recognized in the Consolidated Statements of Financial Position

	Pension benefits		Post-employment benefits	
	2011	2010	2011	2010
<b>As at December 31,</b>				
Defined benefit liability	\$ 619	\$ 600	\$ 375	\$ 415
Defined benefit asset	(575)	(562)	–	–
<b>Net defined benefit liability</b>	<b>\$ 44</b>	<b>\$ 38</b>	<b>\$ 375</b>	<b>\$ 415</b>

	Pension benefits		Post-employment benefits	
	2011	2010	2011	2010
<b>As at January 1, 2010</b>				
Defined benefit liability		\$ 589		\$ 490
Defined benefit asset		(603)		–
<b>Net defined benefit (asset) liability</b>		<b>\$ (14)</b>		<b>\$ 490</b>

### The following disclosures will be built up over time to give a five year history

	Pension benefits		Post-employment benefits	
	2011	2010	2011	2010
<b>As at and for the years ended December 31,</b>				
Defined benefit obligation	\$ 3,980	\$ 3,743	\$ 774	\$ 785
Fair value of plan assets	2,931	2,869	360	345
Deficit (surplus)	\$ 1,049	\$ 874	\$ 414	\$ 440
Experience (gain) loss adjustments on defined benefit obligation	\$ 4	\$ 4	\$ (2)	\$ (13)
Experience gain (loss) adjustment on assets	\$ (19)	\$ 186	\$ (18)	\$ 16

As at December 31, 2011, the Company's broad-based and funded defined benefit pension plans consisted of assets of \$2,917 (December 31, 2010 – \$2,855 and January 1, 2010 – \$2,741) and obligations of \$3,169 (December 31, 2010 – \$2,974 and January 1, 2010 – \$2,909), which results in a deficit of \$252 (December 31, 2010 – \$119 and January 1, 2010 – \$168).

The Company's executive supplemental pension plans are primarily unfunded and, as at December 31, 2011, consisted of assets of \$14 (December 31, 2010 – \$14 and January 1, 2010 – \$14) and obligations of \$811 (December 31, 2010 – \$769 and January 1, 2010 – \$728), which results in a deficit of \$797 (December 31, 2010 – \$755 and January 1, 2010 – \$714). Of this deficit,

\$565 (December 31, 2010 – \$544 and January 1, 2010 – \$534) has been charged to earnings to date. Further, the rabbi trust assets that support a portion of these obligations amounted to \$351 as at December 31, 2011 (December 31, 2010 – \$343 and January 1, 2010 – \$368). These assets form part of the general fund assets of the Company but are held by an external trustee. Other assets that support these obligations also form part of the general fund assets of the Company but are not separately segregated.

Assets and defined benefit obligations for the various pension plans by category, including rabbi trust assets, were as follows.

As at	Pension benefits		
	December 31,		January 1,
	2011	2010	2010
<b>Broad-based funded defined benefit pension plans</b>			
Defined benefit obligation	\$ 3,169	\$ 2,974	\$ 2,909
Fair value of plan assets	2,917	2,855	2,741
<b>Deficit</b>	<b>\$ 252</b>	<b>\$ 119</b>	<b>\$ 168</b>
<b>Executive supplemental pension plans</b>			
Defined benefit obligation	\$ 811	\$ 769	\$ 728
Fair value of plan assets	14	14	14
<b>Deficit</b>	<b>\$ 797</b>	<b>\$ 755</b>	<b>\$ 714</b>
<b>Other</b>			
Rabbi trust assets	\$ 351	\$ 343	\$ 368
<b>Total</b>			
Defined benefit obligation	\$ 3,980	\$ 3,743	\$ 3,637
Fair value of plan assets	3,282	3,212	3,123
<b>Deficit</b>	<b>\$ 698</b>	<b>\$ 531</b>	<b>\$ 514</b>

The assets that support the portion of the post-employment benefit plan obligations that are not funded form part of the general fund assets of the Company.

Overall, the Company's funded or partially funded defined benefit pension and other post-employment benefit plans consist of assets of \$3,291 (December 31, 2010 – \$3,214 and January 1, 2010 – \$3,076) and obligations of \$3,720 (December 31, 2010 – \$3,525 and January 1, 2010 – \$3,499). Obligations for unfunded pension plans and other post-employment benefit plans total \$1,034 (December 31, 2010 – \$1,003 and January 1, 2010 – \$939).

The weighted average asset allocation for the Company's funded defined benefit pension plans is as follows.

As at	Actual allocation		
	December 31,		January 1,
	2011	2010	2010
Equity securities <sup>(1)</sup>	40%	47%	51%
Debt securities	53%	45%	41%
Real estate	3%	3%	3%
Other	4%	5%	5%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

<sup>(1)</sup> Included are investments in MFC common shares of \$0.2 (December 31, 2010 – \$0.3 and January 1, 2010 – \$0.8).

## Net benefit cost

Components of the net benefit cost for the pension plans and other post-employment benefit plans were as follows.

For the years ended December 31,	Pension benefits		Post-employment benefits	
	2011	2010	2011	2010
Defined benefit current service cost	\$ 62	\$ 63	\$ 8	\$ 7
Defined contribution current service cost	70	67	–	–
Interest cost	174	194	37	42
Expected return on plan assets	(190)	(184)	(25)	(25)
Past service cost	–	–	(19)	–
Amortization of actuarial losses	64	64	9	2
Curtailment	–	–	–	(31)
Effect of asset limit	3	3	–	–
<b>Net benefit cost</b>	<b>\$ 183</b>	<b>\$ 207</b>	<b>\$ 10</b>	<b>\$ (5)</b>

## Key weighted average assumptions

The weighted average assumptions used by the Company to determine the defined benefit obligation and net benefit cost for the defined benefit pension plans and other post-employment benefit plans were as follows.

For the years ended December 31,	Pension benefits		Post-employment benefits	
	2011	2010	2011	2010
To determine the accrued benefit obligation at end of year:				
Discount rate	4.4%	4.9%	4.5%	5.1%
Rate of compensation increase	3.4%	3.9%	3.3%	3.4%
Initial health care cost trend rate <sup>(1)</sup>	n/a	n/a	8.0%	8.0%
To determine the net benefit cost for the year:				
Discount rate	4.9%	5.5%	5.1%	5.8%
Expected return on plan assets <sup>(2)</sup>	6.9%	7.0%	7.3%	7.8%
Rate of compensation increase	3.8%	4.1%	3.4%	3.3%
Initial health care cost trend rate <sup>(1)</sup>	n/a	n/a	8.0%	8.0%

<sup>(1)</sup> The health care cost trend rate used to measure the U.S. based post-employment benefit obligation was 8.5% grading to 5.0% for 2028 and years thereafter (2010 – 8.5% grading to 5.0% for 2028) and to measure the net benefit cost was 8.5% grading to 5.0% for 2028 and years thereafter (2010 – 8.5% grading to 5.0% for 2028). In Canada, the rate used to measure the post-employment benefit obligation was 6.8% grading to 4.8% for 2026 and years thereafter (2010 – 6.8% grading to 4.8% for 2026) and to measure the net benefit cost was 6.8% grading to 4.8% for 2026 and years thereafter (2010 – 6.5% grading to 4.8% for 2020).

<sup>(2)</sup> The expected return on pension plan assets for U.S. based plans was 7.8% (2010 – 7.8%). Plans based in Canada had an expected return on plan assets of 5.2% (2010 – 5.5%). Other pension plans had an expected return of 4.1% (2010 – 4.5%).

The overall expected long-term rate of return is 6.9% (2010 – 7.1%) on the combined assets for all of the funded defined benefit pension and other post-employment benefit plans. The expected long-term rate of return is based on the future return expectations in each country for each asset class and on the target asset allocation of the portfolio for each plan.

Assumptions regarding future mortality are based on published statistics and mortality tables. The current longevities underlying the values of the obligations in the defined benefit pension and other post-employment benefit plans are as follows.

As at December 31, 2011	Canada	U.S.
<b>Longevity at age 65 for current pensioners</b>		
Males	19.6	20.1
Females	22.1	21.8
<b>Longevity at age 65 for current members aged 45</b>		
Males	21.1	21.5
Females	22.9	22.7

## Sensitivity of key assumptions

Assumptions adopted can have a significant effect on the obligations and net benefit cost reported for defined benefit pension and other post-employment benefit plans. The sensitivity of the obligations and costs to changes in the key assumptions is set out in the following table.

As at and for the year ended December 31, 2011	Pension benefits		Post-employment benefits	
	Obligation	Net benefit cost	Obligation	Net benefit cost
Discount rate:				
Impact of a 1% increase	\$ (373)	\$ (56)	\$ (74)	\$ (2)
Impact of a 1% decrease	446	66	89	9
Expected return on plan assets:				
Impact of a 1% increase	n/a	(26)	n/a	(3)
Impact of a 1% decrease	n/a	26	n/a	3
Rate of compensation increase:				
Impact of a 0.25% increase	4	1	–	–
Impact of a 0.25% decrease	(3)	(1)	–	–
Health care cost trend rate:				
Impact of a 1% increase	n/a	n/a	39	4
Impact of a 1% decrease	n/a	n/a	(33)	(3)

The impact on the aggregate of service and interest cost of a 1% increase (or decrease) in the health care cost trend rate is a \$2 increase (or \$2 decrease) in cost.

The calculation of the defined benefit obligation is sensitive to the mortality assumptions. As the actuarial estimates of mortality continue to be refined, the effect of an increase of one year in longevity would be an increase in the defined benefit obligation of \$142.

### Cash flows – contributions

Total cash payments for all employee future benefits, comprised of cash contributed by the Company to funded defined benefit pension and other post-employment benefit plans, cash payments directly to beneficiaries from unfunded pension and other post-employment benefit plans, and cash contributed to defined contribution pension plans, were as follows.

For the years ended December 31,	Pension benefits		Post-employment benefits	
	2011	2010	2011	2010
Defined benefit plans	\$ 107	\$ 99	\$ 54	\$ 58
Defined contribution plans	70	67	–	–
<b>Total</b>	<b>\$ 177</b>	<b>\$ 166</b>	<b>\$ 54</b>	<b>\$ 58</b>

The Company's best estimate of expected payments for employee future benefits for the year ending December 31, 2012 is \$124 for defined benefit pension plans, \$74 for defined contribution pension plans and \$36 for post-employment benefit plans.

### Cash flows – estimated benefit payments

The future benefit payments under the defined benefit pension plans and other post-employment benefit plans are estimated to be as follows.

For the years ended December 31,	Pension benefits	Post-employment benefits
2012	\$ 293	\$ 56
2013	289	57
2014	291	57
2015	289	58
2016	282	59
2017 – 2021	1,359	298

### Investment policy and strategy

The Company's overall investment strategy for the funded defined benefit pension and other post-employment benefit plans varies by country and also by plan, depending on several factors including legislative requirements, types of benefit provided, plan demographics and plan funded status. The investment policies and strategies of the plans have been developed primarily to diversify the plan assets and to manage risks. Overall, investments are allocated primarily between the major asset classes of fixed income and equity, with a relatively smaller proportion of investments in alternative asset classes. Currently, the overall target asset allocation is set at approximately the following: for Canada, fixed income 68% and public equity 32%; for the U.S., fixed income 41%, public equity 50% and other types of investments 9%.

## Fair value measurements

Fair value measurements of defined benefit pension and other post-employment benefit plan assets are categorized according to a three level hierarchy, as described in note 11. The fair values of these assets by asset category are as follows.

As at December 31, 2011	Total fair value	Level 1 <sup>(1)</sup>	Level 2 <sup>(1)</sup>	Level 3 <sup>(1)</sup>
<b>Defined benefit pension plans</b>				
Cash and cash equivalents	\$ 43	\$ 43	\$ –	\$ –
Equities <sup>(2)</sup>	1,168	663	505	–
Fixed income <sup>(2)</sup>	1,534	465	1,001	68
Other investments <sup>(3)</sup>	186	2	–	184
<b>Total defined benefit pension plan assets</b>	<b>\$ 2,931</b>	<b>\$ 1,173</b>	<b>\$ 1,506</b>	<b>\$ 252</b>
<b>Post-employment benefit plans</b>				
Cash and cash equivalents	\$ 26	\$ 26	\$ –	\$ –
Equities <sup>(2)</sup>	170	49	121	–
Fixed income <sup>(2)</sup>	159	24	133	2
Other investments <sup>(3)</sup>	5	–	–	5
<b>Total post-employment benefit plan assets</b>	<b>\$ 360</b>	<b>\$ 99</b>	<b>\$ 254</b>	<b>\$ 7</b>

## As at December 31, 2010

<b>Defined benefit pension plans</b>				
Cash and cash equivalents	\$ 49	\$ 49	\$ –	\$ –
Equities <sup>(2)</sup>	1,360	772	588	–
Fixed income <sup>(2)</sup>	1,260	547	642	71
Other investments <sup>(3)</sup>	200	2	–	198
<b>Total defined benefit pension plan assets</b>	<b>\$ 2,869</b>	<b>\$ 1,370</b>	<b>\$ 1,230</b>	<b>\$ 269</b>
<b>Post-employment benefit plans</b>				
Cash and cash equivalents	\$ 24	\$ 24	\$ –	\$ –
Equities <sup>(2)</sup>	172	50	122	–
Fixed income <sup>(2)</sup>	144	23	119	2
Other investments <sup>(3)</sup>	5	–	–	5
<b>Total post-employment benefit plan assets</b>	<b>\$ 345</b>	<b>\$ 97</b>	<b>\$ 241</b>	<b>\$ 7</b>

## As at January 1, 2010

<b>Defined benefit pension plans</b>				
Cash and cash equivalents	\$ 39	\$ 39	\$ –	\$ –
Equities <sup>(2)</sup>	1,395	755	640	–
Fixed income <sup>(2)</sup>	1,090	731	276	83
Other investments <sup>(3)</sup>	231	3	–	228
<b>Total defined benefit pension plan assets</b>	<b>\$ 2,755</b>	<b>\$ 1,528</b>	<b>\$ 916</b>	<b>\$ 311</b>
<b>Post-employment benefit plans</b>				
Cash and cash equivalents	\$ 24	\$ 24	\$ –	\$ –
Equities <sup>(2)</sup>	160	27	133	–
Fixed income <sup>(2)</sup>	132	27	103	2
Other investments <sup>(3)</sup>	5	–	–	5
<b>Total post-employment benefit plan assets</b>	<b>\$ 321</b>	<b>\$ 78</b>	<b>\$ 236</b>	<b>\$ 7</b>

<sup>(1)</sup> See note 11 for a description of the categorization of assets under the three level fair value hierarchy.

<sup>(2)</sup> Includes investments in mutual funds, common/collective trusts, separate accounts, and separate accounts of Company annuity contracts that share exposure to equities or fixed income securities respectively.

<sup>(3)</sup> Includes investments in private equity, timber and agriculture and other assets.

The changes in Level 3 defined benefit pension and other post-employment benefit plan assets measured at fair value on a recurring basis are summarized as follows.

	Private equity	Timber, agriculture and other
<b>Balance as at January 1, 2011</b>	<b>\$ 119</b>	<b>\$ 157</b>
Actual return on plan assets		
Relating to assets still held at the reporting date	15	28
Relating to assets sold during the year	1	(12)
Purchases, sales and settlements	(36)	(17)
Impact of changes in foreign exchange rates	2	2
<b>Balance as at December 31, 2011</b>	<b>\$ 101</b>	<b>\$ 158</b>
<b>Balance as at January 1, 2010</b>	<b>\$ 138</b>	<b>\$ 180</b>
Actual return on plan assets		
Relating to assets still held at the reporting date	11	(2)
Relating to assets sold during the year	12	7
Purchases, sales and settlements	(36)	(20)
Impact of changes in foreign exchange rates	(6)	(8)
<b>Balance as at December 31, 2010</b>	<b>\$ 119</b>	<b>\$ 157</b>

## Note 18 Consolidated Investments

In its capacities as an investor and as an investment manager, the Company has relationships with various types of entities, some of which are considered SPEs. The Company also has relationships with SPEs used to arrange certain of the Company's financings.

Where the Company is deemed to control an SPE, in accordance with IAS 27 and SIC 12, the SPE is consolidated, with interests of other parties classified as either liabilities or non-controlling interests. The Company is deemed to control an SPE where the Company owns the majority of the SPE's voting interests, or has the power to govern the financial and operating policies of the SPE through other means than voting rights, and obtains significant benefits from its activities. The Company receives benefits from its relationships with SPEs in the form of investment returns from investment entities, and in the form of advantageous access to capital markets from financing entities.

The Company assesses the materiality of its relationship with the SPE to determine if it obtains significant benefits from the SPE, which requires disclosure. This assessment considers the nature of the relationship with the SPE and the materiality of the relationship to the Company as, among other factors, a percentage of total investments, percentage of total net investment income and percentage of total funds under management. For purposes of assessing materiality and disclosing relationships with SPEs, the Company aggregates similar entities.

### (a) Investment entities that are SPEs

#### Investment SPEs that are consolidated in the Company's general fund

##### Timber Companies

The Company acts as an investment manager of timberland companies and the Company's general fund and segregated funds invest in many of them. In its capacity as investment manager to the timberland companies, the Company earns investment advisory fees, and in the majority of cases earns forestry management fees and is eligible for performance advisory fees. The Company has determined that many of the timber companies are SPEs.

The Company has determined that as at December 31, 2011 and 2010 and January 1, 2010, it has control over one Timber Company which it manages, Hancock Victoria Plantations ("HVP"), based on ownership of majority voting rights via MFC's general and segregated fund ownership interests. As at January 1, 2010, the Company also had control over Taumata Plantations, Ltd. ("Taumata") based on the interaction of the Company's general fund ownership and cancellation features of the management contract held by the Company's timber management subsidiary. As a result of a modification to the governance features of Taumata during the fourth quarter of 2010, the Company was no longer deemed to control Taumata. The Company continues to have an advisory relationship with Taumata, and invests in its debt and equity securities. The Company and Taumata continue to be related parties, as the Company considers Taumata to be an Associate. The Company recorded a gain of \$7 upon deconsolidation of Taumata.

The consolidation of HVP into the Company's general fund as at December 31, 2011 resulted in an increase in other assets of \$668 (December 31, 2010 – \$634 and January 1, 2010 – \$541), an increase in other liabilities of \$491 (December 31, 2010 – \$460 and January 1, 2010 – \$400), an increase in non-controlling interests of \$177 (December 31, 2010 – \$174 and January 1, 2010 – \$141), and an increase in the Company's net income for the year ended December 31, 2011 of \$13 (2010 – \$44). The Company's maximum exposure to loss as a result of its relationship with HVP is limited to the Company's general fund investment in HVP's capital of \$79 (December 31, 2010 – \$78 and January 1, 2010 – \$70).



## Hancock Mezzanine Funds

The Company acts as investment manager to a series of four investment funds which invest in mezzanine financing of private companies (collectively, the "Mezzanine Funds"). The Company's general fund and segregated funds invest in the Mezzanine Funds in varying proportions and the Company's general fund coinvests alongside the Mezzanine Funds in the Funds' targeted investments. In its capacity as investment manager to the Mezzanine Funds, the Company earns investment advisory fees. The Company has determined that it has control over the Mezzanine Funds, by virtue of its non-cancelable management contracts with them, and by virtue of its exposure to their investment performance resulting from its general fund and segregated fund investments in them. The Company accounts for other parties' interests in the Mezzanine Funds as liabilities because the Funds have limited lives.

The consolidation of the Mezzanine Funds into the Company's general fund as at December 31, 2011 resulted in an increase in assets of \$218 (December 31, 2010 – \$183 and January 1, 2010 – \$171) and an increase in liabilities of \$218 (December 31, 2010 – \$183 and January 1, 2010 – \$171).

Liabilities and non-controlling interests recognized as a result of consolidating HVP, Taumata and the Mezzanine Funds do not represent additional claims on the general assets of the Company; rather, they represent claims against the assets recognized as a result of consolidating these entities. Conversely, the assets recognized as a result of consolidating these entities do not represent additional assets which the Company can use to satisfy claims against its general assets; rather, they can only be used to settle the liabilities recognized as a result of consolidating these entities, and provide returns to the non-controlling interest holders.

## Investment SPEs that are not consolidated

Except as noted above, the Company has determined that it does not have control over any investment entities which are SPEs and in which it invests or which it manages.

The following is a discussion of the investment entities with which the Company has significant relationships.

## Collateralized debt obligation funds

The Company acts as an investment manager to certain asset-backed investment vehicles, commonly known as collateralized debt obligation funds ("CDOs"). The Company has determined that the CDOs it manages are SPEs. The Company also invests in the debt and/or equity of these CDOs, and in the debt and/or equity of CDOs managed by others. Any net losses of a CDO managed by the Company in excess of the CDO's equity are borne by the debt owners. Owners of securities issued by CDOs that are managed by the Company have no recourse to the Company's assets in the event of default by the CDO. The Company's risk of loss from any CDO that it manages, or in which it invests, or both, is limited to its investment in the CDO, if any. The Company has determined that it does not control any of the CDOs which it both manages and invests in, because its power to govern the financial and operating policies of these CDOs is either restricted or subject to approval by the CDOs' other investors.

The maximum exposure to losses from CDOs managed by the Company is \$9 (December 31, 2010 – \$23 and January 1, 2010 – \$29). This consists of nil (December 31, 2010 – \$7 and January 1, 2010 – \$14) in tranches rated below BBB and \$9 (December 31, 2010 – \$16 and January 1, 2010 – \$15) in equity tranches.

Company-managed CDOs As at	December 31,		January 1,
	2011	2010	2010
<b>Total assets</b>	<b>\$ 644</b>	\$ 1,361	\$ 1,498
Total debt <sup>(1)</sup>	<b>\$ 2,448</b>	\$ 5,005	\$ 5,598
Total other liabilities	<b>5</b>	6	7
Total liabilities	<b>\$ 2,453</b>	\$ 5,011	\$ 5,605
Total equity <sup>(2)</sup>	<b>(1,809)</b>	(3,650)	(4,107)
<b>Total liabilities and equity<sup>(3)</sup></b>	<b>\$ 644</b>	\$ 1,361	\$ 1,498

<sup>(1)</sup> Declines in debt result from settlement of the debt as part of the liquidation or amortization process for certain CDOs.

<sup>(2)</sup> Declines in assets reflect the liquidation or amortization process for certain of the CDOs, and also reflect fair value adjustments to investment securities held in these CDOs. Since the CDOs' assets are carried at fair value and their debt is carried at par, declines in the assets' fair values generate negative equity in the CDOs.

<sup>(3)</sup> Includes the Company's investment in the debt and equity of Company-managed CDOs.

## Low-income housing partnerships

The Company has investments that qualify for low-income housing tax credits ("LIH Partnerships"). These investments are primarily made through real estate limited partnerships or limited liability companies. The Company is usually the sole limited partner or investor member and is not the general partner or managing member in any of the LIH Partnerships. The Company has determined that the LIH Partnerships are SPEs. The Company has determined that it does not control any LIH Partnership because the Company does not have power to govern their financial and operating policies. This power is held by each general partner or managing member who has significant exposure to the economics of their LIH partnerships.

The Company's maximum exposure to losses from its investments in LIH Partnerships is \$400 (December 31, 2010 – \$453 and January 1, 2010 – \$546). This consists of \$337 (December 31, 2010 – \$378 and January 1, 2010 – \$423) of equity investments, \$48 (December 31, 2010 – \$61 and January 1, 2010 – \$66) of mortgages and \$15 (December 31, 2010 – \$14 and January 1, 2010 – \$57) of outstanding capital commitments.

LIH Partnerships <sup>(1)</sup> As at	December 31,		January 1,
	2011	2010	2010
<b>Total assets</b>	<b>\$ 1,311</b>	\$ 1,317	\$ 1,242
Total debt	\$ 765	\$ 802	\$ 715
Total other liabilities	158	144	131
Total liabilities	\$ 923	\$ 946	\$ 846
Total equity <sup>(1)</sup>	388	371	396
<b>Total liabilities and equity<sup>(2)</sup></b>	<b>\$ 1,311</b>	\$ 1,317	\$ 1,242

<sup>(1)</sup> Certain data in the table above is reported with a six to twelve month lag due to the delayed availability of financial statements of the LIH Partnerships.

<sup>(2)</sup> Includes the Company's investment in the debt and equity of the LIH Partnerships.

### Timber Companies

As mentioned above, the Company acts as a timber investment manager with total timber assets under management of \$9 billion, of which \$6 billion is organized into Timber Companies. The Company's general fund and segregated funds own \$504 and \$1 billion of the capital of these Timber Companies, respectively. In its capacity as investment manager to the Timber Companies, the Company earns investment advisory fees and, in the majority of cases, earns forestry management fees and is eligible for performance advisory fees. The Company has determined that many of the Timber Companies are SPEs. With the exception of HVP, mentioned above, the Company has determined that it does not control any Timber Company it manages because it either does not have the power to govern their financial and operating policies, or does not have exposure to their investment returns, or both.

The maximum exposure of the Company's general fund to losses from the Timber Companies is \$504 (2010 – \$504 and January 1, 2010 – \$430). This consists of \$202 (December 31, 2010 – \$190 and January 1, 2010 – \$161) of equity investments, \$275 (December 31, 2010 – \$278 and January 1, 2010 – \$266) of debt investments, and \$27 (December 31, 2010 – \$36 and January 1, 2010 – \$3) of outstanding capital commitments.

Timber Companies As at	December 31,		January 1,
	2011	2010	2010
<b>Total assets</b>	<b>\$ 6,145</b>	\$ 6,010	\$ 5,315
Total debt	\$ 2,652	\$ 2,596	\$ 2,134
Total other liabilities	622	542	466
Total liabilities	\$ 3,274	\$ 3,138	\$ 2,600
Total equity	2,871	2,872	2,715
<b>Total liabilities and equity<sup>(1)</sup></b>	<b>\$ 6,145</b>	\$ 6,010	\$ 5,315

<sup>(1)</sup> Includes the Company's general fund and segregated fund investments in the debt and equity of the Timber Companies. Deconsolidation of approximately \$932 of assets, \$1,037 of liabilities and \$(105) of non-controlling interests and other equity occurred during the fourth quarter of 2010, as a result of losing control over Taumata.

### Other entities

The Company has investment relationships with a variety of other entities ("Other Entities"), which result from its direct investment in their debt and/or equity and which have been assessed for control. This category includes, but is not limited to energy investment partnerships, investment funds organized as limited partnerships and investments in businesses that have undergone debt restructurings and reorganizations. The Company believes that its relationships with these Other Entities are not significant and, accordingly, does not provide any summary financial data for them nor does the company distinguish here whether each is an SPE or not. The Company's maximum exposure to losses as a result of its involvement with Other Entities is generally limited to amounts invested, which are included on the Company's Consolidated Statements of Financial Position in the appropriate investment categories, but also includes investment amounts committed.

### (b) Financing entities that are SPEs

#### Financing SPEs that are consolidated in the Company's general fund

The Company has determined that it controls each financing entity below. The Company has control over them because the Company predetermined their financial and operating policies and controls any new issuances or redemptions (within contractual limits of relevant agreements) of capital through them, and the Company obtains benefits from them in the form of advantageous access to capital markets. Each is an SPE because its operations are narrowly limited to issuing and servicing the Company's capital.

### **Manulife Financial Capital Trust**

The Trust, an open-end trust, issued \$1,000 of Manulife Financial Capital Securities ("MaCS"). See note 13. The consolidation of the Trust into the Company's general fund as at December 31, 2011 and 2010 and January 1, 2010 resulted in no quantitative changes to the Company's assets, liabilities or equity.

### **Manulife Financial Capital Trust II**

Trust II, an open-end trust, issued \$1,000 of notes to the capital markets. See note 13. The consolidation of Trust II into the Company's general fund as at December 31, 2011 and 2010 and January 1, 2010 resulted in no quantitative changes to the Company's assets, liabilities or equity.

### **Manulife Finance (Delaware), L.P.**

MFLP issued \$1,200 of debentures. See note 13. The consolidation of MFLP into the Company's general fund as at December 31, 2011 resulted in an increase in assets of \$21 (December 31, 2010 – decrease of \$7 and January 1, 2010 – decrease of \$6), and an increase in liabilities of \$21 (December 31, 2010 – decrease of \$7 and January 1, 2010 – decrease of \$6).

### **Platinum Canadian Mortgage Trust**

Platinum Canadian Mortgage Trust ("Platinum Trust") was organized in 2010 by Manulife Bank of Canada to provide financing for the Company's mortgage business by securitizing certain of the Company's mortgage loans and issuing notes. As at December 31, 2011, Platinum Trust has issued \$750 of notes (December 31, 2010 – \$500). Transfers of mortgage loans to Platinum Trust do not qualify as sales, therefore, the transferred mortgages and corresponding secured borrowing liabilities are recorded on the Company's Consolidated Statements of Financial Position. See note 4(i).

The consolidation of Platinum Trust into the Company's general fund as at December 31, 2011 resulted in a decrease in assets of \$37 (December 31, 2010 – \$18) and a decrease in liabilities of \$37 (December 31, 2010 – \$18).

### **John Hancock Global Funding II, Ltd.**

John Hancock Global Funding II, Ltd. ("JHGF II"), a Delaware Trust, was organized by John Hancock Life Insurance Company (U.S.A.) ("JHUSA"). JHGF II issued medium term notes to investors worldwide, and used the proceeds to purchase funding agreements issued by JHUSA. The medium term notes were issued through 2005 and mature through 2015. They are not redeemable at the option of the investors. See note 9.

The consolidation of JHGF II into the Company's general fund as at December 31, 2011 resulted in an increase in assets of \$65 (December 31, 2010 – \$127 and January 1, 2010 – \$228) and an increase in liabilities of \$37 (December 31, 2010 – \$93 and January 1, 2010 – \$168) and an increase in equity of \$28 (December 31, 2010 – \$34 and January 1, 2010 – \$60).

## **Note 19 Commitments and Contingencies**

### **(a) Legal proceedings**

The Company is regularly involved in legal actions, both as a defendant and as a plaintiff. The legal actions naming the Company as a defendant ordinarily involve its activities as a provider of insurance protection and wealth management products, as well as an investment adviser, employer and taxpayer. In addition, government and regulatory bodies in Canada, the United States, Asia and other jurisdictions where the company conducts business regularly make inquiries and, from time to time, require the production of information or conduct examinations concerning the Company's compliance with, among other things, insurance laws, securities laws, and laws governing the activities of broker-dealers.

The Company announced on April 21, 2011 that it had been informed by staff of the Ontario Securities Commission ("OSC") that staff would not seek any orders from OSC in connection with the enforcement notice delivered by staff in June 2009 relating to the Company's disclosure before March 2009 of risks related to the Company's variable annuity guarantee and segregated funds business.

A class action covering Quebec residents only is pending in Quebec against the Company and proposed class action lawsuits against the Company have been filed in Ontario and the United States, on behalf of investors in Canada (except for Quebec residents) and the United States, respectively. These proceedings are based on allegations that the Company failed to meet its disclosure obligations related to its exposure to market price risk in its segregated funds and variable annuity guaranteed products. The Company may become subject to other similar lawsuits by investors.

The Company believes that its disclosure satisfied applicable disclosure requirements and intends to vigorously defend itself against any claims based on these allegations.

### **(b) Investment commitments**

In the normal course of business, various investment commitments are outstanding which are not reflected in the consolidated financial statements. There were \$3,431 (December 31, 2010 – \$3,154 and January 1, 2010 – \$2,833) of outstanding investment commitments as at December 31, 2011, of which \$373 (December 31, 2010 – \$713 and January 1, 2010 – \$207) mature in 30 days, \$1,513 (December 31, 2010 – \$1,597 and January 1, 2010 – \$1,343) mature in 31 to 365 days and \$1,545 (December 31, 2010 – \$844 and January 1, 2010 – \$1,283) mature after one year.

### (c) Letters of credit

In the normal course of business, third party relationship banks issue letters of credit on the Company's behalf. The Company's businesses utilize letters of credit for which third parties are the beneficiaries, as well as for affiliate reinsurance transactions between subsidiaries of MFC. As at December 31, 2011, letters of credit for which third parties are beneficiary, in the amount of \$82 (December 31, 2010 – \$414 and January 1, 2010 – \$504), were outstanding.

### (d) Guarantees

#### Guarantees regarding Manulife Finance (Delaware), L.P.

MFC has guaranteed the payment of amounts on the \$550 senior debentures due December 15, 2026 and \$650 subordinated debentures due December 15, 2041 issued by MFLP, a wholly owned partnership.

#### Guarantees regarding The Manufacturers Life Insurance Company

On January 29, 2007, MFC provided a subordinated guarantee of Class A and Class B Shares of MLI and any other class of preferred shares that rank on a parity with Class A Shares or Class B Shares of MLI. On November 18, 2011, MFC provided a subordinated guarantee of the subordinated debentures issued by MLI on November 18, 2011.

The following table sets forth certain condensed consolidating financial information for MFC.

	MFC (Guarantor)	Manulife Finance (Delaware), L.P.	MLI Consolidated	Other Subsidiaries of MFC on a Combined Basis	Consolidating Adjustments	Total Consolidated Amounts
<b>For the year ended December 31, 2011</b>						
Total revenue	\$ 328	\$ 60	\$ 49,753	\$ 4,248	\$ (3,406)	\$ 50,983
Net income (loss) attributed to shareholders	129	(6)	256	(182)	(68)	129

#### For the year ended December 31, 2010

Total revenue	\$ 151	\$ 56	\$ 36,978	\$ 1,681	\$ (1,248)	\$ 37,618
Net income (loss) attributed to shareholders	(1,663)	(1)	(996)	(567)	1,564	(1,663)

#### As at December 31, 2011

Invested assets	\$ 58	\$ 7	\$ 222,958	\$ 3,497	\$ –	\$ 226,520
Total other assets	29,863	1,631	49,325	9,323	(50,618)	39,524
Segregated funds net assets	–	–	196,058	–	–	196,058
Insurance contract liabilities	–	–	189,359	11,642	(10,635)	190,366
Investment contract liabilities	–	–	2,540	–	–	2,540
Segregated funds net liabilities	–	–	196,058	–	–	196,058
Total other liabilities	5,706	1,491	51,095	507	(10,540)	48,259

#### As at December 31, 2010

Invested assets	\$ 39	\$ 4	\$ 198,283	\$ 2,896	\$ –	\$ 201,222
Total other assets	30,165	1,445	31,386	6,770	(45,341)	24,425
Segregated funds net assets	–	–	199,120	–	–	199,120
Insurance contract liabilities	–	–	157,449	8,601	(7,738)	158,312
Investment contract liabilities	–	–	2,990	–	–	2,990
Segregated funds net liabilities	–	–	199,120	–	–	199,120
Total other liabilities	6,099	1,297	39,517	521	(7,764)	39,670

#### As at January 1, 2010

Invested assets	\$ 3	\$ 3	\$ 187,149	\$ 2,152	\$ (79)	\$ 189,228
Total other assets <sup>(1)</sup>	31,082	1,384	32,316	5,553	(44,346)	25,989
Segregated funds net assets	–	–	190,783	–	–	190,783
Insurance contract liabilities	–	–	147,773	6,942	(6,772)	147,943
Investment contract liabilities	–	–	3,778	–	–	3,778
Segregated funds net liabilities	–	–	190,783	–	–	190,783
Total other liabilities <sup>(1)</sup>	3,827	1,237	37,456	430	(7,030)	35,920

<sup>(1)</sup> During 2011, the Company identified an error related to the initial adoption of IFRS for two of its subsidiaries. The result is an understatement of other liabilities in MLI consolidated of US\$206 and an understatement of other assets in John Hancock Reassurance Company Ltd. of US\$206 as at January 1, 2010 and did not have any impact on the Company's consolidated financial statements. The balances above have been updated to reflect this correction.

#### Guarantees regarding John Hancock Life Insurance Company (U.S.A.) and John Hancock Life Insurance Company of New York

Details of guarantees regarding certain securities issued or to be issued by JHUSA and John Hancock Life Insurance Company of New York are outlined in note 24.

### (e) Pledged assets

In the normal course of business, certain of MFC's subsidiaries pledge their assets in respect of liabilities incurred, strictly for the purpose of providing collateral for the counterparty. In the event of the Company's default, the counterparty is entitled to apply the collateral in order to settle the liability. The pledged assets are returned to the Company if the underlying transaction is terminated or, in the case of derivatives, if the net exposure moves to an asset position due to market value changes.

The amounts pledged were as follows:

As at	December 31,				January 1,	
	2011		2010		2010	
	Bonds	Other	Bonds	Other	Bonds	Other
In respect of:						
Derivatives	\$ 2,723	\$ 14	\$ 1,818	\$ 10	\$ 1,194	\$ 12
Regulatory requirements	219	58	170	51	167	34
Real estate	-	187	-	70	-	85
Repurchase agreements	656	-	486	-	-	-
Non-registered retirement plans in trust	-	374	-	423	-	453
Other	2	-	2	-	1	1
<b>Total</b>	<b>\$ 3,600</b>	<b>\$ 633</b>	<b>\$ 2,476</b>	<b>\$ 554</b>	<b>\$ 1,362</b>	<b>\$ 585</b>

The Company is required to deposit securities with government agencies in U.S. states where it conducts business. As of December 31, 2011, the fair value of securities on deposit was approximately \$38 (December 31, 2010 – \$34 and January 1, 2010 – \$52). These amounts are included under regulatory requirements in the table above.

### (f) Lease obligations

The Company has a number of operating lease obligations, primarily for the use of office space. The future minimum lease payments by year and in aggregate, under non-cancelable operating leases, are presented below:

2012	\$ 131
2013	114
2014	87
2015	63
2016	36
Thereafter	432
<b>Total minimum lease payments</b>	<b>\$ 863</b>

### (g) Restrictions on dividends and capital distributions

Dividends and capital distributions are restricted under the ICA. These restrictions apply to both the Company and its primary operating subsidiary MLI. The ICA prohibits the declaration or payment of any dividend on shares of an insurance company if there are reasonable grounds for believing a company does not have adequate capital and adequate and appropriate forms of liquidity or the declaration or the payment of the dividend would cause the company to be in contravention of any regulation made under the ICA respecting the maintenance of adequate capital and adequate and appropriate forms of liquidity, or of any direction made to the Company by the Superintendent. The ICA also requires an insurance company to notify the Superintendent of the declaration of a dividend at least 15 days prior to the date fixed for its payment. Similarly, the ICA prohibits the purchase for cancellation of any shares issued by an insurance company or the redemption of any redeemable shares or other similar capital transactions, if there are reasonable grounds for believing that the company does not have adequate capital and adequate and appropriate forms of liquidity or the payment would cause the company to be in contravention of any regulation made under the ICA respecting the maintenance of adequate capital and adequate and appropriate forms of liquidity, or any direction made to the company by the Superintendent. These latter transactions would require the prior approval of the Superintendent.

The ICA requires Canadian non-operating insurance companies to maintain, at all times, adequate levels of capital which are assessed by comparing capital available to a risk metric in accordance with Capital Regime for Regulated Insurance Holding Companies and Non-Operating Life Companies, issued by OSFI. OSFI expects holding companies to manage their capital in a manner commensurate with the group risk profile and control environment. See note 15.

Regulated subsidiaries of MFC must also maintain minimum levels of capital. Such amounts of capital are based on the local capital regime and the statutory accounting basis in each jurisdiction. The most significant of these are the Minimum Continuing Capital and Surplus Requirements for MFC's Canadian insurance subsidiaries and the Risk Based Capital requirements for MFC's U.S. insurance subsidiaries. The Company maintains capital in excess of the minimum required in all jurisdictions.

There are additional restrictions on shareholder dividend distributions in foreign jurisdictions. In the U.S., MFC's principal U.S. insurance subsidiary JHUSA is domiciled in the state of Michigan. Michigan regulatory approval is required if a shareholder dividend distribution from a Michigan insurance subsidiary would exceed that subsidiary's earned regulatory surplus. Regulatory approval is also required if the distribution (together with other distributions during the previous 12 months) exceeds the greater of the subsidiary's

statutory net operating income for the previous year and 10 per cent of its surplus determined at the end of the previous year. The determination must be made in accordance with statutory accounting principles. In addition, Michigan law requires that notification be given to the local insurance commissioner no later than five days following declaration, and at least 10 days prior to payment, of any dividend or distribution.

#### **(h) Participating business**

In some territories where the Company maintains participating accounts, there are regulatory restrictions on the amounts of profit that can be transferred to shareholders. Where applicable, these restrictions generally take the form of a fixed percentage of the policyholder dividends. For participating businesses operating as separate "closed blocks", transfers are governed by the terms of MLI's and John Hancock Mutual Life Insurance Company's plans of demutualization.

### **Note 20 Segmented Information**

The Company's reporting segments are U.S. Insurance and U.S. Wealth Management, which combine to form the U.S. Division, as well as the Asia and Canadian Divisions and the Corporate and Other segment. Each division has profit and loss responsibility and develops products, services and distribution strategies based on the profile of its business and the needs of its market. The significant product and service offerings of each segment are:

**Protection (U.S. Insurance, Asia and Canadian Divisions).** Offers a variety of individual life insurance and individual and group long-term care insurance. Products are distributed through multiple distribution channels, including insurance agents, brokers, banks, financial planners, and direct marketing.

**Wealth Management (U.S. Wealth, Asia and Canadian Divisions).** Offers annuities, pension contracts, and mutual fund products and services. These businesses also offer a variety of retirement products to group benefit plans. Annuity contracts provide non-guaranteed, partially guaranteed and fully guaranteed investment options through general and separate account products. The Canadian Wealth Management business also includes Manulife Bank, which offers a variety of deposit and credit products to Canadian customers. These businesses distribute products through multiple distribution channels, including insurance agents and brokers affiliated with the Company, securities brokerage firms, financial planners, pension plan sponsors, pension plan consultants, and banks.

**Corporate and Other Segment.** Comprised of the Investment Division's external asset management business, earnings on assets backing capital, net of amounts allocated to operating divisions, changes in actuarial methods and assumptions, the property and casualty and run-off reinsurance operations and other non-operating items.

Certain allocation methodologies are employed in the preparation of segmented financial information. Indirect expenses are allocated to business segments using allocation formulas applied on a consistent basis, while capital is apportioned to the Company's business segments using a risk-based methodology. The income statement impact of changes in actuarial methods and assumptions (note 8) and the income statement impact of the goodwill impairment charge (note 7) are reported in the Corporate and Other segment.



### Sale of life retrocession business

As described in note 3, the Company sold its life retrocession business to Pacific Life in the third quarter of 2011. As a result of this transaction, the Company's remaining reinsurance operations, consisting of the property and casualty, run-off and International Group Program operations, no longer constitute a separate reportable segment. The results of the property and casualty and run-off operations have been included in the Corporate and Other segment and the results of the International Group Program operations have been included in the U.S. Insurance segment.

By segment For the year ended December 31, 2011	Asia Division	Canadian Division	U.S. Insurance	U.S. Wealth Management	Corporate and Other	Total
<b>Revenue</b>						
<b>Premium income</b>						
Life and health insurance	\$ 4,994	\$ 2,685	\$ 6,141	\$ –	\$ 366	\$ 14,186
Annuities and pensions	840	730	–	1,748	–	3,318
<b>Net premium income</b>	<b>\$ 5,834</b>	<b>\$ 3,415</b>	<b>\$ 6,141</b>	<b>\$ 1,748</b>	<b>\$ 366</b>	<b>\$ 17,504</b>
Net investment income	1,705	6,053	12,107	5,322	1,050	26,237
Other revenue	889	1,983	734	2,853	783	7,242
<b>Total revenue</b>	<b>\$ 8,428</b>	<b>\$ 11,451</b>	<b>\$ 18,982</b>	<b>\$ 9,923</b>	<b>\$ 2,199</b>	<b>\$ 50,983</b>
<b>Contract benefits and expenses</b>						
Life and health insurance	\$ 4,816	\$ 3,934	\$ 15,415	\$ –	\$ 2,150	\$ 26,315
Annuities and pensions	1,630	3,087	–	8,757	–	13,474
<b>Net benefits and claims</b>	<b>\$ 6,446</b>	<b>\$ 7,021</b>	<b>\$ 15,415</b>	<b>\$ 8,757</b>	<b>\$ 2,150</b>	<b>\$ 39,789</b>
Interest expense	70	383	94	11	691	1,249
Goodwill impairment	–	–	–	–	665	665
Other expenses	1,873	2,855	1,841	1,982	581	9,132
<b>Total contract benefits and expenses</b>	<b>\$ 8,389</b>	<b>\$ 10,259</b>	<b>\$ 17,350</b>	<b>\$ 10,750</b>	<b>\$ 4,087</b>	<b>\$ 50,835</b>
Income (loss) before income taxes	\$ 39	\$ 1,192	\$ 1,632	\$ (827)	\$ (1,888)	\$ 148
Income tax recovery (expense)	(120)	(143)	(547)	380	527	97
<b>Net income (loss)</b>	<b>\$ (81)</b>	<b>\$ 1,049</b>	<b>\$ 1,085</b>	<b>\$ (447)</b>	<b>\$ (1,361)</b>	<b>\$ 245</b>
Less net (income) loss attributed to:						
Participating policyholders	50	(139)	–	–	–	(89)
Non-controlling interests	(17)	–	–	–	(10)	(27)
<b>Net income (loss) attributed to shareholders</b>	<b>\$ (48)</b>	<b>\$ 910</b>	<b>\$ 1,085</b>	<b>\$ (447)</b>	<b>\$ (1,371)</b>	<b>\$ 129</b>

### For the year ended December 31, 2010

<b>Revenue</b>						
<b>Premium income</b>						
Life and health insurance	\$ 4,321	\$ 2,615	\$ 6,430	\$ –	\$ 566	\$ 13,932
Annuities and pensions	535	1,240	–	2,391	–	4,166
<b>Net premium income</b>	<b>\$ 4,856</b>	<b>\$ 3,855</b>	<b>\$ 6,430</b>	<b>\$ 2,391</b>	<b>\$ 566</b>	<b>\$ 18,098</b>
Net investment income	1,710	3,942	4,062	2,209	1,239	13,162
Other revenue	837	1,762	698	2,805	256	6,358
<b>Total revenue</b>	<b>\$ 7,403</b>	<b>\$ 9,559</b>	<b>\$ 11,190</b>	<b>\$ 7,405</b>	<b>\$ 2,061</b>	<b>\$ 37,618</b>
<b>Contract benefits and expenses</b>						
Life and health insurance	\$ 3,951	\$ 3,420	\$ 9,570	\$ –	\$ 3,404	\$ 20,345
Annuities and pensions	798	2,213	–	4,231	–	7,242
<b>Net benefits and claims</b>	<b>\$ 4,749</b>	<b>\$ 5,633</b>	<b>\$ 9,570</b>	<b>\$ 4,231</b>	<b>\$ 3,404</b>	<b>\$ 27,587</b>
Interest expense	59	249	44	13	679	1,044
Goodwill impairment	–	–	–	–	2,330	2,330
Other expenses	1,650	2,685	2,028	1,946	673	8,982
<b>Total contract benefits and expenses</b>	<b>\$ 6,458</b>	<b>\$ 8,567</b>	<b>\$ 11,642</b>	<b>\$ 6,190</b>	<b>\$ 7,086</b>	<b>\$ 39,943</b>
Income (loss) before income taxes	\$ 945	\$ 992	\$ (452)	\$ 1,215	\$ (5,025)	\$ (2,325)
Income tax recovery (expense)	(126)	108	171	(333)	979	799
<b>Net income (loss)</b>	<b>\$ 819</b>	<b>\$ 1,100</b>	<b>\$ (281)</b>	<b>\$ 882</b>	<b>\$ (4,046)</b>	<b>\$ (1,526)</b>
Less net (income) loss attributed to:						
Participating policyholders	(65)	(15)	–	–	–	(80)
Non-controlling interests	(42)	–	–	–	(15)	(57)
<b>Net income (loss) attributed to shareholders</b>	<b>\$ 712</b>	<b>\$ 1,085</b>	<b>\$ (281)</b>	<b>\$ 882</b>	<b>\$ (4,061)</b>	<b>\$ (1,663)</b>

The results of the Company's business segments differ from geographic segmentation primarily as a consequence of segmenting the results of the Company's Corporate and Other segment into the different geographic segments to which its businesses pertain.

<b>By geographic location</b>					
<b>For the year ended December 31, 2011</b>	Asia	Canada	United States	Other	Total
<b>Revenue</b>					
<b>Premium income</b>					
Life and health insurance	\$ 5,041	\$ 2,721	\$ 5,890	\$ 534	\$ 14,186
Annuities and pensions	840	730	1,748	-	3,318
<b>Net premium income</b>	<b>\$ 5,881</b>	<b>\$ 3,451</b>	<b>\$ 7,638</b>	<b>\$ 534</b>	<b>\$ 17,504</b>
Net investment income	2,169	6,236	17,767	65	26,237
Other revenue	881	1,970	4,257	134	7,242
<b>Total revenue</b>	<b>\$ 8,931</b>	<b>\$ 11,657</b>	<b>\$ 29,662</b>	<b>\$ 733</b>	<b>\$ 50,983</b>

**For the year ended December 31, 2010**

<b>Revenue</b>					
<b>Premium income</b>					
Life and health insurance	\$ 4,365	\$ 2,675	\$ 6,412	\$ 480	\$ 13,932
Annuities and pensions	535	1,240	2,391	-	4,166
<b>Net premium income</b>	<b>\$ 4,900</b>	<b>\$ 3,915</b>	<b>\$ 8,803</b>	<b>\$ 480</b>	<b>\$ 18,098</b>
Net investment income	1,752	4,533	6,712	165	13,162
Other revenue	752	1,398	4,116	92	6,358
<b>Total revenue</b>	<b>\$ 7,404</b>	<b>\$ 9,846</b>	<b>\$ 19,631</b>	<b>\$ 737</b>	<b>\$ 37,618</b>

## Note 21 Related Parties

### (a) Transactions with related parties

A number of the entities as disclosed in note 22 transacted with the Company during the reporting year in transactions made in the normal course of business. All related party transactions have taken place at terms that would exist in arm's length transactions.

### (b) Compensation of key management personnel

Key management personnel of the Company are those that have the authority and responsibility for planning, directing and controlling the activities of the Company. Directors (both executive and non-executive) and senior management are considered key personnel. Accordingly, the summary of compensation of key management personnel is as follows.

<b>For the years ended December 31,</b>	<b>2011</b>	<b>2010</b>
Short-term employee benefits	<b>\$ 19</b>	\$ 17
Post-employment benefits	<b>2</b>	2
Share-based payments	<b>20</b>	22
Termination benefits	-	2
Other long-term benefits	<b>1</b>	1
<b>Total</b>	<b>\$ 42</b>	\$ 44

## Note 22 Subsidiaries

The following is a list of the directly and indirectly held major operating subsidiaries of Manulife Financial Corporation.

As at December 31, 2011	Ownership Percentage	Address	Description
<b>The Manufacturers Life Insurance Company</b>	100	Toronto, Canada	Leading Canadian-based financial services company that offers a diverse range of financial protection products and wealth management services
Manulife Holdings (Alberta) Limited	100	Calgary, Canada	Holding company
John Hancock Financial Corporation (formerly "John Hancock Holdings (Delaware) LLC")	100	Wilmington, Delaware, U.S.A.	Holding company
The Manufacturers Investment Corporation	100	Michigan, U.S.A.	Holding company
John Hancock Life Insurance Company (U.S.A.)	100	Michigan, U.S.A.	U.S. life insurance company licensed in all states, except New York
John Hancock Subsidiaries LLC	100	Wilmington, Delaware, U.S.A.	Holding company
Declaration Management & Research LLC	100	McLean, Virginia, U.S.A.	Provides institutional investment advisory services
John Hancock Financial Network, Inc.	100	Boston, Massachusetts, U.S.A.	Financial services distribution organization
The Berkeley Financial Group, LLC	100	Boston, Massachusetts, U.S.A.	Holding company
John Hancock Advisers, LLC	100	Boston, Massachusetts, U.S.A.	Investment advisor
John Hancock Funds, LLC	100	Boston, Massachusetts, U.S.A.	U.S. broker-dealer
Hancock Natural Resource Group, Inc.	100	Boston, Massachusetts, U.S.A.	Manager of globally diversified timberland and agricultural portfolios for public and corporate pension plans, high net-worth individuals, foundations and endowments
John Hancock Life Insurance Company of New York	100	New York, U.S.A.	U.S. life insurance company licensed in New York
John Hancock Investment Management Services, LLC	100	Boston, Massachusetts, U.S.A.	Investment advisor
John Hancock Life & Health Insurance Company	100	Boston, Massachusetts, U.S.A.	U.S. life insurance company licensed in all states
John Hancock Distributors LLC	100	Delaware, U.S.A.	U.S. broker-dealer
John Hancock Insurance Agency, Inc.	100	Delaware, U.S.A.	U.S. insurance agency
Manulife Reinsurance Limited	100	Hamilton, Bermuda	Provides life and financial reinsurance primarily to affiliated MFC companies
Manulife Reinsurance (Bermuda) Limited	100	Hamilton, Bermuda	Provides full risk annuity and life financial reinsurance primarily to affiliated MFC companies
Manulife Bank of Canada	100	Waterloo, Canada	Provides integrated banking products and service options not available from an insurance company
Manulife Canada Ltd.	100	Waterloo, Canada	Canadian life insurance and accident and sickness insurance company
FNA Financial Inc.	100	Toronto, Canada	Holding company
Manulife Asset Management Limited	100	Toronto, Canada	Investment counseling, portfolio and mutual fund management in Canada
First North American Insurance Company	100	Toronto, Canada	Canadian property and casualty insurance company
NAL Resources Management Limited	100	Calgary, Canada	Management company for oil and gas properties
Manulife Securities Investment Services Inc.	100	Burlington, Canada	Mutual fund dealer for Canadian operations
Manulife Holdings (Bermuda) Limited	100	Hamilton, Bermuda	Holding company
Manufacturers P&C Limited	100	St. Michael, Barbados	Provides property and casualty and financial reinsurance
Manulife Financial Asia Limited	100	Hong Kong, China	Holding company
Manufacturers Life Reinsurance Limited	100	St. Michael, Barbados	Provides life and financial reinsurance

As at December 31, 2011	Ownership Percentage	Address	Description
Manulife (Vietnam) Limited	100	Ho Chi Minh City, Vietnam	Vietnamese life insurance company
Manulife Asset Management (Vietnam) Company Ltd.	100	Ho Chi Minh City, Vietnam	Vietnamese fund management company
Manulife International Holdings Limited	100	Hong Kong, China	Holding company
Manulife (International) Limited	100	Hong Kong, China	Life insurance company serving Hong Kong and Taiwan
Manulife-Sinochem Life Insurance Co. Ltd.	51	Shanghai, China	Chinese life insurance company
Manulife Asset Management International Holdings Limited	100	St. Michael, Barbados	Holding company
Manulife Asset Management (Hong Kong) Limited	100	Hong Kong, China	Hong Kong investment management and advisory company marketing mutual funds
Manulife Asset Management (Taiwan) Co., Ltd.	100	Taipei, Taiwan	Asset management company
Manulife Life Insurance Company	100	Tokyo, Japan	Japanese life insurance company
Manulife Asset Management (Japan) Limited	100	Tokyo, Japan	Japanese investment management and advisory company
Manulife Insurance (Thailand) Public Company Limited	95.1	Bangkok, Thailand	Thai life insurance company
Manulife Asset Management (Thailand) Company Limited	95.1	Bangkok, Thailand	Investment management
Manulife Holdings Berhad	58.7	Kuala Lumpur, Malaysia	Investment holding company
Manulife Insurance Berhad	58.7	Kuala Lumpur, Malaysia	Malaysian life insurance company
Manulife Asset Management (Malaysia) Sdn Bhd	58.7	Kuala Lumpur, Malaysia	Asset management company
Manulife (Singapore) Pte. Ltd.	100	Singapore	Singaporean life insurance company
Manulife Asset Management (Singapore) Pte. Ltd.	100	Singapore	Asset management company
PT Asuransi Jiwa Manulife Indonesia	100	Jakarta, Indonesia	Indonesian life insurance company
PT Manulife Aset Manajemen Indonesia	100	Jakarta, Indonesia	Indonesian investment management and advisory company marketing mutual funds
The Manufacturers Life Insurance Co. (Phils.), Inc.	100	Manila, Philippines	Filipino life insurance company
Manulife Asset Management (Europe) Holdings Limited	100	London, England	Holding company
Manulife Asset Management (Europe) Limited	100	London, England	Investment management company for Manulife Financial's international funds
EIS Services (Bermuda) Limited	100	Hamilton, Bermuda	Investment holding company
Berkshire Insurance Services Inc.	100	Toronto, Canada	Investment holding company
JH Investments (Delaware) LLC	100	Boston, Massachusetts, U.S.A.	Investment holding company
Manulife Securities Incorporated	100	Burlington, Canada	Investment dealer
Manulife Asset Management (North America) Limited	100	Toronto, Canada	Investment advisor
<b>John Hancock Reassurance Company Ltd.</b>	100	Hamilton, Bermuda	Provides annuity, life, and long-term care reinsurance primarily to affiliated MFC companies

## Note 23 Segregated Funds Net Assets

As at	December 31,		January 1,
	2011	2010	2010
<b>Investments, at market value</b>			
Cash and short-term securities	\$ 1,888	\$ 1,750	\$ 1,802
Bonds	1,000	928	1,133
Stocks and mutual funds	190,926	194,188	185,356
Other investments	2,430	2,426	2,563
Accrued investment income	75	75	76
Other liabilities, net	(261)	(247)	(147)
<b>Total segregated funds net assets</b>	<b>\$196,058</b>	<b>\$199,120</b>	<b>\$190,783</b>

## Changes in Net Assets

For the years ended December 31,	2011	2010
<b>Net policyholder cash flow</b>		
Deposits from policyholders	\$ 21,689	\$ 24,544
Net transfers (to) from general fund	(299)	76
Payments to policyholders	(21,740)	(21,578)
	\$ (350)	\$ 3,042
<b>Investment related</b>		
Interest and dividends	\$ 5,176	\$ 4,948
Net realized and unrealized investment gains (losses)	(8,379)	16,156
	\$ (3,203)	\$ 21,104
<b>Other</b>		
Management and administration fees	\$ (3,367)	\$ (3,302)
Transfer to mutual funds resulting from restructuring of the Hong Kong pension business	–	(6,614)
Impact of changes in foreign exchange rates	3,858	(5,893)
	\$ 491	\$ (15,809)
Net additions (deductions)	\$ (3,062)	\$ 8,337
Segregated funds net assets, beginning of year	199,120	190,783
<b>Segregated funds net assets, end of year</b>	<b>\$ 196,058</b>	<b>\$ 199,120</b>

### Note 24 Information Provided in Connection with Investments in Deferred Annuity Contracts and *SignatureNotes* Issued or Assumed by John Hancock Life Insurance Company (U.S.A.) and Fixed Investments in Deferred Annuity Contracts to be Issued by John Hancock Life Insurance Company of New York

The following condensed consolidating financial information, presented in accordance with IFRS, and the related disclosure have been included in these consolidated financial statements with respect to JHUSA and John Hancock Life Insurance Company of New York (“JHNY”) in compliance with Regulation S-X and Rule 12h-5 of the United States Securities and Exchange Commission (the “Commission”). These financial statements are incorporated by reference in the registration statements of MFC and its subsidiaries that are described below and which relate to MFC’s guarantee of certain securities to be issued by its subsidiaries.

JHUSA sells deferred annuity contracts that feature a market value adjustment and are registered with the Commission. The deferred annuity contracts contain variable investment options and fixed investment period options. The fixed investment period options enable the participant to invest fixed amounts of money for fixed terms at fixed interest rates, subject to a market value adjustment if the participant desires to terminate a fixed investment period before its maturity date. The annuity contract provides for the market value adjustment to keep the parties whole with respect to the fixed interest bargain for the entire fixed investment period. These fixed investment period options that contain a market value adjustment feature are referred to as “MVAs”.

JHUSA may also sell medium-term notes to retail investors under its *SignatureNotes* program and JHNY may also sell MVAs.

Effective December 31, 2009, John Hancock Variable Life Insurance Company (the “Variable Company”) and John Hancock Life Insurance Company (the “Life Company”) merged with and into JHUSA. In connection with the mergers, JHUSA assumed the Variable Company’s rights and obligations with respect to the MVAs issued by the Variable Company and the Life Company’s rights and obligations with respect to the *SignatureNotes* issued by the Life Company.

MFC fully and unconditionally guaranteed the payment obligations of JHUSA and JHNY under the MVAs and of JHUSA under the *SignatureNotes* (including the MVAs and *SignatureNotes* assumed by JHUSA in the merger), and such MVAs and the *SignatureNotes* were registered with the Commission. The *SignatureNotes* and MVAs assumed or issued by JHUSA and the MVAs issued by JHNY are collectively referred to in this note as the “Guaranteed Securities”. Each of JHUSA and JHNY is, and each of the Variable Company and the Life Company was, a wholly owned subsidiary of MFC.

MFC’s guarantees of the Guaranteed Securities are unsecured obligations of MFC, and are subordinated in right of payment to the prior payment in full of all other obligations of MFC, except for other guarantees or obligations of MFC which by their terms are designated as ranking equally in right of payment with or subordinate to MFC’s guarantees of the Guaranteed Securities.

The laws of the State of New York govern MFC’s guarantees of the *SignatureNotes* issued or assumed by JHUSA and the MVAs issued by JHNY and the laws of the Commonwealth of Massachusetts govern MFC’s guarantees of the MVAs issued or assumed by JHUSA. MFC has consented to the jurisdiction of the courts of New York and Massachusetts. However, because a substantial portion of MFC’s assets are located outside the United States, the assets of MFC located in the United States may not be sufficient to satisfy a judgment given by a federal or state court in the United States to enforce the subordinate guarantees. In general, the federal laws of Canada and the laws of the Province of Ontario, where MFC’s principal executive offices are located, permit an action to be brought in Ontario to enforce such a judgment provided that such judgment is subsisting and unsatisfied for a fixed sum of money and not void or voidable in the United States and a Canadian court will render a judgment against MFC in a certain dollar amount, expressed in Canadian dollars, subject to customary qualifications regarding fraud, violations of public policy, laws limiting the enforcement of

creditor's rights and applicable statutes of limitations on judgments. There is currently no public policy in effect in the Province of Ontario that would support avoiding the recognition and enforcement in Ontario of a judgment of a New York or Massachusetts court on MFC's guarantees of the *Signature* Notes issued or assumed by JHUSA or the MVAs issued by JHNY or a Massachusetts court on guarantees of the MVAs issued or assumed by JHUSA.

MFC is a holding company. The assets of MFC consist primarily of the outstanding capital stock of its subsidiaries and investments in other international subsidiaries. MFC's cash flows primarily consist of dividends and interest payments from its operating subsidiaries, offset by expenses and shareholder dividends and stock repurchases for MFC. As a holding company, MFC's ability to meet its cash requirements, including, but not limited to, paying any amounts due under its guarantees, substantially depends upon dividends from its operating subsidiaries.

These subsidiaries are subject to certain regulatory restrictions under laws in Canada, the United States and certain other countries, which may limit their ability to pay dividends or make contributions or loans to MFC. For example, some of MFC's subsidiaries are subject to restrictions prescribed by the ICA on their ability to declare and pay dividends. The restrictions related to dividends imposed by the ICA are described in note 19(g).

In the United States, insurance laws in Michigan, New York, Massachusetts and Vermont, the jurisdictions in which certain U.S. insurance company subsidiaries of MFC are domiciled, impose general limitations on the payment of dividends and other upstream distributions or loans by these insurance subsidiaries. These limitations are also described in note 19(g).

In Asia, the insurance laws of the jurisdictions in which MFC operates either provide for specific restrictions on the payment of dividends or other distributions or loans by subsidiaries or impose solvency or other financial tests, which could affect the ability of subsidiaries to pay dividends in certain circumstances.

There can be no assurance that any current or future regulatory restrictions in Canada, the United States or Asia will not impair MFC's ability to meet its cash requirements, including, but not limited to, paying any amounts due under its guarantee.

The following condensed consolidating financial information, presented in accordance with IFRS, reflects the effects of the mergers and is provided in compliance with Regulation S-X and in accordance with Rule 12h-5 of the Commission.

### Condensed Consolidating Statement of Financial Position

As at December 31, 2011	Manulife Financial Corporation (Guarantor)	John Hancock Life Insurance Company (U.S.A.) (Issuer)	John Hancock Life Insurance Company of New York (Issuer)	Other Subsidiaries	Consolidation Adjustments	Consolidated Manulife Financial Corporation
<b>Assets</b>						
Invested assets	\$ 58	\$ 90,391	\$ 10,240	\$ 126,327	\$ (496)	\$ 226,520
Investments in unconsolidated subsidiaries	29,472	3,794	1	11,132	(44,399)	–
Reinsurance assets	–	22,376	1,156	3,479	(16,283)	10,728
Other assets	391	21,852	1,038	25,103	(19,588)	28,796
Segregated funds net assets	–	120,711	7,159	70,123	(1,935)	196,058
<b>Total assets</b>	<b>\$ 29,921</b>	<b>\$ 259,124</b>	<b>\$ 19,594</b>	<b>\$ 236,164</b>	<b>\$ (82,701)</b>	<b>\$ 462,102</b>
<b>Liabilities and equity</b>						
Insurance contract liabilities	\$ –	\$ 105,815	\$ 7,135	\$ 94,199	\$ (16,783)	\$ 190,366
Investment contract liabilities	–	1,442	83	1,465	(450)	2,540
Other liabilities	460	19,225	3,642	32,051	(16,634)	38,744
Long-term debt	4,902	–	–	688	(87)	5,503
Liabilities for preferred shares and capital instruments	344	1,031	–	5,004	(2,367)	4,012
Segregated funds net liabilities	–	120,711	7,159	70,123	(1,935)	196,058
Shareholders' equity	24,215	10,900	1,575	32,057	(44,532)	24,215
Participating policyholders' equity	–	–	–	249	–	249
Non-controlling interest in subsidiaries	–	–	–	328	87	415
<b>Total liabilities and equity</b>	<b>\$ 29,921</b>	<b>\$ 259,124</b>	<b>\$ 19,594</b>	<b>\$ 236,164</b>	<b>\$ (82,701)</b>	<b>\$ 462,102</b>



## Condensed Consolidating Statement of Financial Position

As at December 31, 2010	Manulife Financial Corporation (Guarantor)	John Hancock Life Insurance Company (U.S.A.) (Issuer)	John Hancock Life Insurance Company of New York (Issuer)	Other Subsidiaries	Consolidation Adjustments	Consolidated Manulife Financial Corporation
<b>Assets</b>						
Invested assets	\$ 39	\$ 79,971	\$ 9,522	\$ 112,190	\$ (500)	\$ 201,222
Investments in unconsolidated subsidiaries	29,761	3,589	1	10,924	(44,275)	–
Reinsurance assets	–	14,994	895	3,291	(11,348)	7,832
Other assets	404	13,170	512	13,112	(10,605)	16,593
Segregated funds net assets	–	123,657	7,288	69,720	(1,545)	199,120
<b>Total assets</b>	<b>\$ 30,204</b>	<b>\$ 235,381</b>	<b>\$ 18,218</b>	<b>\$ 209,237</b>	<b>\$ (68,273)</b>	<b>\$ 424,767</b>
<b>Liabilities and equity</b>						
Insurance contract liabilities	\$ –	\$ 85,137	\$ 6,608	\$ 78,213	\$ (11,646)	\$ 158,312
Investment contract liabilities	–	1,805	40	1,145	–	2,990
Other liabilities <sup>(1)</sup>	881	12,816	2,913	22,068	(8,853)	29,825
Long-term debt	4,874	–	–	1,017	(50)	5,841
Liabilities for preferred shares and capital instruments	344	1,009	–	4,346	(1,695)	4,004
Segregated funds net liabilities	–	123,657	7,288	69,720	(1,545)	199,120
Shareholders' equity <sup>(1)</sup>	24,105	10,957	1,369	32,252	(44,578)	24,105
Participating policyholders' equity	–	–	–	160	–	160
Non-controlling interest in subsidiaries	–	–	–	316	94	410
<b>Total liabilities and equity</b>	<b>\$ 30,204</b>	<b>\$ 235,381</b>	<b>\$ 18,218</b>	<b>\$ 209,237</b>	<b>\$ (68,273)</b>	<b>\$ 424,767</b>

## Condensed Consolidating Statement of Financial Position

As at January 1, 2010	Manulife Financial Corporation (Guarantor)	John Hancock Life Insurance Company (U.S.A.) (Issuer)	John Hancock Life Insurance Company of New York (Issuer)	Other Subsidiaries	Consolidation Adjustments	Consolidated Manulife Financial Corporation
<b>Assets</b>						
Invested assets	\$ 3	\$ 87,431	\$ 2,162	\$ 100,785	\$ (1,153)	\$ 189,228
Investments in unconsolidated subsidiaries	30,479	3,576	1	13,105	(47,161)	–
Reinsurance assets	–	10,399	598	4,159	(7,112)	8,044
Other assets	603	12,572	34	12,043	(7,307)	17,945
Segregated funds net assets	–	117,355	6,945	67,964	(1,481)	190,783
<b>Total assets</b>	<b>\$ 31,085</b>	<b>\$ 231,333</b>	<b>\$ 9,740</b>	<b>\$ 198,056</b>	<b>\$ (64,214)</b>	<b>\$ 406,000</b>
<b>Liabilities and equity</b>						
Insurance contract liabilities	\$ –	\$ 86,087	\$ 1,136	\$ 68,777	\$ (8,057)	\$ 147,943
Investment contract liabilities	–	2,494	–	1,284	–	3,778
Other liabilities <sup>(1)</sup>	594	11,163	347	21,492	(5,554)	28,042
Long-term debt	2,889	–	–	1,002	(35)	3,856
Liabilities for preferred shares and capital instruments	344	1,063	–	4,404	(1,789)	4,022
Segregated funds net liabilities	–	117,355	6,945	67,964	(1,481)	190,783
Shareholders' equity <sup>(1)</sup>	27,258	13,171	1,312	32,883	(47,366)	27,258
Participating policyholders' equity	–	–	–	80	–	80
Non-controlling interest in subsidiaries	–	–	–	170	68	238
<b>Total liabilities and equity</b>	<b>\$ 31,085</b>	<b>\$ 231,333</b>	<b>\$ 9,740</b>	<b>\$ 198,056</b>	<b>\$ (64,214)</b>	<b>\$ 406,000</b>

<sup>(1)</sup> During 2011, the Company identified an error related to the initial adoption of IFRS for two of its subsidiaries. The result of this error is an understatement of other liabilities and an overstatement of shareholders' retained earnings in JHUSA of US\$206, offset by an understatement of other assets and an understatement in shareholders' retained earnings in John Hancock Reassurance Company Ltd. of US\$206 on the January 1, 2010 opening IFRS statement of financial position for these subsidiaries. The effects of these corrections are not material to the financial statements taken as a whole, however, correcting these items in the current year would have distorted the current year results for JHUSA and 'Other Subsidiaries' expressed in the Condensed Consolidating Financial Statements above. Accordingly, the Company has made the corrections by adjusting opening shareholders' retained earnings as at January 1, 2010. This correction has no effect on the consolidated financial statements of the Company.

## Condensed Consolidating Statement of Income

For the year ended December 31, 2011	Manulife Financial Corporation (Guarantor)	John Hancock Life Insurance Company (U.S.A.) (Issuer)	John Hancock Life Insurance Company of New York (Issuer)	Other Subsidiaries	Consolidation Adjustments	Consolidated Manulife Financial Corporation
<b>Revenue</b>						
Net premium income	\$ –	\$ 5,466	\$ 351	\$ 11,687	\$ –	\$ 17,504
Net investment income (loss)	332	14,944	1,489	10,757	(1,285)	26,237
Net other revenue	(4)	1,883	129	11,499	(6,265)	7,242
<b>Total revenue</b>	<b>\$ 328</b>	<b>\$ 22,293</b>	<b>\$ 1,969</b>	<b>\$ 33,943</b>	<b>\$ (7,550)</b>	<b>\$ 50,983</b>
<b>Contract benefits and expenses</b>						
Net benefits and claims	\$ –	\$ 19,454	\$ 1,532	\$ 23,639	\$ (4,836)	\$ 39,789
Commissions, investment and general expenses	18	2,765	169	7,410	(1,487)	8,875
Goodwill impairment	–	665	–	–	–	665
Other expenses	320	404	16	1,993	(1,227)	1,506
<b>Total contract benefits and expenses</b>	<b>\$ 338</b>	<b>\$ 23,288</b>	<b>\$ 1,717</b>	<b>\$ 33,042</b>	<b>\$ (7,550)</b>	<b>\$ 50,835</b>
<b>(Loss) income before income taxes</b>	<b>\$ (10)</b>	<b>\$ (995)</b>	<b>\$ 252</b>	<b>\$ 901</b>	<b>\$ –</b>	<b>\$ 148</b>
Income tax (expense) recovery	(2)	256	(86)	(71)	–	97
<b>(Loss) income after income taxes</b>	<b>\$ (12)</b>	<b>\$ (739)</b>	<b>\$ 166</b>	<b>\$ 830</b>	<b>\$ –</b>	<b>\$ 245</b>
Equity in net income (loss) of unconsolidated subsidiaries	141	248	–	(491)	102	–
<b>Net income (loss)</b>	<b>\$ 129</b>	<b>\$ (491)</b>	<b>\$ 166</b>	<b>\$ 339</b>	<b>\$ 102</b>	<b>\$ 245</b>
Net income (loss) attributed to:						
Non-controlling interest in subsidiaries	\$ –	\$ –	\$ –	\$ 23	\$ 4	\$ 27
Participating policyholders	–	17	5	100	(33)	89
Shareholders	129	(508)	161	216	131	129
	<b>\$ 129</b>	<b>\$ (491)</b>	<b>\$ 166</b>	<b>\$ 339</b>	<b>\$ 102</b>	<b>\$ 245</b>

## Condensed Consolidating Statement of Income

For the year ended December 31, 2010	Manulife Financial Corporation (Guarantor)	John Hancock Life Insurance Company (U.S.A.) (Issuer)	John Hancock Life Insurance Company of New York (Issuer)	Other Subsidiaries	Consolidation Adjustments	Consolidated Manulife Financial Corporation
<b>Revenue</b>						
Net premium income	\$ –	\$ 6,507	\$ 571	\$ 11,023	\$ (3)	\$ 18,098
Net investment income (loss)	149	6,010	709	7,102	(808)	13,162
Net other revenue	2	1,898	132	7,040	(2,714)	6,358
<b>Total revenue</b>	<b>\$ 151</b>	<b>\$ 14,415</b>	<b>\$ 1,412</b>	<b>\$ 25,165</b>	<b>\$ (3,525)</b>	<b>\$ 37,618</b>
<b>Contract benefits and expenses</b>						
Net benefits and claims	\$ –	\$ 11,209	\$ 1,312	\$ 16,309	\$ (1,243)	\$ 27,587
Commissions, investment and general expenses	28	2,970	192	7,073	(1,543)	8,720
Goodwill impairment	–	1,557	–	773	–	2,330
Other expenses	235	438	10	1,362	(739)	1,306
<b>Total contract benefits and expenses</b>	<b>\$ 263</b>	<b>\$ 16,174</b>	<b>\$ 1,514</b>	<b>\$ 25,517</b>	<b>\$ (3,525)</b>	<b>\$ 39,943</b>
<b>Loss before income taxes</b>	<b>\$ (112)</b>	<b>\$ (1,759)</b>	<b>\$ (102)</b>	<b>\$ (352)</b>	<b>\$ –</b>	<b>\$ (2,325)</b>
Income tax recovery	17	214	40	528	–	799
<b>(Loss) income after income taxes</b>	<b>\$ (95)</b>	<b>\$ (1,545)</b>	<b>\$ (62)</b>	<b>\$ 176</b>	<b>\$ –</b>	<b>\$ (1,526)</b>
Equity in net (loss) income of unconsolidated subsidiaries	(1,568)	(135)	–	(1,659)	3,362	–
<b>Net (loss) income</b>	<b>\$ (1,663)</b>	<b>\$ (1,680)</b>	<b>\$ (62)</b>	<b>\$ (1,483)</b>	<b>\$ 3,362</b>	<b>\$ (1,526)</b>
Net (loss) income attributed to:						
Non-controlling interest in subsidiaries	\$ –	\$ –	\$ –	\$ 45	\$ 12	\$ 57
Participating policyholders	–	(5)	–	65	20	80
Shareholders	(1,663)	(1,675)	(62)	(1,593)	3,330	(1,663)
	<b>\$ (1,663)</b>	<b>\$ (1,680)</b>	<b>\$ (62)</b>	<b>\$ (1,483)</b>	<b>\$ 3,362</b>	<b>\$ (1,526)</b>

## Consolidating Statement of Cash Flows

	Manulife Financial Corporation (Guarantor)	John Hancock Life Insurance Company (U.S.A.) (Issuer)	John Hancock Life Insurance Company of New York (Issuer)	Other Subsidiaries	Consolidation Adjustments	Consolidated Manulife Financial Corporation
<b>For the year ended December 31, 2011</b>						
<b>Operating activities</b>						
Net income (loss)	\$ 129	\$ (491)	\$ 166	\$ 339	\$ 102	\$ 245
Adjustments for non-cash items in net income (loss):						
Equity in net income of unconsolidated subsidiaries	(141)	(248)	–	491	(102)	–
Increase in insurance contract liabilities	–	17,113	482	10,339	–	27,934
(Decrease) increase in investment contract liabilities	–	(488)	–	552	–	64
(Decrease) increase in reinsurance assets	–	(6,301)	(298)	4,747	–	(1,852)
Amortization of premium/discount on invested assets	–	30	52	(57)	–	25
Other amortization	(1)	82	1	263	–	345
Net realized and unrealized (gains) losses including impairments	–	(10,151)	(874)	(5,734)	–	(16,759)
Deferred income tax expense (recovery)	–	264	18	(492)	–	(210)
Stock option expense	–	6	–	17	–	23
Goodwill impairment	–	665	–	–	–	665
Net (loss) income adjusted for non-cash items	\$ (13)	\$ 481	\$ (453)	\$ 10,465	\$ –	\$ 10,480
Dividends from unconsolidated subsidiaries	1,400	37	–	–	(1,437)	–
Changes in policy related and operating receivables and payables	–	2,194	376	(3,717)	–	(1,147)
<b>Cash provided by (used in) operating activities</b>	<b>\$ 1,387</b>	<b>\$ 2,712</b>	<b>\$ (77)</b>	<b>\$ 6,748</b>	<b>\$ (1,437)</b>	<b>\$ 9,333</b>
<b>Investing activities</b>						
Purchases and mortgage advances	\$ –	\$ (27,725)	\$ (6,344)	\$ (48,761)	\$ –	\$ (82,830)
Disposals and repayments	–	24,651	6,004	41,196	–	71,851
Changes in investment broker net receivables and payables	–	1,220	174	363	–	1,757
Notes receivables from affiliates	–	–	–	(203)	203	–
Notes receivables from parent	–	–	–	406	(406)	–
Notes receivables from subsidiaries	28	10	–	–	(38)	–
Capital contribution to unconsolidated subsidiary	(281)	(109)	–	–	390	–
Return of capital from unconsolidated subsidiaries	–	133	–	–	(133)	–
Investment in common shares of subsidiaries	(391)	–	–	–	391	–
<b>Cash (used in) provided by investing activities</b>	<b>\$ (644)</b>	<b>\$ (1,820)</b>	<b>\$ (166)</b>	<b>\$ (6,999)</b>	<b>\$ 407</b>	<b>\$ (9,222)</b>
<b>Financing activities</b>						
Increase (decrease) in repurchase agreements and securities sold but not yet purchased	\$ –	\$ 120	\$ –	\$ (54)	\$ –	\$ 66
Repayment of long-term debt	–	–	–	(396)	–	(396)
Issue of capital instruments, net	–	–	–	547	–	547
Repayment of capital instruments	–	–	–	(550)	–	(550)
Net increase (redemption) of investment contract liabilities	–	83	43	(694)	–	(568)
Funds borrowed, net	–	(6)	–	50	–	44
Secured borrowings from securitization transactions	–	–	–	250	–	250
Changes in bank deposits, net	–	–	–	1,603	–	1,603
Shareholder dividends paid in cash	(716)	–	–	(1)	–	(717)
Distribution to non-controlling interest	–	–	–	(17)	–	(17)
Common shares issued, net	7	–	–	386	(391)	2
Preferred shares issued, net	391	–	–	–	–	391
Dividends paid to parent	–	–	–	(1,437)	1,437	–
Return of capital to parent	–	–	–	(133)	133	–
Capital contributions by parent	–	–	–	390	(390)	–
Notes payable to affiliates	–	203	–	–	(203)	–
Notes payable to parent	–	–	–	(38)	38	–
Notes payable to subsidiaries	(406)	–	–	–	406	–
<b>Cash (used in) provided by financing activities</b>	<b>\$ (724)</b>	<b>\$ 400</b>	<b>\$ 43</b>	<b>\$ (94)</b>	<b>\$ 1,030</b>	<b>\$ 655</b>
<b>Cash and short-term securities</b>						
Increase (decrease) during the year	\$ 19	\$ 1,292	\$ (200)	\$ (345)	\$ –	\$ 766
Effect of foreign exchange rate changes on cash and short-term securities	–	38	9	145	–	192
Balance, January 1	39	1,708	421	9,154	–	11,322
<b>Balance, December 31</b>	<b>\$ 58</b>	<b>\$ 3,038</b>	<b>\$ 230</b>	<b>\$ 8,954</b>	<b>\$ –</b>	<b>\$ 12,280</b>
<b>Cash and short-term securities</b>						
<b>Beginning of year</b>						
Gross cash and short-term securities	\$ 39	\$ 2,063	\$ 443	\$ 9,304	\$ –	\$ 11,849
Net payments in transit, included in other liabilities	–	(355)	(22)	(150)	–	(527)
<b>Net cash and short-term securities, January 1</b>	<b>\$ 39</b>	<b>\$ 1,708</b>	<b>\$ 421</b>	<b>\$ 9,154</b>	<b>\$ –</b>	<b>\$ 11,322</b>
<b>End of year</b>						
Gross cash and short-term securities	\$ 58	\$ 3,363	\$ 255	\$ 9,137	\$ –	\$ 12,813
Net payments in transit, included in other liabilities	–	(325)	(25)	(183)	–	(533)
<b>Net cash and short-term securities, December 31</b>	<b>\$ 58</b>	<b>\$ 3,038</b>	<b>\$ 230</b>	<b>\$ 8,954</b>	<b>\$ –</b>	<b>\$ 12,280</b>
<b>Supplemental disclosures on cash flow information:</b>						
Interest paid	\$ 321	\$ 92	\$ 3	\$ 1,286	\$ (649)	\$ 1,053
Interest received	\$ –	\$ 3,999	\$ 446	\$ 3,995	\$ (39)	\$ 8,401
(Tax refunds received) income taxes paid	\$ (10)	\$ (313)	\$ 71	\$ 507	\$ –	\$ 255

## Consolidating Statement of Cash Flows

	Manulife Financial Corporation (Guarantor)	John Hancock Life Insurance Company (U.S.A.) (Issuer)	John Hancock Life Insurance Company of New York (Issuer)	Other Subsidiaries	Consolidation Adjustments	Consolidated Manulife Financial Corporation
<b>For the year ended December 31, 2010</b>						
<b>Operating activities</b>						
Net (loss) income	\$ (1,663)	\$ (1,680)	\$ (62)	\$ (1,483)	\$ 3,362	\$ (1,526)
Adjustments for non-cash items in net (loss) income:						
Equity in net income of unconsolidated subsidiaries	1,568	135	–	1,659	(3,362)	–
Increase in insurance contract liabilities	–	6,527	872	6,243	–	13,642
Increase (decrease) in investment contract liabilities	–	118	(2)	(38)	–	78
(Decrease) increase in reinsurance assets	–	(2,592)	(250)	3,289	–	447
Amortization of premium/discount on invested assets	–	120	78	(80)	–	118
Other amortization	–	86	1	229	–	316
Net realized and unrealized losses (gains) including impairments	9	(1,016)	(102)	(3,382)	–	(4,491)
Deferred income tax (recovery) expense	(17)	413	(157)	(713)	–	(474)
Stock option expense	–	8	–	17	–	25
Goodwill impairment	–	1,557	–	773	–	2,330
Net (loss) income adjusted for non-cash items	\$ (103)	\$ 3,676	\$ 378	\$ 6,514	\$ –	\$ 10,465
Dividends from unconsolidated subsidiaries	1,360	99	–	–	(1,459)	–
Changes in policy related and operating receivables and payables	(9)	(1,457)	187	2,374	(1)	1,094
<b>Cash provided by (used in) operating activities</b>	<b>\$ 1,248</b>	<b>\$ 2,318</b>	<b>\$ 565</b>	<b>\$ 8,888</b>	<b>\$ (1,460)</b>	<b>\$ 11,559</b>
<b>Investing activities</b>						
Purchases and mortgage advances	\$ –	\$ (28,483)	\$ (3,607)	\$ (44,000)	\$ –	\$ (76,090)
Disposals and repayments	–	23,153	2,852	28,528	–	54,533
Changes in investment broker net receivables and payables	–	74	(2)	11	–	83
Net cash decrease from purchase of subsidiaries	–	–	–	(28)	–	(28)
Capital contribution to unconsolidated subsidiaries	(2,992)	(337)	–	(348)	3,677	–
Return of capital from unconsolidated subsidiaries	–	4	–	–	(4)	–
Notes receivable from affiliates	–	–	–	(69)	69	–
Notes receivable from parent	–	–	–	(148)	148	–
Notes receivable from subsidiaries	229	14	–	–	(243)	–
<b>Cash (used in) provided by investing activities</b>	<b>\$ (2,763)</b>	<b>\$ (5,575)</b>	<b>\$ (757)</b>	<b>\$ (16,054)</b>	<b>\$ 3,647</b>	<b>\$ (21,502)</b>
<b>Financing activities</b>						
Increase (decrease) in repurchase agreements and securities sold but not yet purchased	\$ –	\$ 472	\$ –	\$ 64	\$ –	\$ 536
Issue of long-term debt, net	2,024	(1)	–	–	–	2,024
Repayment of long-term debt	(1)	(1)	–	–	1	(1)
Net (redemption) increase of investment contract liabilities	–	(677)	42	(104)	–	(739)
Funds borrowed, net	–	(2)	–	7	–	5
Secured borrowings from securitization transactions	–	15	–	562	–	577
Changes in bank deposits, net	–	–	–	1,574	–	1,574
Shareholder dividends paid in cash	(691)	–	–	–	–	(691)
Contributions from non-controlling interest	–	–	–	36	–	36
Common shares issued, net	2	–	–	1	–	3
Capital contributions by parent	–	348	–	3,329	(3,677)	–
Return of capital to parent	–	–	–	(4)	4	–
Dividends paid to parent	–	–	(101)	(1,358)	1,459	–
Notes payable to affiliates	69	–	–	–	(69)	–
Notes payable to parent	–	–	–	(243)	243	–
Notes payable to subsidiaries	148	–	–	–	(148)	–
<b>Cash provided by (used in) financing activities</b>	<b>\$ 1,551</b>	<b>\$ 155</b>	<b>\$ (59)</b>	<b>\$ 3,864</b>	<b>\$ (2,187)</b>	<b>\$ 3,324</b>
<b>Cash and short-term securities</b>						
Increase (decrease) during the year	\$ 36	\$ (3,102)	\$ (251)	\$ (3,302)	\$ –	\$ (6,619)
Effect of foreign exchange rate changes on cash and short-term securities	–	(251)	(35)	(53)	–	(339)
Balance, January 1	3	5,061	707	12,509	–	18,280
<b>Balance, December 31</b>	<b>\$ 39</b>	<b>\$ 1,708</b>	<b>\$ 421</b>	<b>\$ 9,154</b>	<b>\$ –</b>	<b>\$ 11,322</b>
<b>Cash and short-term securities</b>						
<b>Beginning of year</b>						
Gross cash and short-term securities	\$ 3	\$ 5,339	\$ 726	\$ 12,737	\$ –	\$ 18,805
Net payments in transit, included in other liabilities	–	(278)	(19)	(228)	–	(525)
<b>Net cash and short-term securities, January 1</b>	<b>\$ 3</b>	<b>\$ 5,061</b>	<b>\$ 707</b>	<b>\$ 12,509</b>	<b>\$ –</b>	<b>\$ 18,280</b>
<b>End of year</b>						
Gross cash and short-term securities	\$ 39	\$ 2,063	\$ 443	\$ 9,304	\$ –	\$ 11,849
Net payments in transit, included in other liabilities	–	(355)	(22)	(150)	–	(527)
<b>Net cash and short-term securities, December 31</b>	<b>\$ 39</b>	<b>\$ 1,708</b>	<b>\$ 421</b>	<b>\$ 9,154</b>	<b>\$ –</b>	<b>\$ 11,322</b>
<b>Supplemental disclosures on cash flow information:</b>						
Interest paid	\$ 207	\$ 156	\$ 4	\$ 659	\$ (162)	\$ 864
Interest received	\$ –	\$ 4,143	\$ 355	\$ 3,544	\$ (20)	\$ 8,022
(Tax refunds received) income taxes paid	\$ (17)	\$ (105)	\$ 49	\$ 176	\$ –	\$ 103

## **Note 25 First-time Adoption of IFRS**

As outlined in note 1, the Company has adopted IFRS as a replacement of previous Canadian GAAP effective January 1, 2011. References to Canadian GAAP throughout this note relate to Canadian GAAP prior to the adoption of IFRS. The Company's opening Consolidated Statement of Financial Position was prepared at January 1, 2010, the Company's date of transition to IFRS (the "Transition Date") in accordance with the requirements of IFRS 1 "First-Time Adoption of International Financial Reporting Standards". This note explains the principal adjustments made by the Company in preparing the opening IFRS Consolidated Statement of Financial Position as at January 1, 2010 compared to the Consolidated Balance Sheet as at December 31, 2009 under Canadian GAAP and the required adjustments between IFRS and previous Canadian GAAP to total equity and total comprehensive income for the 2010 comparative year.

IFRS has been applied retrospectively, except for certain optional and mandatory exemptions from full retrospective application provided for under IFRS 1, as detailed below.

### **(a) First-time adoption elections**

#### **Optional exemptions**

*Business combinations* – The Company has elected to apply IFRS 3 "Business Combinations" prospectively only to business combinations on or after the Transition Date. As a result, business combinations prior to transition have not been restated.

*Share-based payment transactions* – The Company elected to apply IFRS 2 "Share-based Payments" to all equity instruments granted after November 7, 2002 that had not vested by the Transition Date. The Company applied IFRS 2 for all liabilities arising from share-based payment transactions that existed at the Transition Date.

*Insurance contracts* – The Company has elected to maintain the existing Canadian GAAP requirements under CALM for the measurement of its insurance contracts until the new IFRS standard for insurance contracts is completed and becomes effective.

*Fair value or revaluation value as deemed cost* – The Company has elected to use amortized cost of own use property as the deemed cost at the Transition Date. A revaluation of assets in this category was performed on Transition Date.

*Employee benefits* – The Company did not elect prospective application of the IFRS requirements for employee benefits and instead applied the requirements retrospectively.

*Currency translation differences* – The Company elected to reset all cumulative translation gains and losses to zero in opening retained earnings at the Transition Date.

*Designation of financial assets and financial liabilities* – At the Transition Date, consistent with Canadian GAAP, the Company chose to designate bonds and stocks held to support insurance contract liabilities as FVTPL, with realized and unrealized changes in fair value recognized in income. Bonds and stocks supporting the Company's corporate and surplus segments and certain investment contracts have been classified as AFS under IFRS, which are carried at fair value with unrealized gains and losses recorded in OCI. Refer to note 1(d) and note 4(b) for further information.

#### **Mandatory exemptions**

*Estimates* – At the date of transition, the Company's estimates under IFRS are consistent with estimates previously made under previous Canadian GAAP at the same date, after adjusting for differences in accounting policies.

*Derecognition of financial assets and liabilities* – The Company has applied the derecognition requirements in IAS 39 "Financial Instruments: Recognition and Measurement" prospectively to transactions occurring on or after January 1, 2004.

*Hedge accounting* – The Company continued to apply hedge accounting only for those hedging relationships that met the hedge accounting criteria under IFRS. Hedge accounting was discontinued at the Transition Date for any hedge relationships that did not meet the requirements for hedge accounting under IFRS.

**(b) Summary of significant measurement differences between Canadian GAAP and IFRS**

Topic/Adjustment	Summary of differences
<b>(i) Investment adjustments</b>	
<b>Real estate</b>	<p>Under Canadian GAAP, real estate was carried on a move-to-market measurement, with realized gains and losses deferred and amortized. Under IFRS, the accounting for real estate follows two primary models:</p> <ul style="list-style-type: none"> <li>▪ <i>Own use property</i> – measured at depreciated cost less impairment.</li> <li>▪ <i>Investment property</i> – the Company has elected to measure at fair value through earnings.</li> </ul>
<b>Other invested assets</b>	<ul style="list-style-type: none"> <li>▪ <i>Agriculture</i> – Under Canadian GAAP was recorded on a “move-to-market” basis similar to real estate. Under IFRS is measured at fair value through earnings.</li> <li>▪ <i>Private equities</i> – were measured at historical cost less impairments under Canadian GAAP where significant influence is not held over the investment. Under IFRS they are measured at fair value.</li> <li>▪ <i>Impairments of available-for-sale equities</i> – Under IFRS impairments are recognized when declines in the carrying values are significant or prolonged, irrespective of expectations of future recoveries of the carrying values. Under Canadian GAAP the consideration of future recovery was permitted, resulting in additional impairment charges under IFRS.</li> <li>▪ <i>Oil and gas investments</i> – Asset retirement obligations associated with these investments are discounted using a risk-free discount rate under IFRS, as opposed to a risk-adjusted rate under Canadian GAAP.</li> <li>▪ <i>Loan origination costs</i> – Certain internal costs incurred to originate loans issued by Manulife Bank of Canada were included as an adjustment to the carrying value of the loan and are amortized into income over the effective life of the loan or mortgage under Canadian GAAP. These internal costs are expensed as incurred under IFRS.</li> <li>▪ <i>Hedge accounting</i> – Certain hedge relationships under Canadian GAAP did not qualify for hedge accounting under IFRS and/or were subject to a change in hedge effectiveness testing and/or measurement.</li> <li>▪ <i>Mortgage securitizations</i> – Certain mortgages in third party securitization vehicles are accounted for on-balance sheet as secured borrowings under IFRS. These transactions qualified for derecognition and were not recognized on-balance sheet under Canadian GAAP.</li> <li>▪ <i>Foreign exchange gains/losses on debt instruments classified as Available-for-Sale</i> – Are recorded in income under IFRS as opposed to OCI under Canadian GAAP.</li> </ul>
<b>Changes in insurance contract liabilities related to invested asset changes</b>	<ul style="list-style-type: none"> <li>▪ Upon adoption of IFRS and until the new IFRS standard for insurance contracts is effective, the previous Canadian GAAP requirements for the valuation of insurance liabilities (CALM) will be maintained. Under CALM, changes in the carrying value of the assets supporting insurance liabilities highlighted under “investment adjustments” above that are not the result of changes in expected future cash flows are largely offset by a corresponding change in insurance liabilities.</li> </ul>
<b>(ii) Actuarial adjustments</b>	<ul style="list-style-type: none"> <li>▪ <i>Product classification</i> – The definition of insurance contracts under IFRS includes contracts that have significant insurance risk, while the Canadian GAAP definition was based on the form of the contract. Certain contracts that do not now qualify as insurance contracts are measured as financial liabilities at amortized cost or fair value under IFRS. Additionally, for those financial liabilities measured at amortized cost, acquisition costs that were not considered incremental to the issuance of the financial liability were expensed as incurred under IFRS. Previously, these costs were included in the carrying amount of the policyholder liabilities under Canadian GAAP.</li> <li>▪ <i>Embedded derivatives</i> – Certain insurance contracts contain embedded derivatives under IFRS that are presented separately in other assets or other liabilities and measured at fair value through earnings.</li> </ul>
<b>(iii) Consolidation adjustments</b>	<ul style="list-style-type: none"> <li>▪ IFRS requires the consolidation of all entities, including special purpose entities, over which the Company has control. Several entities, including certain private equity investments and financing vehicles that were not consolidated under Canadian GAAP are consolidated under IFRS.</li> </ul>
<b>(iv) Corporate adjustments</b>	<ul style="list-style-type: none"> <li>▪ <i>Goodwill</i> – Is tested at the CGU level under IFRS, a more granular level than a reporting unit under Canadian GAAP, which resulted in an impairment charge upon transition to IFRS and in 2010 and could result in more frequent impairment charges going forward under IFRS.</li> <li>• <i>Investments in leveraged leases</i> – are measured in a similar manner to a capital lease with income recognized on an effective yield basis under IFRS. Income was only recognized during the period in which the net investment in the lease is positive under Canadian GAAP.</li> <li>• <i>Stock-based compensation</i> – IFRS requires the use of the graded vesting method to account for share-based compensation awards that vest in installments over the vesting period as opposed to straight-line recognition applied under Canadian GAAP.</li> </ul>



Topic/Adjustment	Summary of differences
(iv) Corporate adjustments (cont'd)	<ul style="list-style-type: none"> <li>▪ <i>Employee future benefits</i> – Actuarial gains and losses are determined using the fair value of plan assets under IFRS as opposed to the “market-related” value under Canadian GAAP. Where plan benefits are improved under IFRS, past service costs are recognized in income on a straight-line basis until the benefits become vested, unless fully vested in which case they are recognized immediately.</li> <li>▪ <i>Income tax accounting differences</i> – Liabilities are recorded for tax positions under IFRS based on a probability-weighted assessment of the outflows on the range of possible outcomes. Under Canadian GAAP, emphasis was instead placed on the appropriateness of recognizing the tax benefit. Specifically, a tax benefit is only recognized if it is probable that the tax position will be accepted by the relevant tax authority based on its technical merits.</li> </ul>
(v) Diluted earnings per share	<ul style="list-style-type: none"> <li>▪ Under IFRS, convertible financial instruments that contain features enabling the holder to convert their security into common shares must be included in the calculation of diluted earnings per share (“EPS”), irrespective of the likelihood of conversion. Under Canadian GAAP, the inclusion or exclusion of such instruments in the calculation of diluted EPS was based on past experience and expectations of whether these instruments will be settled in cash rather than shares. The impact of including certain convertible preferred shares and debentures issued by the Company in the calculation of diluted EPS resulted in a reduction of two cents and four cents for the first and fourth quarters of 2010, respectively, compared to diluted EPS for the same periods under Canadian GAAP.</li> </ul>

With the exception of the impairment of goodwill in the third quarter of 2010, the initial adoption of IFRS did not have a material impact on the net loss in accordance with IFRS for the year ended December 31, 2010.

A summary of the various earnings impacts to total comprehensive income (loss) as a result of the adoption of IFRS is as follows.

**For the year ended December 31, 2010**

<b>Net loss in accordance with Canadian GAAP</b>	\$ (312)
Add back: non-controlling interest	40
<i>IFRS adjustments increasing (decreasing) reported net income</i>	
(i) <i>Investment adjustments</i>	
Real estate	(93)
Private equity	183
Hedge accounting	(73)
Oil and gas	19
Other invested assets	(6)
Changes in insurance contract liabilities related to invested asset changes	(47)
(ii) <i>Actuarial adjustments</i>	
Product classification	64
Embedded derivatives	(16)
(iii) <i>Consolidation adjustments</i>	(16)
(iv) <i>Corporate adjustments</i>	
Goodwill impairment	(1,291)
Investments in leveraged leases	150
Other adjustments	(87)
Income tax accounting differences	(26)
Non-controlling interest	18
<i>Income tax adjustments on the above</i>	(33)
<b>Net loss in accordance with IFRS</b>	<b>\$ (1,526)</b>
Other comprehensive loss under Canadian GAAP	(1,058)
IFRS adjustments to other comprehensive income (loss) including amounts attributed to participating policyholders and non-controlling interest on:	
Change in unrealized gains on AFS financial assets	34
Change in unrealized gains (losses) on cash flow hedges	14
Translation of foreign operations	183
<b>Total comprehensive loss in accordance with IFRS</b>	<b>\$ (2,353)</b>

A summary of the various adjustments to total equity as a result of the adoption of IFRS is as follows.

As at	December 31, 2010	January 1, 2010
<b>Total equity determined in accordance with Canadian GAAP<sup>(1)</sup></b>	<b>\$ 26,740</b>	<b>\$ 28,774</b>
Reclassification of non-controlling interests to equity under IFRS	254	202
<i>IFRS adjustments increasing (decreasing) reported equity</i>		
<i>Retained earnings</i>		
<i>(i) Investment adjustments</i>		
Real estate	97	194
Private equity	201	23
Agriculture	85	85
Hedge accounting	106	177
Oil and gas	(44)	(61)
Other invested assets	(166)	(160)
Changes in insurance contract liabilities related to invested asset changes	(376)	(333)
<i>(ii) Actuarial adjustments</i>		
Product classification	(53)	(117)
Embedded derivatives	(45)	(28)
<i>(iii) Consolidation adjustments</i>	(99)	(99)
<i>(iv) Corporate adjustments</i>		
Goodwill impairment	(2,025)	(734)
Investments in leveraged leases	(374)	(523)
Other adjustments	(146)	(51)
Income tax accounting differences	(185)	(159)
Income tax adjustments on the above	237	269
Currency translation account reset through equity (see note 25(a))	(5,144)	(5,144)
<i>Accumulated other comprehensive income on:</i>		
AFS financial assets	82	51
Cash flow hedges	44	26
Translation of net foreign operations	5,330	5,148
<i>Non-controlling interest</i>	156	36
<b>Total equity determined in accordance with IFRS</b>	<b>\$ 24,675</b>	<b>\$ 27,576</b>

<sup>(1)</sup> Canadian GAAP opening shareholders' retained earnings as at January 1, 2010, included in Canadian GAAP total equity, have been restated. During the first quarter of 2011, the Company identified errors originating primarily from years prior to the merger with John Hancock Financial Services, Inc. in April 2004. The result of these errors included an understatement of other liabilities of \$133. Because these errors are not material to the consolidated financial statements for prior years, but correcting them in the current year would have materially distorted the current year's result, the Company has corrected the errors by reducing opening shareholders' retained earnings as at January 1, 2010 by \$133.

The Company did not have any material adjustments to the Consolidated Statements of Cash Flows upon first-time adoption of IFRS.

### (c) Summary of key financial statement presentation differences between Canadian GAAP and IFRS

Topic	Summary of differences
Amounts ceded under reinsurance arrangements	Were included as part of: (i) policy liabilities on the statement of financial position, and (ii) premium income and policy benefits and expenses on the income statement under Canadian GAAP. Under IFRS, these balances are presented on a gross basis on both the statement of financial position and income statement under IFRS.
Segregated funds	Under Canadian GAAP were disclosed on the face of the statement of financial position, but not included in the total assets and liabilities. Under IFRS, these balances are included in total assets and liabilities on the statement of financial position.
Investments in leveraged leases	Are classified as investments in capital leases within other investments under IFRS. Previously, these investments were included in private placement bonds. In addition, certain tax balances associated with the investments in leveraged leases were reclassified between deferred tax liabilities, other liabilities and other investments under IFRS.
Deferred tax assets	Are disclosed separately on the face of the statement of financial position under IFRS. Previously, these balances were included in miscellaneous assets under Canadian GAAP. Additionally, certain miscellaneous tax assets, previously included in deferred tax liabilities under Canadian GAAP are now presented in miscellaneous assets under IFRS.
Non-controlling interest	Is included as a separate component of equity on the statement of financial position under IFRS. Under Canadian GAAP, non-controlling interest was included in liabilities. Under IFRS net income includes income attributable to non-controlling interest. Total net income on the income statement is then attributed to controlling interests (shareholders and participating products) and non-controlling interests. The determination of earnings per share will continue to exclude the income attributable to the non-controlling interests.

**Note 26 Subsequent Events**

On February 22, 2012, MFC issued 10 million Class 1 Shares Series 7 ("Class 1 Series 7 Preferred Shares") at a price of \$25 per share, for an aggregate amount of \$250. The Class 1 Series 7 Preferred Shares are entitled to non-cumulative preferential cash dividends, payable quarterly, if and when declared, at a per annum rate of 4.60% until March 19, 2017 after which the dividend rate will be reset every five years at a rate equal to the five year Government of Canada bond yield plus 3.13%. On March 19, 2017 and on March 19 every five years thereafter, the Class 1 Series 7 Preferred Shares will be convertible at the option of the holder into Class 1 Shares Series 8 ("Class 1 Series 8 Preferred Shares"). The Class 1 Series 8 Preferred Shares are entitled to non-cumulative preferential cash dividends, payable quarterly, if and when declared, at a rate equal to the three month Government of Canada Treasury Bill yield plus 3.13%. Subject to regulatory approval, MFC may redeem Class 1 Series 7 Preferred Shares, in whole or in part, at par, on March 19, 2017 and on March 19 every five years thereafter.

On February 17, 2012, MLI issued \$500 in subordinated fixed/floating debentures, which mature June 1, 2022. The debentures are guaranteed by MFC on a subordinated basis. The debentures bear interest at a fixed rate of 4.165% per annum, payable semi-annually for five years and thereafter at the 90-day Bankers' Acceptance rate plus 2.45% payable quarterly. With regulatory approval, MLI may redeem the debentures, in whole or in part, on or after June 1, 2017, at par, together with accrued and unpaid interest. The subordinated debentures form part of the Company's Tier 2B regulatory capital.

**Note 27 Comparatives**

Certain comparative amounts have been reclassified to conform to the current year's presentation.

# EMBEDDED VALUE

Embedded value is a measure of the shareholder value embedded in the current balance sheet of the Company, excluding any value associated with future new business. The change in embedded value between reporting periods, excluding changes due to discount rates, foreign exchange rates and capital, is used as a measure of the value created by the year's operations. Embedded value is a non-GAAP measure.

Manulife Financial's embedded value is defined as the adjusted Canadian IFRS shareholders' equity plus the value of in-force business. The adjusted Canadian IFRS shareholders' equity is the fiscal year end Canadian IFRS shareholders' equity adjusted for goodwill and intangibles, fair value of surplus assets, third party debt and pension liabilities. The value of in-force business is the present value of expected future Canadian IFRS earnings on in-force business less the present value cost of holding capital required to support the in-force business. Required capital uses the Canadian MCCR required capital framework.

As at December 31, 2011, Manulife Financial's embedded value was \$36.1 billion, a decrease of \$3.2 billion from December 31, 2010. Normal operating activities reduced embedded value by \$1.1 billion as interest on last year's embedded value and the embedded value created by new business was more than offset by experience variances and the impact of actuarial assumption changes. Due to the significant decline in risk free interest rates this year, we altered our method for determining the discount rate from one based on current risk free rates to one based on a long-term moving average of risk free rates, similar to the Ultimate Reinvestment Rate used in the valuation of policy liabilities. Thus, non-operational items reduced embedded value by \$2.1 billion due to the higher discount rate that resulted from this method change as well as the impact of shareholder dividends, partly offset by favourable currency impacts due to the appreciation of the U.S. dollar and Japanese yen.

## Embedded Value

For the years ended December 31,

(C\$ in millions unless otherwise stated)

	2011	2010
<b>Embedded value as at January 1 (CGAAP)</b>	<b>\$ 39,303</b>	\$ 40,790
Interest on embedded value	<b>2,808</b>	3,168
New business	<b>1,086</b>	1,841
Experience variances and changes in actuarial assumptions	<b>(5,029)</b>	(4,851)
<b>Embedded value before discount rate/currency and capital movements</b>	<b>\$ 38,168</b>	\$ 40,948
Discount rate changes	<b>(2,416)</b>	1,766
Surplus yield changes	<b>(12)</b>	(1,812)
Currency	<b>1,171</b>	(935)
Common shareholder dividends	<b>(936)</b>	(927)
Other capital movements <sup>(1)</sup>	<b>90</b>	263
<b>Embedded value as at December 31</b>	<b>\$ 36,065</b>	\$ 39,303
<b>Embedded value per share</b>	<b>\$ 20.02</b>	\$ 22.11
<b>Annual growth rate in embedded value</b>		
(before the impact of discount rate, currency, dividends and capital changes)	<b>(3)%</b>	0%

<sup>(1)</sup> Includes share issues, repurchases and option exercises.

The embedded value can be reconciled to the Consolidated Financial Statements as follows:

<b>As at December 31,</b> (C\$ in millions unless otherwise stated)	<b>2011</b>	2010
Common shareholders' equity on Consolidated Statement of Financial Position	<b>\$ 22,402</b>	\$ 25,291
Fair value adjustments	<b>(1,247)</b>	(1,142)
Goodwill & (post-tax) intangibles	<b>(4,729)</b>	(7,182)
<b>Value of common shareholders' net equity</b>	<b>\$ 16,426</b>	\$ 16,967
Pre-tax value of expected profit embedded in IFRS policy liabilities (reported actuarial provision for adverse deviation – PfAD) <sup>(1)</sup>	<b>\$ 47,801</b>	\$ 45,035
Adjustments:		
Value of additional policy margins not captured in reported actuarial PfAD	<b>7,437</b>	4,900
Taxes	<b>(14,292)</b>	(13,156)
Converting discount rates from valuation rates to higher cost of capital adjusted discount rates	<b>(12,299)</b>	(7,732)
Cost of locked-in capital	<b>(9,008)</b>	(6,711)
<b>Value of in-force business<sup>(2)</sup></b>	<b>\$ 19,639</b>	\$ 22,336
<b>Embedded value</b>	<b>\$ 36,065</b>	\$ 39,303

<sup>(1)</sup> The reported actuarial PfAD includes non-capitalized segregated fund margins.

<sup>(2)</sup> The 2011 value of in-force Variable Annuity business is \$3,860.

The principal economic assumptions used in the embedded value calculations in 2011 were as follows:

	Canada	U.S.	Hong Kong	Japan
MCCSR ratio	150%	150%	150%	150%
Discount rate	8.50%	8.50%	9.25%	6.25%
Risk premium	4.0%	4.0%	5.0%	4.0%
Yield on surplus assets	4.50%	4.50%	4.50%	2.00%
Jurisdictional income tax rate	26%	35%	16.5%	36%
Foreign exchange rate	n/a	1.0170	0.1309	0.0132

As noted above, the discount rate method was changed for 2011's embedded value to be based on a long-term moving average of risk free rates similar to the Ultimate Reinvestment Rate that is used in the determination of policy liabilities. Risk premiums varying from four to five per cent are added to the long-term risk free rate. However, higher risk premiums were used in some Asian businesses resulting in a weighted average discount rate of 8.4 per cent.

Consistent with normal practice, the assumptions are updated each year to reflect prevailing market rates. The key assumption changes are summarized below:

	Discount Rates		Interest on Surplus			Exchange Rates	
	2011	2010	2011	2010		2011	2010
Canada	<b>8.50%</b>	7.25%	<b>4.50%</b>	4.50%			
U.S.	<b>8.50%</b>	7.50%	<b>4.50%</b>	4.50%	U.S. Dollar	<b>1.0170</b>	0.9946
Hong Kong	<b>9.25%</b>	8.25%	<b>4.50%</b>	4.50%	Hong Kong Dollar	<b>0.1309</b>	0.1280
Japan	<b>6.25%</b>	6.25%	<b>2.00%</b>	2.00%	Japanese Yen	<b>0.0132</b>	0.0123

Embedded value has been calculated using the consolidated financial position of the Company as at September 30, 2011 projected to December 31, 2011, allowing for the actual change in key elements such as the market value of securities, new business contributions and in-force policy experience. The future stream of profits has been calculated on a Canadian IFRS basis in all countries using assumptions consistent with the best estimate assumptions used in the calculation of the actuarial liabilities. Future mortality improvements are recognized in best estimate assumptions on individual insurance business in North America. The expected cost of segregated fund guarantees within the policy liabilities is determined using stochastic techniques. The Company's target equity/debt structure has been utilized, which assumes that 25 per cent of the capital is in the form of debt.

## SOURCE OF EARNINGS

Manulife uses the Source of Earnings ("SOE") to identify the primary sources of gains or losses in each reporting period. It is one of the key tools the Company uses to understand and manage its business. The SOE is prepared following regulatory guidelines prepared by OSFI, and in accordance with draft guidelines set out by the Canadian Institute of Actuaries ("CIA"). The SOE attributes each component of earnings to one of seven categories: expected profit from in-force business, the impact of new business, experience gains or losses (comparing actual to expected outcomes), the impact of management actions and changes in assumptions, earnings on surplus funds, other, and income taxes. In aggregate, these elements explain the \$129 million of shareholders' net income in 2011. Note that for comparative purpose, the 2010 full year earnings have been restated on an IFRS basis.

Expected profit from in-force business represents the formula-driven release of Provisions for Adverse Deviation ("PfADs") on the non-fee income insurance businesses, the expected net income on fee businesses, and the planned margins on one-year renewable businesses such as Group Benefits. PfADs are a requirement of the CIA's Standards of Practice, and represent additional amounts held in excess of the expected cost of discharging policy obligations in order to provide a margin of conservatism. These amounts are released over time as the Company is released from the risks associated with the policy obligations. Reduced fee income on wealth products, the sales of the Life Retrocession business in Reinsurance and a new reinsurance arrangement drove the decrease in 2011 over 2010.

Impact of new business represents the financial impact of new business written in the period, including acquisition expenses. Writing new business creates economic value, which is offset by PfADs and other limits on capitalization of this economic value in the actuarial liabilities. Consequently, the Company reports an overall loss in the statement of operations from new business in the first year. The new business loss in 2011 was lower than in 2010 due to repricing activities and lower volumes of new business, offset by higher expense losses, again due to lower volumes which resulted in lower expense coverage.

Experience gains or losses arise from items such as claims, policy persistency, fee income, and expenses, where the actual experience in the current period differs from the expected results assumed in the policy liabilities. It also includes the experience gains or losses associated with actual investment returns and movements in investment markets differing from those expected on assets supporting the liabilities. For the majority of businesses, the expected future investment returns underlying the valuation are updated quarterly for investment market movements and this impact is also included in the experience gains and losses. This component also includes the impact of currency changes to the extent they are separately quantified. Experience gains do not include the impact of management actions or changes in assumptions during the reporting period. The experience losses in 2011 were primarily driven by the adverse impact of interest rate and equity market movements on segregated fund guarantees, partially offset by investment gains on general fund liabilities and gains from macro hedges. Additionally, the experience losses in 2011 included a \$174 million Property and Casualty claims loss related to the Japan Earthquake/Tsunami and the New Zealand Earthquake that occurred in the first quarter of 2011. The experience losses in 2010 were primarily driven by the impact of investment markets, including the impact of interest rate movements and equity market movements on the guarantees associated with segregated funds.

Management actions and changes in assumptions reflect the income impact of changes to valuation methods and assumptions for the policy liabilities and other management initiated actions in the year that are outside the normal course of business. All changes in the methods and assumptions impacting the policy liabilities are reported in the Corporate and Other ("Corporate") segment with a total consolidated shareholders' pre-tax earnings impact of \$(1,656) million in 2011 and \$(2,951) million in 2010. Note 8 of the Consolidated Financial Statements provides additional details of the breakdown of the changes in actuarial methods and assumptions. The change in methods and assumptions impact in 2011 includes the impact of updates to mortality assumptions, policyholder behaviour, investment return and expense assumptions as well as various model refinements.

Material management action items reported in the Corporate segment in 2011 include a goodwill impairment charge for U.S. Life Insurance and the expected cost of equity macro hedges, offset by gains from bonds designated as AFS (available-for-sale) and the sale of the Life Retrocession business in Reinsurance. Management action items reported in the Corporate segment in 2010 include losses on the impairment of goodwill, the addition of macro hedges in surplus, and expenses relating to the U.S. subsidiaries restructure project, offset by gains from the sale of bonds designated as available-for-sale.

Management action items reported in business segments are primarily driven by specific business unit actions.

Earnings on surplus funds reflect the actual investment returns on the assets supporting the Company's surplus (shareholders' equity). These assets comprise a diversified portfolio and returns will vary in harmony with the underlying asset categories.

Other represents pre-tax earnings items not included in any other line of the SOE, including non-controlling interest, and any earnings not otherwise explained in the SOE including prior period tax-related adjustments.

Income taxes represent the tax charges to earnings based on the varying tax rates in the jurisdictions in which Manulife Financial conducts business.



Manulife Financial's net income attributed to shareholders for the full year 2011 increased to \$129 million from a loss of \$1,663 million the previous year on an IFRS basis.

#### For the year ended December 31, 2011 on IFRS basis

(C\$ millions)	Asia	Canada	U.S. Insurance	U.S. Wealth	Corporate and Other	Total
Expected profit from in-force business	\$ 837	\$ 890	\$ 693	\$ 757	\$ 107	\$ 3,284
Impact of new business	21	(217)	(156)	(170)	–	(522)
Experience gains (losses)	(970)	223	860	(1,550)	412	(1,025)
Management actions and changes in assumptions	(5)	20	(4)	(23)	(2,045)	(2,057)
Earnings on surplus	193	219	284	168	(360)	504
Other	(4)	(82)	(45)	(9)	(12)	(152)
<b>Income (loss) before income taxes</b>	<b>\$ 72</b>	<b>\$ 1,053</b>	<b>\$ 1,632</b>	<b>\$ (827)</b>	<b>\$ (1,898)</b>	<b>\$ 32</b>
Income tax (expense) recovery	(120)	(143)	(547)	380	527	97
<b>Net income (loss) attributed to shareholders</b>	<b>\$ (48)</b>	<b>\$ 910</b>	<b>\$ 1,085</b>	<b>\$ (447)</b>	<b>\$ (1,371)</b>	<b>\$ 129</b>

#### For the year ended December 31, 2010 restated for IFRS basis

(C\$ millions)	Asia	Canada	U.S. Insurance	U.S. Wealth	Corporate and Other	Total
Expected profit from in-force business	\$ 751	\$ 902	\$ 707	\$ 818	\$ 202	\$ 3,380
Impact of new business	17	(166)	(325)	(102)	1	(575)
Experience gains (losses)	(119)	88	(1,096)	244	(276)	(1,159)
Management actions and changes in assumptions	–	(4)	(12)	80	(4,648)	(4,584)
Earnings on surplus	173	187	239	179	(308)	470
Other	16	(30)	35	(4)	(11)	6
<b>Income (loss) before income taxes</b>	<b>\$ 838</b>	<b>\$ 977</b>	<b>\$ (452)</b>	<b>\$ 1,215</b>	<b>\$ (5,040)</b>	<b>\$(2,462)</b>
Income tax (expense) recovery	(126)	108	171	(333)	979	799
<b>Net income (loss) attributed to shareholders</b>	<b>\$ 712</b>	<b>\$ 1,085</b>	<b>\$ (281)</b>	<b>\$ 882</b>	<b>\$ (4,061)</b>	<b>\$(1,663)</b>

# BOARD OF DIRECTORS

Current as at March 13, 2012

"Director Since" refers to the year of first election to the Board of Directors of The Manufacturers Life Insurance Company.

**Gail C.A. Cook-Bennett**

*Chair of the Board*  
Manulife Financial  
Toronto, ON, Canada  
Director Since: 1978

**Donald A. Guloien**

*President and Chief Executive Officer*  
Manulife Financial  
Toronto, ON, Canada  
Director Since: 2009

**Linda B. Bammann**

*Corporate Director*  
Ocala, FL, U.S.A.  
Director Since: 2009

**Joseph P. Caron**

*President*  
Joseph Caron Incorporated  
Vancouver, BC Canada  
Director Since: 2010

**John M. Cassaday**

*President and Chief Executive Officer*  
Corus Entertainment Inc.  
Toronto, ON, Canada  
Director Since: 1993

**Thomas P. d'Aquino**

*Chairman and Chief Executive*  
Intercounsel, Ltd.  
Ottawa, ON, Canada  
Director Since: 2005

**Richard B. DeWolfe**

*Managing Partner*  
DeWolfe & Company, LLC  
Milton, MA, U.S.A.  
Director Since: 2004

**Robert E. Dineen, Jr.**

*Attorney at Law*  
Sherman, CT, U.S.A.  
Director Since: 1999

**Sheila S. Fraser**

*Corporate Director*  
Ottawa, ON, Canada  
Director Since: 2011

**Scott M. Hand**

*Executive Chairman of the Board*  
Royal Nickel Corporation  
Toronto, ON, Canada  
Director Since: 2007

**Robert J. Harding, FCA**

*Chairman of the Board*  
Brookfield Infrastructure Global  
Advisory Board  
Toronto, ON, Canada  
Director Since: 2008

**Luther S. Helms**

*Managing Partner*  
Sonata Capital Group  
Scottsdale, AZ, U.S.A.  
Director Since: 2007

**Tsun-yan Hsieh**

*Chairman*  
Linhart Group Pte Ltd.  
Singapore  
Director Since: 2011

**Donald R. Lindsay**

*President and Chief Executive Officer*  
Teck Resources Limited  
Vancouver, BC Canada  
Director Since: 2010

**Lorna R. Marsden**

*President Emerita and Professor*  
York University  
Toronto, ON, Canada  
Director Since: 1995

**John R.V. Palmer**

*Corporate Director*  
Toronto, ON, Canada  
Director Since: 2009

**Andrea S. Rosen**

*Corporate Director*  
Toronto, ON, Canada  
Director Since: 2011

**Hugh W. Sloan, Jr.**

*Chairman of the Board*  
Spartan Motors, Inc.  
Bloomfield Village, MI, U.S.A.  
Director Since: 1985

# COMPANY OFFICERS

March 13, 2012

## EXECUTIVE COMMITTEE:

**Donald A. Guloien**

President and Chief Executive Officer

**Michael W. Bell**

Senior Executive Vice President and Chief Financial Officer

**Jean-Paul (J-P.) Bisnaire**

Senior Executive Vice President, Corporate Development and General Counsel

**James R. Boyle**

Senior Executive Vice President, U.S. Division

**Robert A. Cook**

Senior Executive Vice President and General Manager, Asia

**Cindy L. Forbes**

Executive Vice President and Chief Actuary

**Scott S. Hartz**

Executive Vice President, General Account Investments

**Rahim Hirji**

Executive Vice President and Chief Risk Officer

**Stephani E. Kingsmill**

Executive Vice President, Human Resources

**Beverly S. Margolian**

Executive Vice President and Chief Strategy Officer

**Paul L. Rooney**

Senior Executive Vice President and General Manager, Canada

**Warren A. Thomson**

Senior Executive Vice President and Chief Investment Officer

## MANAGEMENT COMMITTEE

(includes members of Executive Committee plus):

**Kevin J.E. Adolphe**

Executive Vice President and Chief Operating Officer, Investment Division

**Nicole L. Boivin**

Senior Vice President and Chief Branding and Communications Officer

**Craig R. Bromley**

Executive Vice President and General Manager, Japan

**Richard J. Brunet**

Executive Vice President, Group Benefits

**Jonathan Chiel**

Executive Vice President and General Counsel, John Hancock

**Joseph M. Cooper**

Executive Vice President, Global Services and Chief Information Officer

**Marc Costantini**

Executive Vice President, Strategic Initiatives U.S. Division, John Hancock Financial Services

**Jean-Francois Courville**

Executive Vice President and Chief Executive Officer, Manulife Asset Management

**Simon R. Curtis**

Executive Vice President, Corporate Development

**Michael J. Doughty**

Executive Vice President, Individual Insurance, Canadian Division

**Steven A. Finch**

Executive Vice President and Chief Financial Officer, U.S. Division - John Hancock Financial Services

**J. Roy Firth**

Executive Vice President, Individual Wealth Management

**James D. Gallagher**

Executive Vice President, Global Compliance

**Philip J. Hampden-Smith**

Executive Vice President and General Manager, South East Asia Operations

**Marianne Harrison**

Executive Vice President and General Manager, John Hancock Long Term Care

**Michael E. Huddart**

Executive Vice President and General Manager, Hong Kong

**Peter J. Levitt**

Executive Vice President and Treasurer

**J. Alex F. Macdonald**

Executive Vice President, Canadian Investments and Global Investment Strategy

**Hugh C. McHaffie**

Executive Vice President, U.S. Wealth Management

**Craig A. Merdian**

Executive Vice President and Chief Financial Officer, Asia Division

**Anthony G. Ostler**

Senior Vice President, Investor Relations

**Marc H. Sterling**

Executive Vice President, Regional Operations, Asia

**Lynda D. Sullivan**

Executive Vice President and Controller

**D. Gregory Taylor**

Executive Vice President and Chief Financial Officer, Canadian Division

# OFFICE LISTING

## Corporate Headquarters

**Manulife Financial Corporation**  
200 Bloor Street East  
Toronto, ON  
Canada M4W 1E5  
Tel: 416 926-3000

## Canadian Division

**Head Office**  
500 King Street North  
Waterloo, ON  
Canada N2J 4C6  
Tel: 519 747-7000

**Group Benefits**  
380 Weber Street North  
Waterloo, ON  
Canada N2J 3J3  
Tel: 519 747-7000

**Individual Insurance and  
Group Retirement Solutions**  
25 Water Street South  
Kitchener, ON  
Canada N2G 4Z4  
Tel: 519 747-7000

**Manulife Investments**  
200 Bloor Street East  
Toronto, ON  
Canada M4W 1E5  
Tel: 519 747-7000

**Manulife Bank of Canada**  
500 King Street North  
Waterloo, ON  
Canada N2J 4C6  
Tel: 519 747-7000

**Manulife Securities**  
1375 Kerns Road  
Burlington, ON  
Canada L7P 4V7  
Tel: 519 747-7000

**Affinity Markets**  
2 Queen Street East  
Toronto, ON  
Canada M5C 3G7  
Tel: 519 747-7000

## U.S. Division

**John Hancock Financial  
Head Office and  
U.S. Wealth Management**  
601 Congress Street  
Boston MA 02210  
U.S.A.  
Tel: 617 663-3000

**U.S. Insurance**  
197 Clarendon Street  
Boston MA 02116  
U.S.A.  
Tel: 617 572-6000

**International Group Program**  
200 Berkeley Street, B-03  
Boston, MA 02116  
U.S.A.  
Tel: 617 572-6000

## International Group Program – Europe

**John Hancock International  
Services S.A.**  
Avenue de Tervuren 270-272  
B-1150 Brussels, Belgium  
Tel: +32 02 775-2940

## International Group Program – Asia

51 Bras Basah Road  
#09 – 00 Manulife Centre  
Singapore 189554  
Tel: +65 6737-1221

## International Group Program – Japan

2/F., Manulife Place Akasaka  
2-21-25 Akasaka, Minato-ku  
Tokyo 107-0052 Japan  
Tel: +81 3 3589-5031

## Asia Division

**Head Office**  
48/F., Manulife Plaza  
33 Hysan Avenue  
Causeway Bay  
Hong Kong  
Tel: +852 2510-5888

## Japan

**Manulife Life Insurance  
Company**  
4-34-1, Kokuryo-cho  
Chofu-shi, Tokyo  
Japan 182-8621  
Tel: +81 4 2489-8080

**Manulife Investments Japan  
Limited**  
15F Marunouchi Trust Tower North  
1-8-1 Marunouchi, Chiyoda-ku  
Tokyo, Japan 100-0005  
Tel: +81 3 6267-1900

## China

**Manulife-Sinochem Life  
Insurance Co. Ltd.**  
6/F., Jin Mao Tower  
88 Century Boulevard  
Pudong New Area  
Shanghai 200121  
P.R. China  
Tel: +86-21-5049-2288

**Manulife-Teda Fund  
Management Co., Ltd.**  
3/F South Block, Winland  
International Financial Center  
No.7 Financial Street  
XiCheng District  
Beijing 100033  
P.R. China  
Tel: +86-10-6657-7777

## Hong Kong

**Manulife (International)  
Limited**  
22/F., Manulife Financial Centre  
223-231 Wai Yip Street  
Kwun Tong, Kowloon  
Hong Kong  
Tel: +852 2510-5600

**Manulife Provident Funds  
Trust Company Limited**  
22/F., Manulife Financial Centre  
223-231 Wai Yip Street  
Kwun Tong, Kowloon  
Hong Kong  
Tel: +852 2510-5600

## Indonesia

**PT. Asuransi Jiwa Manulife  
Indonesia**  
3-17/F., South Tower, Sampoerna  
Strategic Square  
Jl. Jend. Sudirman Kav 45  
Jakarta 12930  
Indonesia  
Tel: +62 21 2555-7788

## Malaysia

**Manulife Holdings Berhad**  
12/F., Menara Manulife  
Jalan Gelenggang  
Damansara Heights  
50490 Kuala Lumpur  
Tel: +60 3 2719-9228

## Philippines

**The Manufacturers Life  
Insurance Co. (Phils.), Inc.**  
LKG Tower  
6801 Ayala Avenue  
1226 Makati City  
Philippines  
Tel: +63 2 884-5433

## Singapore

**Manulife (Singapore) Pte Ltd.**  
51 Bras Basah Road  
#09-00 Manulife Centre  
Singapore 189554  
Tel: +65 6737-1221

## Taiwan

**Manulife Taiwan**  
2/F., 89 Sungren Road  
Taipei 110  
Taiwan  
Tel: +886 2 2757-5888

## Thailand

**Manulife Insurance (Thailand)  
Public Co. Ltd.**  
364/30 Sri Ayudhaya Road  
Rajthevi, Bangkok 10400  
Thailand  
Tel: +66 2 246-7650

## Vietnam

**Manulife (Vietnam) Limited**  
Manulife Plaza  
75 Hoang Van Thai Street  
Tan Phu Ward, District 7  
Ho Chi Minh City  
Vietnam  
Tel: +84 8 5416-6888

## Reinsurance Division

**Manufacturers P&C Limited**  
Manulife Place, Bishop's Court Hill  
Collymore Rock, St. Michael  
Barbados, West Indies BB14004  
Tel: +246 228-4910

## Investment Division

**Manulife Asset Management  
Limited**  
200 Bloor Street East  
Toronto, ON  
Canada M4W 1E5  
Tel: 416 852-2204

**Manulife Asset Management  
(US) LLC**  
101 Huntington Avenue  
Boston, MA 02199  
U.S.A.  
Tel: 617 375-1500

**Manulife Asset Management  
(Asia),  
a division of Manulife Asset  
Management (Hong Kong)  
Limited**  
47/F., Manulife Plaza  
33 Hysan Avenue  
Causeway Bay, Hong Kong  
Tel: +852 2910-2600

**Manulife Asset Management  
(Japan) Limited**  
15F Marunouchi Trust Tower North  
1-8-1 Marunouchi, Chiyoda-ku  
Tokyo, Japan 100-0005  
Tel: +81 3 6267-1940

**Manulife Asset Management  
(Europe) Limited**  
10 King William Street  
London, EC4N 7TW  
England, U.K.  
Tel: +44 20 7256-3500

**Manulife Capital**  
200 Bloor Street East  
Toronto, ON  
Canada M4W 1E5  
Tel: 416 926-5727

**Mortgage Division**  
200 Bloor Street East  
Toronto, ON  
Canada M4W 1E5  
Tel: 1 800 286-1909 (Canada)  
1 800 809-3082 (U.S.A.)

**NAL Resources Management  
Limited**  
550 6th Avenue S.W.  
Calgary, AB  
Canada T2P 0S2  
Tel: 403 294-3600

**Real Estate Division**  
250 Bloor Street East  
8th Floor  
Toronto, ON  
Canada M4W 1E5  
Tel: 416 926-5500

**Hancock Natural Resource Group**  
99 High Street, 26th Floor  
Boston, MA 02110-2320  
U.S.A.  
Tel: 617 747-1600

# GLOSSARY OF TERMS

**Available-For-Sale (AFS) Financial Assets:** Non-derivative financial assets that are designated as available-for-sale or that are not classified as loans and receivables, held-to maturity investments, or held for trading.

**Accumulated Other Comprehensive Income (AOCI):** A separate component of shareholders' equity which includes net unrealized gains and losses on available-for-sale securities, net unrealized gains and losses on derivative instruments designated within an effective cash flow hedge, and unrealized foreign currency translation gains and losses. These items have been recognized in comprehensive income, but excluded from net income.

**Book Value per Share:** Ratio obtained by dividing common shareholders' equity by the number of common shares outstanding at the end of the period.

**Cash Flow Hedges:** A hedge of the exposure to variability in cash flows associated with a recognized asset or liability, a forecasted transaction or a foreign currency risk in an unrecognized firm commitment that is attributable to a particular risk and could affect reported net income.

**Constant Currency Basis:** Quarterly amounts stated on a constant currency basis are calculated using Q4 2010 rates as appropriate. Year-to-date amounts stated on a constant currency basis for earnings, sales and premiums and deposits are calculated using the prior year quarterly rates in effect for each respective quarter.

**Corporate Owned Life Insurance (COLI):** Life insurance purchased by organizations, predominantly to finance nonqualified executive deferred compensation plans.

**Deferred Acquisition Costs (DAC):** Costs directly attributable to the acquisition of new business, principally agents' compensation, which are capitalized on the Company's balance sheet and amortized into income over a specified period.

**Embedded Value:** A measure of shareholders' value embedded in the current balance sheet of the Company, excluding any value associated with future new business.

**Guarantee Value:** Typically within variable annuity products, the guarantee value refers to the level of the policyholder's protected account balance which is unaffected by market fluctuations.

**Hedging:** The practice of making an investment in a market or financial instrument for the purpose of offsetting or limiting potential losses from other investments or financial exposures.

**Dynamic Hedging:** A hedging technique which seeks to limit an investment's market exposure by adjusting the hedge as the underlying security changes (hence, "dynamic").

**Macro hedging:** An investment technique used to offset the risk of an entire portfolio of assets. A macro hedge reflects a more broad-brush approach which is not frequently adjusted to reflect market changes.

**International Financial Reporting Standards (IFRS):** Refers to the international accounting standards that were in Canada, effective January 1, 2011; this was a change from Canadian Generally Accepted Accounting Principles (CGAAP).

**Impaired Assets:** Mortgages, bonds and other investment securities in default where there is no longer reasonable assurance of collection.

**In-force:** Refers to the policies that are currently active.

**Long-Term Care (LTC):** Insurance coverage available on an individual or group basis to provide reimbursement for medical and other services to the chronically ill, disabled, or mentally challenged.

**Market Exposure:** Refers to investments made in a particular type of security and/or market sector. Equity market exposure refers to exposure to public equity markets (including North American and International markets), while interest rate exposure refers to exposure to interest rates, including treasuries, corporate bonds, swaps etc.

**Minimum Continuing Capital and Surplus Requirements (MCCSR):** The ratio of the available capital of a life insurance company to its required capital, each as calculated under the Office of the Superintendent of Financial Institutions' (OSFI) published guidelines.

**New business embedded value ("NBEV"):** Is the change in shareholders' economic value as a result of sales in the period. NBEV is calculated as the present value of expected future earnings after the cost of capital on new business using future mortality, morbidity, policyholder behavior assumptions, expense and investment assumptions used in the pricing of the products sold. The investment assumptions for long duration products are based on the long-term investment assumptions typically determined during the annual planning cycle.

**New Business Strain:** The initial expenses of writing an insurance policy that take place when the policy is written, and have an immediate negative impact on the Company's financial position. Over the life of the contract, future income (premiums, investment income, etc.) is expected to repay this initial outlay.

**Other than Temporary Impairment (OTTI):** A write down that is used if the institution does not expect the fair value of the security to recover prior to its maturity or the expected time of sale.

**Premiums and deposits:** A measure of top line growth. The Company calculates premiums and deposits as the aggregate of (i) general fund premiums net of reinsurance, reported as premiums on the Statement of Operations, (ii) premium equivalents for administration only group benefit contracts, (iii) premiums in the Canadian Group Benefit's reinsurance ceded agreement, (iv) segregated fund deposits, excluding seed money, (v) mutual fund deposits, (vi) deposits into institutional advisory accounts, and (vii) other deposits in other managed funds.

**Policyholder experience:** The actual cost in a reporting period from contingent events such as mortality, lapse and morbidity compared to the expected cost in that same reporting period using best estimate valuation assumptions.

**Provisions for adverse deviation (PfAD):** The amounts contained in the reserves that represent conservatism against potential future deterioration of expected assumptions. These Provisions for Adverse Deviation are released into income over time, and the release of these margins represents the future expected earnings stream.

**Reserves:** The amount of money set aside today, together with the expected future premiums and investment income, will be sufficient to provide for future expected policyholder obligations and expenses while also providing some conservatism in the assumptions. Expected assumptions are reviewed and updated annually.

**Return on common shareholders' equity:** A profitability measure that presents the net income available to common shareholders as a percentage of the capital deployed to earn the income. The Company calculates return on equity using average common shareholders' equity excluding Accumulated Other Comprehensive Income (Loss) on AFS securities and on cash flow hedges.

**Sales** are measured according to product type:

**Individual Insurance:** New annualized premiums reflect the annualized premium expected in the first year of a policy that requires premium payments for more than one year. Sales are reported gross before the impact of reinsurance. Single premium is the lump sum premium from the sale of a single premium product e.g. travel insurance.

**Group Insurance:** Sales include new annualized premiums and ASO premium equivalents on new cases, as well as the addition of new coverages and amendments to contracts, excluding rate increases.

**Individual Wealth Management:** All new deposits are reported as sales. This includes individual annuities, both fixed and variable; segregated fund products; mutual funds; college savings 529 plans; and authorized bank loans and mortgages.

**Group Pensions:** New regular premiums reflect an estimate of expected deposits in the first year of the plan with the Company. Single premium sales reflect the assets transferred from the previous plan provider. Sales include the impact of the addition of a new division or a new product to an existing client as well as increases in the contribution rate for an existing plan.

**Total Capital:** Capital funding that is both unsecured and permanent in nature. Comprises total equity (excluding AOCI on cash flow hedges), non-controlling interest in subsidiaries, liabilities for preferred shares and qualifying capital instruments. For regulatory reporting purposes, the numbers are further adjusted for various additions or deductions to capital as mandated by the guidelines used by OSFI.

**Universal Life Insurance:** A form of permanent life insurance with flexible premiums. The customer may vary the premium payment and death benefit within certain restrictions. The contract is credited with a rate of interest based on the return of a portfolio of assets held by the Company, possibly with a minimum rate guarantee, which may be reset periodically at the discretion of the Company.

**Variable Annuity:** Funds are invested in segregated funds (also called separate accounts in the U.S.) and the return to the contract holder fluctuates according to the earnings of the underlying investments. In some instances, guarantees are provided.

**Variable Universal Life Insurance:** A form of permanent life insurance with flexible premiums in which the cash value and possibly the death benefit of the policy fluctuate according to the investment performance of segregated funds (or separate accounts).

# Shareholder Information

## MANULIFE FINANCIAL

CORPORATE HEADQUARTERS  
200 Bloor Street East  
Toronto, ON Canada M4W 1E5  
Telephone 416 926-3000  
Fax: 416 926-5454  
Web site: www.manulife.com

## ANNUAL MEETING OF SHAREHOLDERS

Shareholders are invited to attend the annual meeting of Manulife Financial Corporation to be held on May 3, 2012 at 11:00 a.m. in the International Room at 200 Bloor Street East, Toronto, ON, Canada M4W 1E5

## STOCK EXCHANGE LISTINGS

Manulife Financial Corporation's common share are listed on:  
The Toronto Stock Exchange (MFC)  
New York Stock Exchange (MFC)  
The Stock Exchange of Hong Kong (00945)  
Philippine Stock Exchange (MFC)

## INVESTOR RELATIONS

Financial analysts, portfolio managers and other investors requiring financial information may contact our Investor Relations Department or access our Web site at www.manulife.com.  
Fax: 416 926-6285  
E-mail: investor\_relations@manulife.com

## SHAREHOLDER SERVICES

**For information or assistance regarding your share account, including dividends, changes of address or ownership, lost certificates, to eliminate duplicate mailings or to receive shareholder material electronically,** please contact our Transfer Agents in Canada, the United States, Hong Kong or the Philippines. If you live outside one of these countries please contact our Canadian Transfer Agent.

## Direct Deposit of Dividends

Shareholders resident in Canada, the United States and Hong Kong may have their Manulife common share dividends deposited directly into their bank account. To arrange for this service please contact our Transfer Agents.

## Dividend Reinvestment Program

Canadian and U.S. resident common shareholders may purchase additional common shares without incurring brokerage or administrative fees by reinvesting their cash dividend through participation in Manulife's Dividend Reinvestment and Share Purchase Programs. For more information please contact our stock transfer agents: in Canada – CIBC Mellon; in the United States – Computershare Shareowner Services.

**For other shareholder issues** please contact Manulife's Shareholder Services department by calling toll free (within North America) to 1 800 795-9767, ext 221022; from outside North America dial 416 926-3000, ext 221022; via fax: 416 926-3503 or via e-mail to shareholder\_services@manulife.com

## More information

Information about Manulife Financial Corporation, including electronic versions of documents and share and dividend information is available at anytime online at [www.manulife.com](http://www.manulife.com)

## TRANSFER AGENTS

### Canada

CIBC Mellon Trust Company  
(Administrative Agent – Canadian Stock Transfer Company)  
P.O. Box 700 Station B  
Montreal, QC Canada H3B 3K3  
Toll Free: 1 800 783-9495  
Collect: 416 682-3864  
E-mail: inquiries@canstockta.com  
Online: www.canstockta.com  
CIBC Mellon offices are also located in Toronto, Halifax, Vancouver and Calgary.

## United States

Computershare Shareowner Services LLC  
480 Washington Blvd.  
Jersey City, NJ 07310 U.S.A.  
Or  
P.O. Box 358015  
Pittsburgh, PA 15252-8015 U.S.A.  
Toll Free: 1 800 249-7702  
E-mail: shrrelations@bnymellon.com  
Online: www.computershare.com

## Hong Kong

Registered Holders:  
Computershare Hong Kong Investor Services Limited  
17M Floor, Hopewell Centre  
183 Queen's Road East,  
Wan Chai, Hong Kong  
Telephone: 852 2862-8555  
Ownership Statement Holders:  
The Hongkong and Shanghai Banking Corporation Limited  
Sub-Custody and Clearing,  
Hong Kong Office  
GPO Box 64 Hong Kong  
Telephone: 852 2288-8355

## Philippines

The Hongkong and Shanghai Banking Corporation Limited  
HSBC Stock Transfer Unit  
7th Floor, HSBC Centre  
3058 Fifth Avenue West  
Bonifacio Global City  
Taguig City, 1634  
Philippines  
Telephone: PLDT 632 581-7595;  
GLOBE 632 976-7595

## AUDITORS

Ernst & Young LLP  
Chartered Accountants  
Licensed Public Accountants  
Toronto, Canada

## DIVIDENDS

### Common Share Dividends Paid for 2010 and 2011

	Record Date	Payment Date	Per Share Amount Canadian (\$)
<b>Year 2011</b>			
Fourth Quarter	February 22, 2012	March 19, 2012	\$ 0.13
Third Quarter	November 15, 2011	December 19, 2011	\$ 0.13
Second Quarter	August 23, 2011	September 19, 2011	\$ 0.13
First Quarter	May 17, 2011	June 20, 2011	\$ 0.13
<b>Year 2010</b>			
Fourth Quarter	February 23, 2011	March 21, 2011	\$ 0.13
Third Quarter	November 16, 2010	December 20, 2010	\$ 0.13
Second Quarter	August 17, 2010	September 20, 2010	\$ 0.13
First Quarter	May 18, 2010	June 21, 2010	\$ 0.13

### Common and Preferred Share Dividend Dates in 2012\*

\* Dividends are not guaranteed and are subject to approval by the Board Of Directors.

Record date	Payment Date	
Common and Preferred Shares	Common Shares	Preferred Shares
February 22, 2012	March 19, 2012	March 19, 2012
May 15, 2012	June 19, 2012	June 19, 2012
August 21, 2012	September 19, 2012	September 19, 2012
November 20, 2012	December 19, 2012	December 19, 2012





Front cover graphic languages (left to right): Indonesian, Chinese, Vietnamese, Japanese  
 Back cover graphic languages (left to right): Chinese, Filipino, Thai, Chinese



 **Manulife Financial**  
 | For your future™

