



Embedded Value 2014 Report

Manulife Financial Corporation



Background:

Consistent with our objective of providing useful information to investors about our Company, and as noted in our 2014 Annual Report under the section “Additional Actuarial Disclosures” we have enhanced our Embedded Value (“EV”) and New Business Value (“NBV”) disclosure as at December 31, 2014. Our revised disclosure provides information that is more aligned with insurers with substantial Asian operations. These enhancements are described in more detail in the section entitled “Changes to Assumptions and Methodology for 2014”. Going forward we intend to provide updated information on EV annually, and NBV quarterly.

EV is a measure of the present value of shareholders’ interests in the expected future distributable earnings on in-force business reflected in the Consolidated Statements of Financial Position of Manulife Financial Corporation (the “Company” or “Manulife”). It does not include any value associated with future new business. The change in EV between reporting periods is used by Manulife’s management as a measure of the value created by the Company’s operations in the reporting period. NBV is the change in EV as a result of sales in the reporting period. EV and NBV are non-GAAP financial measures. 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 financial statements. Non-GAAP financial measures are not defined terms under GAAP and, therefore, 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.

We use a traditional deterministic discounted cash flow methodology for determining our EV and NBV. This methodology makes implicit allowance for all material sources of risk embedded in our products through the use of a risk-adjusted discount rate. It should be noted that this allowance for risk is approximate and may not correspond with the allowance determined using market consistent techniques.

The calculation of EV and NBV necessarily require a number of assumptions with respect to future experience. Future experience may vary from that assumed in the calculation, which may materially impact EV and NBV. See “Caution regarding forward-looking statements” below.

Towers Watson Review Opinion on Embedded Value

Manulife and its subsidiaries have prepared EV results for the year ended December 31, 2014. The EV results, together with a description of the methodology and assumptions that have been used, are shown in this report.

Our scope of work covered:

- A review of methodology and assumptions used to determine the restated 2013 EV, the EV results for the year ended 2014, and the restated NBV for 2014 and the first quarter of 2015.
- A review of the results of Manulife’s calculation of the EV results.

Towers Watson has concluded that:

- The methodology used for the North American and Asian business is consistent with recent industry practice in each respective region as regards traditional embedded value calculations based on discounted values of projected deterministic after-tax cash flows. This methodology makes an overall allowance for risk for the Company through the use of risk discount rates which incorporate risk margins which vary by business, together with an explicit allowance for the cost of holding required capital. Towers Watson has not considered how this compares to a capital markets valuation of such risk (so called “market consistent valuation”);
- The economic assumptions used have made allowance for the Company’s current and expected future asset mix and investment strategy and are internally consistent; and

- The operating assumptions have been set with appropriate regard to past, current and expected future experience, taking into account the nature of the business.

Towers Watson has performed a number of high-level checks on the results of the calculations, without undertaking detailed checks on the models and processes involved, and has confirmed that no issues have been discovered that have a material impact on the disclosed EV as at December 31, 2014, the NBV for the twelve-month period January 1, 2014 to December 31, 2014, the NBV for the three-month period January 1, 2015 to March 31, 2015, the analysis of movement in EV for the twelve-month period December 31, 2013 to December 31, 2014, or the sensitivity analysis.

Changes to Assumptions and Methodology for 2014

We have made several refinements to our EV and NBV assumptions and methodology which in aggregate have caused a reduction in both metrics. The key enhancements were:

- Wealth and asset management¹ (“WAM”) businesses and our bank business have been excluded from both the value of in-force business and NBV to more closely align with the definition of included business used by other insurers with substantial Asian operations as these businesses have little or no insurance risk. Our new WAM disclosure provides more detail on these businesses – please see the “Supplementary Disclosure Wealth and Asset Management” section of our Q1 2015 Statistical Information Package which is available on the Investor Relations section of our website.
- For our Asian business, we have calculated EV and NBV using local statutory balance sheet and local regulatory reserving and capital requirements rather than IFRS reserving for Canadian Insurance Companies and MCCSR capital. With this change, the results for our Asian business are more comparable to those of other insurers with substantial Asian operations.
- We have refined the methodology used to determine our discount rates, which has resulted in generally higher discount rates.
- We have refined the methodology used to determine our yield on surplus asset assumptions, which has resulted in generally lower yield on surplus asset assumptions.

Our 2013 and 2014 results are shown below using our new basis.

Results

Embedded Value Summary

As at December 31, (C\$ millions)	2014	2013 Restated ⁽¹⁾
Adjusted net worth excluding holding company activities⁽²⁾	\$ 35,428	\$ 31,495
Present value of future profits	\$ 28,646	\$ 25,754
Cost of capital	(12,678)	(11,360)
Value of in-force business⁽³⁾	\$ 15,968	\$ 14,394
Holding company activities		
Value of debt and preferred shares	\$ (12,004)	\$ (11,853)
Embedded value	\$ 39,392	\$ 34,036

⁽¹⁾ 2013 figures have been restated to reflect the changes in assumptions and methodology noted above.

⁽²⁾ The adjusted net worth shown above reflects the equity for the Company, adjusted for the items listed under the reconciliation of shareholders' equity to adjusted net worth.

⁽³⁾ The value of in-force business excludes the WAM and bank businesses.

¹ Wealth and asset management is comprised of our fee based business with little or no insurance risk, including mutual funds, pension products and institutional asset management.

As at December 31, 2014, Manulife's EV was \$39.4 billion, an increase of 16% or \$5.4 billion from the restated EV as at December 31, 2013. Normal operating activities increased EV by \$4.0 billion, largely due to the interest on last year's EV, and the EV created by new business. Updates to non-operational items increased EV by \$1.4 billion, as a result of favourable currency impacts due to the appreciation of the U.S. dollar and Hong Kong dollar, partly offset by the reduction in adjusted net worth due to the payment of shareholder dividends of \$1.0 billion.

The restatement resulted in a decrease in EV of \$7.7 billion of which \$4.8 billion was due to the impact of excluding the WAM and bank businesses from the value of in-force component of our EV. The remaining decrease was primarily due to refinements to our assumptions and methodology for determining discount rates and interest on surplus assumptions.

Embedded Value Movement

For the year ended December 31, (C\$ millions)	2014
Embedded value as at January 1	\$ 41,705
Impact of restatement	(7,670)
Current period earnings from WAM and bank business ⁽¹⁾	623
Interest on embedded value	2,791
New business value	760
Changes in investment assumptions and investment experience	577
Changes in operating assumptions and operating experience	(615)
Unallocated overhead expenses ⁽²⁾	(206)
Embedded value before currency and capital movements	\$ 37,965
Currency	\$ 2,290
Common shareholder dividends	(1,029)
Other capital movements ⁽³⁾	166
Embedded value as at December 31	\$ 39,392

⁽¹⁾ The value of in-force business excludes WAM and bank businesses. As a result, the current period earnings from WAM and bank businesses contribute to the total embedded value movement.

⁽²⁾ Unallocated overhead expenses include both Group unallocated expenses and Asia regional office unallocated expenses.

⁽³⁾ Includes share issues, option exercises, preferred share dividends, and fair value adjustments to shareholders' equity.

Embedded Value Components by Division

As at December 31, 2014 (C\$ millions)	Asia	Canada	U.S.	Corporate and Other	Total
Required capital ⁽¹⁾	\$ 2,525	\$ 5,397	\$ 11,786	\$ 149	\$ 19,857
Allocated surplus ⁽¹⁾	2,000	1,925	4,204	7,442	15,571
Adjusted net worth excluding holding company activities⁽²⁾	\$ 4,525	\$ 7,322	\$ 15,990	\$ 7,591	\$ 35,428
Present value of future profits	\$ 7,229	\$ 8,164	\$ 13,201	\$ 52	\$ 28,646
Cost of capital	(1,212)	(3,367)	(8,046)	(53)	(12,678)
Value of in-force business⁽³⁾	\$ 6,017	\$ 4,797	\$ 5,155	\$ (1)	\$ 15,968
Embedded value excluding holding company activities	\$ 10,542	\$ 12,119	\$ 21,145	\$ 7,590	\$ 51,396
Holding company activities					
Value of debt and preferred shares					\$ (12,004)
Total embedded value					\$ 39,392

⁽¹⁾ Required capital is based on the required capital ratios as outlined in the Assumption section below. The allocated surplus by division is based on our capital ratio operating range for each territory in Asia, Canada and the U.S., with the remainder allocated to Corporate and Other.

⁽²⁾ The adjusted net worth shown above reflects the equity for the Company, adjusted for the items listed under the reconciliation of shareholders' equity to adjusted net worth.

⁽³⁾ The value of in-force business excludes WAM and bank businesses.

Reconciliation of Shareholders' Equity to Adjusted Net Worth

As at December 31, (C\$ millions)	2014	2013 Restated ⁽¹⁾
Shareholders' equity on Consolidated Statements of Financial Position (excludes preferred shares)	\$ 30,613	\$ 25,831
Fair value adjustments ⁽²⁾	(473)	(432)
Goodwill & intangibles ⁽³⁾	(4,908)	(4,768)
Impact of differences between IFRS and statutory values of insurance and investment contract liabilities and assets in Asia ⁽⁴⁾	(1,808)	(989)
Value of debt and preferred shares	12,004	11,853
Adjusted net worth excluding holding company activities⁽⁵⁾	\$ 35,428	\$ 31,495

⁽¹⁾ 2013 figures have been restated to reflect the changes in assumptions and methodology noted above.

⁽²⁾ Fair value adjustments are made for the Company's long-term debt, and preferred shares, which are measured at amortized cost under IFRS reporting and fair value for EV reporting. Adjustments are also made for surplus assets which are measured at amortized cost under IFRS reporting but fair value for EV reporting.

⁽³⁾ Goodwill and intangible assets are a component of IFRS adjusted net worth; however, they are excluded from EV.

⁽⁴⁾ This adjustment represents the difference between adjusted net worth for our Asian business as measured under IFRS for Canadian insurance companies, and adjusted net worth for our Asian business as measured under the relevant local statutory accounting basis. The adjustment increased during 2014 primarily due to the impact of lower interest rates in Hong Kong.

⁽⁵⁾ The value of adjusted IFRS shareholder's equity in our 2013 published results was \$20,861 million. The restated figure for adjusted net worth excluding holding company activities above of \$31,495 million is higher primarily due to the impact of excluding holding company activities, partially offset by the impact of differences between IFRS and statutory values of insurance and investment contract liabilities and assets in Asia.

Projected After-tax Discounted Distributable Earnings

(C\$ millions)	Discounted Amount
December 31, 2014	\$ 3,567
2015 – 2019	11,760
2020 – 2024	8,565
2025 – 2029	5,499
2030 – 2034	3,942
2035 and later	6,059
Total	\$ 39,392

The December 31, 2014 value represents allocated surplus, net of holding company activities, as of the valuation date. The remaining cash flows are distributable earnings expected to emerge after the valuation date. Distributable earnings for North America reflect IFRS reserving requirements for Canadian insurance companies and MCCR required capital. Distributable earnings for Asia reflect local regulatory reserving and capital requirements. The sum of the discounted distributable earnings equals the EV as at December 31, 2014.

New Business Value Results

(C\$ millions, unless otherwise stated)	New Business Value			APE ⁽²⁾		New Business Value margin ⁽⁴⁾	
	2015 Q1	2014 restated ⁽¹⁾	2014	2015 Q1	2014	2015 Q1	2014 restated ⁽¹⁾
Canada	\$ 45	\$ 176	\$ 159	\$ 344	\$ 782	13.1%	22.5%
U.S.	6	115	142	136	520	4.4%	22.1%
Asia							
Hong Kong	59	227	205	91	351	64.8%	64.7%
Japan	40	103	182	254	741	15.7%	13.9%
Indonesia and Other Asia	19	76	91	121	438	15.7%	17.4%
Total excluding Wealth and Asset Management, Bank, and Other	169	\$ 697	\$ 779	946	2,832	17.9%	24.6%
Wealth and Asset Management & Bank	N/A	N/A	432				
Other ⁽³⁾	46	63	63				
Grand total	\$ 215	\$ 760	\$ 1,274				

⁽¹⁾ 2014 figures have been restated to reflect changes to assumptions and methodology in 2014 noted above

⁽²⁾ Annualized Premium Equivalent ("APE") is calculated as 100% of annualized first year premiums for recurring premium products, and as 10% of single premiums for single premium products and wealth management products. APE displayed here does not include the WAM or bank businesses.

⁽³⁾ Other NBV includes our Property and Casualty Reinsurance business.

⁽⁴⁾ New Business Value margin is calculated as NBV divided by APE.

The restatement of NBV for the year ended December 31, 2014 resulted in a decrease of \$514 million of which \$432 million was due to the impact of excluding the WAM and bank businesses from our NBV calculations. The remaining decrease was primarily due to the impact of using local reserving and capital requirements in Asia, and refinements to our assumptions and methodology for determining interest on surplus assumptions.

The NBV margin decreased in the U.S. and Canada in the first quarter of 2015. In the U.S. the decrease is primarily due to the impact of lower interest rates, an unfavourable shift in business mix, and seasonally lower sales. The NBV margin in Canada decreased primarily due to higher Group Benefits sales, which have a high initial APE, as well as the impact of lower interest rates.

Sensitivities

The following table outlines the potential impact on EV at December 31, 2014, and NBV for the year ended December 31, 2014 of changes in the assumptions used for EV and NBV.

This includes sensitivities due to specific changes in market prices and interest rate levels projected using internal models as at a specific date. The sensitivities measure the impact of changing one factor at a time and assume that all other factors remain unchanged. For example, the discount rate, public equity return, and alternative long-duration asset ("ALDA") return remain unchanged when we test a 50 basis points ("bps") increase or decrease in fixed income market yields. 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 investment return and future investment activity assumptions; changes in business mix, effective tax rates and other market factors; and the general limitations of our internal models.

The potential impact on EV of changes in assumptions includes impacts due to change in adjusted net worth, the present value of expected future earnings, and the present value of the cost of holding capital to support the in-force business. The potential impact on NBV of changes in assumptions includes impacts due to changes in the present value of expected future earnings on new business, and the present value of the cost of holding capital to support new business. We reflected a change in reserve assumptions only where the assumptions are set with reference to current market rates. This applies to the change in fixed income market yield in North America and some Asia territories.

These estimates assume that the performance of the dynamic hedging program for a 50 bps change in fixed income market yields, and a 10% immediate change in public equity and ALDA market values would not completely offset the gain/loss from the dynamically hedged variable annuity guarantee liabilities. They assume that the hedge assets are based on the actual position at the period end, and that equity hedges in the dynamic program are rebalanced at 5% intervals. In addition, we assume that the macro hedge assets are rebalanced in line with market changes. For variable annuity guarantee liabilities that are dynamically hedged, it is assumed that interest rate hedges are rebalanced at 20 basis point intervals.

The sensitivities should only be viewed as directional estimates of the underlying sensitivities for the respective factors based on the changes in assumptions outlined below. Given the nature of these calculations, we cannot provide assurance that the actual impact on EV or NBV will be as indicated.

Sensitivity of Embedded Value to Changes in Assumptions^{(1),(2)}

As at December 31, 2014

(C\$ millions)	Canada	U.S.	Asia	Corporate and Other	Total
Embedded Value excluding holding company activities	\$ 12,119	\$ 21,145	\$ 10,542	\$ 7,590	\$ 51,396
Value of debt and preferred shares					(12,004)
Total Embedded Value					39,392
Potential impact on Embedded Value of changes in assumptions:					
100 bps increase in discount rate	\$ (918)	\$ (1,696)	\$ (633)	\$ (6)	\$ (3,253)
100 bps decrease in discount rate	1,099	2,031	753	6	3,889
50 bps increase in fixed income market yields for all future years	370	484	563	(82)	1,335
50 bps decrease in fixed income market yields for all future years	(412)	(452)	(977)	91	(1,750)
100 bps increase in public equity and ALDA returns ⁽³⁾	858	1,473	278	4	2,613
100 bps decrease in public equity and ALDA returns ⁽³⁾	(866)	(1,477)	(275)	(5)	(2,623)
10% immediate increase in public equity and ALDA market values ⁽³⁾	665	1,585	537	(156)	2,631
10% immediate decrease in public equity and ALDA market values ⁽³⁾	(684)	(1,857)	(628)	155	(3,014)
Required surplus – relative 25% increase ⁽⁴⁾	(843)	(2,027)	(292)	(9)	(3,171)

⁽¹⁾ For general fund adjustable benefit products subject to minimum rate guarantee, the sensitivities are based on the assumption that credited rates are floored at the minimum.

⁽²⁾ The EV sensitivities include impacts from both adjusted net worth, where applicable, and the value of in-force business. The adjusted net worth is affected by the 50 bps changes in fixed income market yields, which causes changes in the fair value of fixed income assets held, and by the 10% immediate increase and decrease in public equity and ALDA market values.

⁽³⁾ ALDA include commercial real estate, timber and agricultural real estate, oil and gas, and private equities.

⁽⁴⁾ This shows the impact of increasing required capital levels by a relative 25% above those shown in the assumptions table below. For example, the MCCR ratio for Canada would be 187% compared to a base of 150%.

The potential impact on EV of changes in fixed income market yields for all future years is higher in Asia than other divisions primarily due to the impact of changes in fixed income rates on the local reserve basis in Hong Kong. The potential impact on EV of changes in public equity and ALDA returns, and public equity and ALDA market values, is lower in Asia than other divisions primarily due to the lower use of ALDA and the high proportion of participating business.

Sensitivity of New Business Value to Changes in Assumptions^{(1),(2)}

(C\$ millions)	Canada	U.S.	Japan	Hong Kong	Indonesia and Other Asia	Other ⁽⁵⁾	Total
New Business Value for the period January 1 to December 31, 2014	\$ 176	\$ 115	\$ 103	\$ 227	\$ 76	\$ 63	\$ 760
Potential impact on New Business Value of changes in assumptions							
100 bps increase in discount rate	\$ (28)	\$ (18)	\$ (36)	\$ (20)	\$ (11)	\$ (2)	\$(115)
100 bps decrease in discount rate	33	23	43	22	14	2	137
50 bps increase in fixed income market yields for all future years	13	12	78	31	9	1	144
50 bps decrease in fixed income market yields for all future years	(13)	(13)	(88)	(28)	(9)	-	(151)
100 bps increase in public equity and ALDA return ⁽³⁾	7	13	3	19	2	-	44
100 bps decrease in public equity and ALDA return ⁽³⁾	(7)	(12)	(3)	(19)	(2)	-	(43)
10% immediate increase in public equity and ALDA market values ⁽³⁾	5	-	-	5	2	-	12
10% immediate decrease in public equity and ALDA market values ⁽³⁾	(5)	-	-	(7)	(3)	-	(15)
Required surplus – relative 25% increase ⁽⁴⁾	(14)	(18)	(12)	(6)	(4)	(5)	(59)

⁽¹⁾ For general fund adjustable benefit products subject to minimum rate guarantee, the sensitivities are based on the assumption that credited rates are floored at the minimum.

⁽²⁾ For the purpose of NBV sensitivities, assumption changes have been assumed to occur after the point-of-sale. Therefore, the NBV sensitivity gives an indication of how the NBV written during the year would have been affected by an economic shock occurring after the point-of-sale. NBV sensitivities take into account hedging strategies on new business which are intended to be implemented shortly after sale. Actual changes in NBV due to experience being different from assumed may vary from what is shown above as a result of changes in product mix.

⁽³⁾ ALDA include commercial real estate, timber and agricultural real estate, oil and gas, and private equities.

⁽⁴⁾ This shows the impact of increasing required capital levels by a relative 25% above those shown in the assumptions table below. For example, the MCCR ratio for Canada would be 187% compared to a base of 150%.

⁽⁵⁾ Other NBV includes our Property and Casualty Reinsurance business.

The potential impact of changes in fixed income market rates for all future years is relatively higher for NBV than EV. This occurs because invested assets partially mitigate exposure to changes in fixed income market yields, and EV has relatively higher invested assets than NBV.

Methodology

The value of in-force business and NBV do not include the WAM or bank businesses. The adjusted net worth includes all of Manulife's equity, adjusted for the items listed under the reconciliation of shareholders' equity to adjusted net worth.

The value of in-force business has been calculated using the financial position of the Company as at September 30, 2014 projected to December 31, 2014, allowing for the actual change in key elements such as the market value of securities, the contribution of new business and policy experience. As such, management believes that the value is a fair representation of the Company's EV as at December 31, 2014.

The EV is the sum of the adjusted net worth and the value of in-force business. The adjusted net worth is the IFRS shareholders' equity adjusted for goodwill and intangibles, fair value of surplus assets, the value of debt and preferred shares, and local statutory balance sheet, regulatory reserve, and capital for our Asian business².

The value of in-force business in Canada and the U.S. is the present value of expected future IFRS earnings on in-force business less the present value of the cost of holding capital to support the in-force business under the MCCSR framework. The value of in-force business in Asia reflects local statutory earnings and capital requirements.

NBV is the change in EV as a result of sales in the reporting period. NBV is calculated as the present value of shareholders' interests in the expected future distributable earnings on new business, less the present value of the cost of holding capital as calculated under the MCCSR framework in North America, and the local capital requirements in Asia.

Investment assumptions are consistent with product pricing, updated to reflect market assumptions consistent with the market environment in the quarter the business was sold. Best estimate fixed income yields are updated quarterly, and long-term expected yields for ALDA are typically reviewed during the annual review of actuarial assumptions and methods.

Assumptions

The principal economic assumptions used in the EV calculation as at December 31, 2014, and the NBV for the year ended December 31, 2014 were:

Principal Economic Assumptions as at December 31, 2014

Territory	Canada	U.S.	Japan	Hong Kong
Required capital	150% MCCSR	150% MCCSR	400% solvency margin	150% solvency margin
Discount rate	7.5%	8.25%	5.75%	10.0%
Public equity return	8.9%	9.8%	6.0%	11.5%
Jurisdictional income tax rate ^{(1),(2)}	26.5%	35.0%	30.78%	16.5%
Reinvestment assumption for 10-year government bonds:				
Immediate	1.86%	2.17%	0.32%	1.85%
10 years in future	2.74%	2.83%	1.89%	2.83%
20 years in future	3.09%	3.61%	1.93%	2.86%
30 years in future	3.81%	4.09%	2.61%	3.28%

⁽¹⁾ In Japan the consumption tax assumption used is 8%.

⁽²⁾ For Hong Kong, individual insurance products are taxed on a premium tax basis due to a Company election under Hong Kong tax regulations.

² In Japan, as a simplification, the fair value of balance sheet assets is reflected in both the local statutory balance sheet and projected local statutory earnings.

Assumption	Additional information												
Required Capital:	<p>The capital ratios in jurisdictions not included in the table above are as follows:</p> <table> <tr> <td>China</td><td>100% of required minimum solvency margin</td></tr> <tr> <td>Indonesia</td><td>120% of regulatory risk-based capital requirement</td></tr> <tr> <td>Malaysia</td><td>160% of regulatory capital adequacy ratio</td></tr> <tr> <td>The Philippines</td><td>125% of regulatory risk-based capital requirement</td></tr> <tr> <td>Singapore</td><td>200% of regulatory capital adequacy ratio</td></tr> <tr> <td>Vietnam</td><td>100% of requirement minimum solvency margin</td></tr> </table>	China	100% of required minimum solvency margin	Indonesia	120% of regulatory risk-based capital requirement	Malaysia	160% of regulatory capital adequacy ratio	The Philippines	125% of regulatory risk-based capital requirement	Singapore	200% of regulatory capital adequacy ratio	Vietnam	100% of requirement minimum solvency margin
China	100% of required minimum solvency margin												
Indonesia	120% of regulatory risk-based capital requirement												
Malaysia	160% of regulatory capital adequacy ratio												
The Philippines	125% of regulatory risk-based capital requirement												
Singapore	200% of regulatory capital adequacy ratio												
Vietnam	100% of requirement minimum solvency margin												
Discount rate:	A risk-adjusted discount rate is used which is based on the risk profile of the business and makes an allowance for all material sources of risk embedded in our products, the risk that actual experience in future years differs from that assumed, and for the economic cost of capital. The discount rate is set based on our target equity/debt structure, which assumes that 25% of the capital is in the form of debt.												
Public equity returns:	The equity return assumptions are based on long-term historical observed experience. The public equity return assumptions in Asia excluding Hong Kong and Japan vary between 9.0% and 11.0%.												
Risk free interest rates:	The risk free interest rates are based on forward interest rates implied by the equilibrium risk-free market curve at December 31, 2014. The rates transition to the long-term risk free interest rates over a 60 year period. The long term risk free interest rates were developed in accordance with Canadian actuarial standards of practice.												
Expenses	Expenses are allocated to acquisition of new business and maintenance of in-force business and are derived based on internal cost studies. Expenses are then projected into the future with an allowance for inflation. Where certain expenses were identified as being non-recurring and distinct in nature these expenses were excluded from the analysis. An allowance has been made for planned expense savings as a result of the Company's efficiency and effectiveness ("E&E") initiative. The present value of the future expense savings associated with the business covered in our EV disclosure contributed \$900 million to our EV. This includes the savings from our E&E program to be achieved in future years, and not allocated to future new business or businesses not covered in the EV. Unallocated Group office and Asia regional office expenses are charged to EV as incurred.												
Exchange rates:	<p>The foreign exchange rate used for the translation of EV results at December 31, 2013 and 2014 are the respective year-end statements of financial position rates.</p> <p>The foreign exchange rates used for translation of the NBV results each quarter are the respective quarterly statements of income rates.</p>												
Other assumptions:	<p>Other operating assumptions such as mortality, morbidity, lapses and expenses are consistent with best estimate assumptions used in the valuation of insurance and investment contract liabilities as at December 31, 2014 on an IFRS basis.</p> <p>Local statutory earnings in Asia are calculated using assumptions as required under the local reserving basis.</p>												

The principal economic assumptions used in the EV calculation as at December 31, 2013, and the NBV for the year ended December 31, 2013 were:

Restated Principal Economic Assumptions as at December 31, 2013⁽¹⁾

	Canada	U.S.	Japan	Hong Kong
Capital ratio	150% MCCSR	150% MCCSR	400% solvency margin	150% solvency margin
Discount rate	7.5%	8.25%	5.75%	10.0%
Equity return	8.9%	9.8%	6.0%	11.5%
Income tax rate ⁽²⁾	26.5%	35.0%	31.0%	16.5%
Reinvestment assumption for 10-year government bonds				
Immediate	2.83%	3.04%	0.74%	2.31%
10 years in future	3.65%	4.21%	2.58%	2.37%
20 years in future	3.50%	5.91%	2.13%	2.37%
30 years in future	3.50%	4.91%	2.11%	2.38%

⁽¹⁾These assumptions reflect the changes to assumptions and methodology for 2014 noted above.

⁽²⁾ For Hong Kong, individual insurance products are taxed on a premium tax basis due to a Company election under Hong Kong tax regulations.

The principal economic assumptions used in the NBV calculation for the three month period ended March 31, 2015 were the same as at December 31, 2014 except as noted below:

Principal Economic Assumptions for the three month period ended March 31, 2015

	Canada	U.S.	Japan	Hong Kong
Reinvestment assumption for 10-year government bonds				
Immediate	1.34%	1.94%	0.40%	1.44%
10 years in future	2.51%	2.63%	1.96%	2.19%
20 years in future	2.84%	3.45%	1.98%	2.43%
30 years in future	3.66%	3.99%	2.64%	2.99%

Caution regarding forward-looking statements

This report contains forward-looking statements which are made pursuant to the “safe harbor” provisions of Canadian provincial securities laws and the U.S. Private Securities Litigation Reform Act of 1995. Such statements include, but are not limited to projections and statements regarding future experience.

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.

Certain material factors or assumptions are applied in making forward-looking statements, including the assumptions described in this report, 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: 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 applicable in any of the territories in which we operate; changes in regulatory capital requirements in any of the territories in which we operate; our ability to execute strategic plans and changes to strategic plans; downgrades in our insurance subsidiaries financial strength or credit ratings; our ability to maintain our reputation; the establishment of provisions against future tax assets; the accuracy of estimates

relating to morbidity, mortality and policyholder behaviour; the accuracy of other estimates used in applying accounting policies actuarial methods, and EV and NBV 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; unforeseen liabilities or asset impairments arising from acquisitions and dispositions of businesses; our liquidity, including the availability of financing to satisfy existing financial liabilities on 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 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; 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.

We do not undertake to update any forward-looking statements, except as required by law.