



# On target. Delivering growth.

Manulife Financial Corporation 2013 Annual Report

Annual and Special Meeting May 1st, 2014

#### **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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- Develop our Asian opportunity to the fullest.
- Grow our wealth and asset management businesses in Asia, Canada and the U.S.
- Continue to build our balanced Canadian franchise.
- Continue to grow higher-ROE, lower risk U.S. businesses.

### **Enterprise Priorities**

- Become a global leader in retirement solutions and maintain a leadership position in our protection businesses.
- Significantly extend our customer reach by growing and diversifying our distribution channels.
- Build a meaningful competitive advantage by leveraging our global scale, our global capabilities, and our local market focus to achieve operational excellence.
- Leverage technology to enable competitive differentiation in attracting, servicing and retaining customers.
- Attain leading brand rankings across protection and wealth in key markets.
- Build and leverage our status as an employer of choice to attract and retain industry leading talent.
- Maintain capital above our targets and manage risks within our appetite at all times.

C\$ millions, unless stated and per share data	2013	2012	% change⁵
Funds under management 1,5 (billion)	\$599	\$531	8%
Insurance sales 1,5,8	\$2,757	\$3,279	(13%)
Wealth sales 1,5	\$49,681	\$35,940	37%
Core earnings <sup>1</sup>	\$2,617	\$2,249	16%
Common shareholders' net income	\$2,999	\$1,698	77%
Basic earnings per common share	\$1.63	\$0.94	73%
Diluted core earnings per common share	\$1.34	\$1.15	17%
Return on common shareholders' equity	12.8%	7.8%	_
Book value per common share <sup>1</sup>	\$13.98	\$12.15	15%





# Manulife Financial

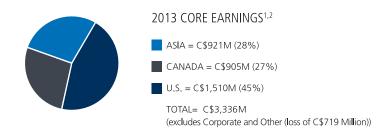
### An International, Diversified Business

Manulife Financial is a leading Canada-based financial services group with principal operations in Asia, Canada and the United States. Clients look to Manulife for 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.

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.



- 3rd largest North American Life Insurer³
- 11th largest Global Life Insurer³
- Principal operations in 3 Key Geographies
- Founded in 1887

# Asia

Manulife Financial has operated in Asia since 1897, beginning in China and Hong Kong. Today, as a pan-Asian financial services company, we have insurance and asset management operations in most of the 12 territories in which we operate, namely Hong Kong, the Philippines, Singapore, Indonesia, Taiwan, China, Japan, Vietnam, Malaysia, Thailand, Cambodia and Macau. We offer a diverse portfolio of protection, savings and wealth management products and services to meet the needs of individuals and corporate clients. We distribute our products through a multi-channel platform across the region, including approximately 57,500 tied agents, bank partners, independent agents, and financial advisors.

#### **Products and Services**

- Individual life insurance
- Group life and health
- Hospital coverage
- Mutual funds
- Annuities
- Group retirement
- Unit linked products

Operating in 12 Asia territories Started Asia Operations in 1897 8,800 Employees

57,500 Agents

#### Sales Rank Data<sup>4</sup>

- #2 Hong Kong MPF, by assets under management
- #3 China Insurance4
- #3 Vietnam Insurance
- #5 Philippines Insurance
- #7 Singapore Insurance
- #8 Hong Kong Insurance
- #8 Indonesia Insurance



28% \$921M

C\$ millions, unless otherwise stated	2013	2012	% change⁵
Funds under management 1,5 (billion)	\$76.6	\$77.7	1%
Insurance sales 1,5,8	\$1,052	\$1,370	(16%)
Wealth sales 1,5	\$8,536	\$5,690	57%
Core earnings <sup>1</sup>	\$921	\$963	(4%)

# Canada

Serving one in five Canadians, we are a leading financial services organization offering a diverse range of protection, estate planning, investment and banking solutions through a diversified multi-channel distribution network.

We provide retail solutions to individuals and business owners, sold mainly through independent advisors. Group life, health, disability and retirement solutions are marketed to Canadian employers through consultants, brokers and independent advisors. We also provide international employee benefits management to multinational corporations. Life, health and specialty products, such as travel insurance, are also offered through alternative distribution channels.

#### **Products and Services**

- Individual life insurance
- Living benefits insurance
- Mutual funds
- Private wealth management
- Segregated Fund products<sup>9</sup>
- Fixed annuities
- Guaranteed interest contracts
- High interest savings accounts
- Mortgages & investment loans
- Group life, health, disability & retirement
- Travel insurance
- Creditor insurance
- International employee benefits management

#### Founded in 1887

8,700 Employees

#### Sales Rank Data<sup>4</sup>

- #1 Group Benefits
- #2 Defined Contribution Group Pensions
- #2 Individual Segregated Funds
- #3 Individual Life and Living Benefits



2013	2012	% change⁵
\$145.2	\$133.2	9%
\$1,125	\$1,310	(14%)
\$12,133	\$10,057	21%
\$905	\$835	8%
	\$145.2 \$1,125 \$12,133	\$145.2 \$133.2 \$1,125 \$1,310 \$12,133 \$10,057

<sup>1</sup> Non-GAAP measure. The Chairman of the Board's Message and the Message from the CEO also include non-GAAP measures. See "Performance and Non-GAAP Measures" on page 79. 2 For more information on core earnings, see page 79. 3 Market Capitalization as of December 31, 2013. 4 Sales rank from most recently available data as at year-end. See "Manulife Financial – Financial Strength Fact Sheet" and "John Hancock Fact Sheet" for further disclosures, both available at manulife.com. China Insurance ranking based on market rank among Foreign Invested Insurance Companies, based on agency produced business, for Manulife-Sinochem Life Insurance Co. Ltd. 5 Percent change for funds under management and insurance and wealth sales are presented on a constant currency basis. 6 Net sales market rank per Strategic Insight based on Intermediary-sold channel 7 Source: Pensions and Investments' "Top Money Managers" survey, based on worldwide institutional data at December 31, 2013.

8 Restated to remove Taiwan insurance sales. 9 Segregated fund products include guarantees. These products are also referred to as variable annuities.

# The United States

Our U.S. Insurance division operates under the John Hancock brand. It provides a full range of life and long-term care insurance products and services designed to help people protect their families, grow their savings, and preserve their wealth.

John Hancock also offers a broad range of personal and family-oriented wealth management products and services focused on individuals and business markets.

We distribute our products through a multi-channel network, including brokerage general agents, producer groups, banks, national wirehouses, regional financial firms and financial planning firms, and broker dealers as well as John Hancock's own Signator Investors, Inc., an independent broker-dealer that supports a national network of independent firms and advisors.

#### **Products and Services**

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

Manulife started U.S. operations in 1903

John Hancock was founded in 1862, and merged with Manulife in 2004 6,000 Employees

#### Sales Rank Data<sup>4</sup>

- #1 Small Case (<\$10M) 401(k) plans
- #4 Lifecycle funds
- #9 Individual Life Insurance
- #9 Mutual Funds<sup>6</sup>



C\$ millions, unless otherwise stated	2013	2012	% change⁵
Funds under management 1,5 (billion)	\$340.4	\$292.7	9%
Insurance sales 1,5	\$580	\$599	(6%)
Wealth sales 1,5	\$29,012	\$20,193	39%
Core earnings <sup>1</sup>	\$1,510	\$1,085	39%

# Asset Management

Manulife Asset Management is the global asset management arm of Manulife Financial, providing comprehensive asset management solutions for institutional investors and investment funds in key markets around the world. As a Top 40 institutional asset manager globally 7, our investment expertise extends across a broad range of public and private asset classes, as well as asset allocation solutions. We service institutional clients such as pension plans, foundations, endowments, and financial institutions, and retail clients through Manulife and John Hancock wealth management affiliates.

With more than 325 Investment Professionals with offices in 17 countries and territories, we are on the ground in every market in which we operate, extracting value through our local knowledge backed by information sharing across our global network. Our high-performing portfolio management teams provide our clients with a full spectrum of products and solutions organized into three major asset class groupings:

#### **Public Markets**

- Global and Emerging Market Equity
- Global Fixed Income
- Domestic Equity and Domestic Fixed Income

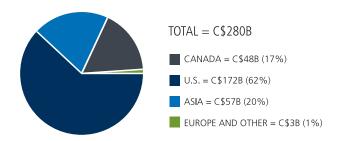
#### Private Markets

- Private Placement Debt
- Commercial Mortgages
- Timberland
- Real Estate Equity
- Private Equity & Mezzanine
- Farmland
- Oil & Gas

#### Asset Allocation Solutions

- Strategic & Tactical
- Multi-Asset Funds
- Customized Solutions

We manage a wide range of assets diversified by geography, product, and asset class.





# Chairman of the Board's Message

To My Fellow Shareholders

**Richard B. DeWolfe**Chairman of the Board

As you read this annual report you will see that your patient investment in Manulife Financial is being rewarded as our transformation continues.

In response to the unprecedented low interest rates combined with equity market volatility and what seems like an endless parade of regulatory and accounting changes, we recognize that simply being the best well run insurance company will not be enough to compete in the world of tomorrow. Strategic planning and corporate vision have become critical elements in response to uncertainty. Technology and shifting demographics are not just a challenge but an opportunity. I believe that our management team understands finding the clear air and accelerating our core strengths will differentiate the company in an industry where a "me too" model has often been enough to survive. Our 126-year history is enviable but if you will pardon the pun "it will not insure our future."

# We continue to see a lot of value available to be unlocked by Manulife over the long term.

**Analyst** 

Our President and CEO, Donald Guloien, has continued his steady leadership demonstrating intellect, instinct, discipline and sound judgment. A strong supporter of the Boston Marathon, Donald attends the event every year and he distinguished himself and John Hancock following last year's tragedy. Together with the Hancock management team and employee volunteers on scene, our core values — strong, reliable, trustworthy and forward thinking — were delivered in full measure and with our early commitment and ongoing participation the One Fund has raised over \$73 million for victims.

In the boardroom, in the office and on the road, Donald has set the tone and together with his senior executive team they have delivered and implemented organizational redesign, robust risk management, significant expense reductions, compliance and education programs and a series of new products and services. Most importantly they are on track to accomplish our 2016 financial objectives and are producing the consistent core earnings which demonstrate operating success.

While we are certainly grateful to see the general improvement in financial markets we are not wooed by the rising tides. Your Board of Directors and Management both recognize we have much work to do and have many challenges ahead if we are to realize the financial rewards of our investments in Asia, our stewardship of long-term care and our strong growth of asset management and wealth products and services. Our employees continue to be a source of great strength to our organization even as our many changes may have imposed new stress and temporary burdens they continued to deliver on our plan.

The Board of Directors has been active and truly engaged bringing a higher level of involvement and individual participation. In addition to our eight scheduled meetings many have taken on special projects providing added insight and oversight in areas of risk management, banking and diversity. Seven Directors, the CEO and I travelled to Japan in 2013, the second largest insurance market in the world, to conduct a full review of our operations and product offerings. Over five days we visited our facilities, interviewed our management team, met with Japanese business leaders, the Canadian Ambassador and Japanese government regulators all to assure that we understood the challenges and opportunities which could result from the Abe Government economic reforms; which to date remain quite positive. The entire Board of Directors will travel to Asiain 2014 to conduct our Strategic Planning meeting and observe our operations first hand.

The Board has been active in fostering a more robust and extensive Investor Relations program supporting a goal of achieving greater global ownership of MFC shares and promoting direct shareholder engagement. Many shareholder views expressed over this past year will be evident in our proxy and annual report: the introduction of Total Shareholder Return (TSR) as an additional performance metric; a revised CEO change of control provision; an enhanced compensation discussion and analysis; and more correlated data on our growing wealth business. These represent some changes prompted by our positive dialogue with investors.

The Board also voted a few significant governance changes. First was the elimination of a mandatory retirement age and the substitution of a twelve year term limit which will allow us to consider highly qualified candidates who might otherwise be ruled out of consideration. The second was approval of the first increase in Director retainer fees in eight years. The firm of Pearl Meyer & Partners was retained to conduct a full review of all Board compensation practices using an appropriate peer group. To ensure that our fees are fair, competitive and attractive on a global basis, we are recommending they be denominated in U.S. dollars, the same as our senior executive management compensation.

We are pleased that the company was once again recognized by the Globe and Mail as a top company in corporate governance. Although we have a significantly smaller board standing for election this year, we continue to appreciate that 31 per cent of our independent directors are women.

As I complete my first full year as Chairman, I am grateful for the opportunity to serve our shareholders and policyholders while working to enhance the efforts of our management, employees and agents. I am thankful for the support and acceptance I have received and am especially inspired by the hard work and commitment of my fellow Board members. It is with these same feelings that I thank our Director, Dr. Lorna Marsden, former President of York University, who retires this year after 19 years (1995) of faithful service and likewise to Mr. Robert Harding who has chaired our Corporate Governance and Nominating Committee and added his voice and wisdom to the many important decisions faced by the Board since 2008.

While this has been a year of extraordinary progress and remarkable results, we remain ever cautious and vigilant working toward greater success at Manulife, a company committed to providing more financial certainty in an uncertain world.

Richard B. DeWolfe

Chairman of the Board



# Message from the CEO

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

In 2013, we were able to deliver excellent advice, innovative products, and performance for our customers around the world. During the year we continued to pursue our vision to be the most professional financial services organization in the world, by providing strong, reliable, trustworthy and forward-thinking solutions for our customers' most significant financial decisions.

Customers entrusted us with \$599 billion to manage on their behalf, supporting life insurance products, retirement plans, as well as other financial needs.

For our more than 20 million customers around the world we paid out claims, cash surrender values, annuity payments and other benefits worth \$19 billion. Our call centres worldwide handled almost 12 million inquiries.

Manulife and John Hancock customers globally had peace of mind knowing they were protected by the solid financial strength of our Company.

Manulife remains our top choice among the lifecos owing to what we perceive to be better growth opportunities including the benefits from a large and growing platform in Asia and the fact the ongoing restructuring and repositioning of the business provides potential upside while at the same time limiting downside.

**Analyst** 

Customers also enjoyed great fund returns: Those who invested in John Hancock Funds Fundamental All Cap Core Fund, sold in the U.S., enjoyed a return of 35.9 per cent. Others who were in the Manulife Monthly High Income Fund, sold in Canada, received a return of 18.3 per cent, and those invested in the Manulife Global Fund ("MGF") Asia Small Cap Equity Fund, available in a variety of markets across Asia, saw a return of 18.7 per cent.

As our customer needs change, our product suite changes with them, and in 2013 we developed, launched or upgraded more than 50 new products to better meet their changing requirements. In addition, Manulife Asset Management launched 23 new retail and institutional products in Asia, 24 in Canada and 21 in the U.S.

In every part of our business we strived to deliver excellent service to our customers, and where we did not, we are actively working to improve upon it.

#### A Positive Trajectory

As a result of all of our activities, and the many fine efforts of our people in so many varied disciplines across the Company, we made progress on reaching our financial goals. Our 2013 results reflect significant improvement in core earnings and net income, a strong capital base, lower risk and a greater return on equity.

Particularly impressive is our positive trajectory in net income: In 2011, we had a small gain; in 2012, earnings increased to \$1.8 billion; and in 2013 a further improvement to \$3.1 billion.

While this trajectory is impressive, we must dissuade anyone from extrapolating a growth rate for next year. That is because our net income benefited from unusual items in 2013. We had strong investment-related experience of \$906 million. In addition, we realized a \$350 million gain on the sale of our Taiwan insurance business. These were partially offset by other items, including updates to actuarial models and market-related factors, which netted a \$543 million charge.

Turning to core earnings, our goal is to achieve \$4 billion in core earnings by 2016, and we are making measurable progress towards achieving that goal. In addition, we have a core return on common shareholders' equity ("Core ROE") objective for 2016 of 13 per cent. For the year ended 2013, our core earnings were \$2.6 billion and Core ROE was 10.6 per cent.

We ended the year with a very strong capital ratio of 248 per cent, a 37-point increase over 2012.

Manulife's share price has followed a similar trajectory as our earnings, and

as a result our market capitalization increased by \$14 billion to \$39 billion. Total shareholder return in 2013 was 60 per cent, compared to 30 per cent in 2012.

The Company entered 2014 in a strong financial position with reduced equity market and interest rate sensitivity and a healthier new business mix. The market continues to gain a better understanding of how well our businesses are diversified from product, risk and geographic perspectives.

Our plan is delivering the desired results. The U.S. operation has turned around nicely, and, along with our strong Asian and Canadian businesses, we have a well-balanced portfolio. Our insurance sales in Asia were below our expectations and for the entire company insurance sales were slightly lower than what we would have liked, although the sales had better margins. Wealth sales were simply outstanding, driving record funds under management for the 21st consecutive quarter.

Our Efficiency and Effectiveness Program ("E&E") has quickly become a way of life for the Company and we have already identified over 300 projects, of which over 60 per cent are in execution. For example, our Workplace Transformation initiative will improve flexibility and mobility for employees in terms of where work is performed as well as providing workspaces that support new ways to work, collaborate and communicate. Through our Global Procurement project, we have significantly upgraded our processes to leverage the Company's global scale in vendor negotiation; and have already achieved cost savings as a result.

We have also consolidated our Information Technology Infrastructure teams from various business units into a single global function to achieve efficiencies through better data and information storage management. The annualized pre-tax run rate savings from E&E exceeded \$200 million in 2013. The net bottom line impact in 2013 was immaterial; however, bottom line net savings of approximately \$100 million pre-tax are expected in 2014, increasing thereafter to estimated net pre-tax savings of \$400 million by 2016.

#### Growth Strategy and Performance

Manulife's four growth strategies produced record performances across all of our divisions in 2013.

#### 1. Developing our Asian opportunity to the fullest

During the year, we achieved record wealth sales of \$8.5 billion, an increase of more than 50 per cent from 2012. There were new fund launches, and a successful execution of the Mandatory Provident Fund's Employee Choice Arrangement in Hong Kong, where we continue to hold the leading position in new cash flows.

# When I had to take two months of unpaid leave from work to complete a placement for school, we didn't have to worry about bills or our mortgage because what money we made continued to work for us, all thanks to Manulife One!

Customer

We expanded our distribution platform across the region by securing and strengthening important distribution agreements with key partners, including new *bancassurance* agreements in Malaysia and Vietnam. We also achieved strong growth in our professional agency force, ending the year with a record 57,500 agents, an increase of nearly 4,000 professionals.

In 2014, we will continue to build a premier pan-Asian insurance and wealth management franchise that is well positioned to meet the evolving protection, savings and retirement needs of our customers in the region.

#### 2. Continuing to build our Canadian franchise

We made significant progress growing all of our diverse businesses in Canada. We achieved record mutual fund deposits of more than \$6.5 billion, an increase of more than 60 per cent from 2012.

Group Retirement solutions sales grew 25 per cent to \$1.4 billion and Group Benefits continued to lead the market throughout 2013. We introduced RetirementPlus — a flexible segregated fund product and the first retirement product of its kind. In 2013, we were the first company in Canada licensed by the Office of the Superintendent of Financial Institutions to administer the new federal Pooled Registered Pension Plans, which are expected to be available for sale in certain provinces in 2014.

Manulife Bank responded to significant regulatory changes and ended the year with record net lending assets despite a slowdown in the residential mortgage market and aggressive competitive environment. Also, we expanded our distribution reach through increased penetration of the broker-dealer channel, as well as through completion of two transactions to bolster our mortgage creditor life and travel insurance businesses during the year.

The Canadian Division continues to work toward being recognized as the most trusted partner for broad-based integrated financial solutions in Canada.

#### 3. Continuing to grow higher ROE, lower risk U.S. businesses

In 2013, we achieved record mutual fund deposits of more than \$23 billion, an increase of 79 per cent over 2012, which contributed to our record funds under management.

On the insurance side of the business, we continue to generate strong sales of our re-priced, lower risk insurance products. In our Retirement Plan Services ("RPS") business, the Company launched two new products, expanding into the mid-market 401(k) business. While RPS sales declined because of competitive pressures and lower industry sales, we were pleased to see sales for the new mid-market 401(k) platform gain traction. With several commitments now being funded, we are building momentum in this market. We also broadened our distribution reach through the acquisition of a broker-dealer to further fuel wealth management sales growth.

Our objective for the U.S. is to drive sustainable earnings and opportunistic growth. We will be leveraging our trusted John Hancock brand and capabilities to provide innovative solutions to customers in order to meet their wealth and protection needs.

# 4. Growing our wealth and asset management businesses in Asia, Canada and the U.S.

Our wealth and asset management businesses around the world continue to yield impressive results. In 2013, we achieved almost \$16 billion in net mutual fund flows, more than tripling our 2012 results. This outcome was due to a strong product suite and our robust distribution partnerships, as well as generally improved market conditions.

Manulife Asset Management grew its assets under management by 18 per cent to \$243 billion, and continues to generate strong investment performance in all asset classes, exceeding their benchmarks for the one-, three- and five-year periods. The Investment Division ended 2013 with a total of 70 funds rated Four Stars or Five Stars by Morningstar, an increase of nine funds from 2012.

Our Investment Division will continue work to become a Top 25 Global Asset Management franchise ranked by AUM, delivering trusted investment solutions that comprehensively address our global clients' most important investment and income needs.

#### Beyond Financial Measures

As you know, progress may be measured in different ways. Beyond quantitative results such as sales, earnings or capital ratios, excellence in how we manage our operations, design and deliver our products and services, and contribute to our communities is equally important.

For example, in 2013, Manulife was named one of Canada's Top Employers for the third year in a row. In Hong Kong, Manulife took Gold in the Reader's Digest Trusted Brand Awards in the insurance company category for the 10th consecutive year. Four Manulife Asset Management funds were recognized in the Top 100 Performing Funds by Benchmark, and in China, Manulife-Sinochem received the "2013 Professional Insurance Service Award." In the U.S., financial representatives ranked John Hancock Retirement Plan Services #1 in five categories.

Manulife and John Hancock continue to invest in the many communities in which we live and operate. Around the world, people came together to support disaster relief efforts in the Philippines following the devastation of Typhoon Haiyan. Manulife was no exception and contributed funds to provide immediate disaster relief through the Red Cross and matched employee donations globally.

My bank had closed my account without informing me and this caused my life insurance policy with Manulife to be cancelled. I am a single parent and she [my daughter] has no other family. I spoke with Eric, a customer service representative with Manulife, who said he would do everything he could to help. I received a letter dated November 19 saying my policy would be reinstated as an exception. I can't tell you how much this means to me.

Customer

In Canada, we support several important, research-driven community projects. Our partnership with Bridgepoint Active Healthcare in Toronto is exploring best practice volunteer programming in health care; the annual Bloomberg-Manulife Prize for the Promotion of Active Health recognizes top academics, including this year's winner, Dr. Walter Willett at the Harvard School of Public Health; and we support the Canadian Institute for Advanced Research's work on volunteerism and civic engagement among new Canadians. Our focus on volunteerism plays a powerful role by inspiring our employees and advisors to invest their time in their community.

We will never forget the tragic events at the 2013 Boston Marathon, and the lives lost or changed by the attacks on April 15th. We are inspired by the strength and courage of all those affected, including many of our employees. We are proud to have played a leadership role in the creation of The One Fund. Other examples of how Manulife and John Hancock contribute to economic, social and environmental health can be found in our Public Accountability Statement.

#### Looking Ahead

Despite our progress, we remain unsatisfied with the pace of our growth and have established goals to ensure we can deliver aggressive yet achievable growth. At the same time, we are not prepared to sacrifice long-term performance in order to achieve these short-term targets. While there are challenges and uncertainty ahead, we are very confident in our ability to deliver on both objectives. Our business is becoming far better balanced; our earnings more sustainable; our risks better contained and our capital position and leverage steadily improving.

We have built a solid foundation on which to grow; however, our environment continues to evolve rapidly. Collectively, these changes represent potential challenges, as well as significant potential growth opportunities, for our businesses. Our strategy has evolved in order to reflect this changing landscape.

Our priorities in the years ahead will focus on customer centricity, technology, products and distribution, E&E, fostering a high-performance culture, attracting and retaining talent, and investing in our brands.

We believe the best way for Manulife and John Hancock to be among the most trusted and forward thinking brands in financial services is to behave that way. Let me share with you some examples of how I believe we are doing just that.

We have many instances of employees who have set a fine example. One of our most dedicated, valuable and oldest employees is a medical doctor named Dr. James Sun, who worked for us in Shanghai and was being recognized for his achievements during a visit from our entire Board of Directors. Dr. Sun received his accolade, and then politely said "Sorry, but I must leave. I have customers waiting on my underwriting decisions, and we are quite backed up. I must go." He knew

the Board was important, but we were not customers. Dr. Sun's dedication has inspired countless fellow employees.

Customers will always be the ultimate judge of whether we are a customer-centric organization. While we always appreciate positive feedback, we also recognize that customers are giving us valuable insight into how we can do things better. We also want our customers to know that we are acting in their interest at heart. One day last year, we received an email from the CFO of a company that we do business with. It read:

"Just want to share an anecdote. My mother-in-law passed away two years ago. Recently [John] Hancock sent a letter to her son informing him that they had a benefit due on a life policy she had taken out when she was 17. She died at 96. The family was unaware. So [John] Hancock somehow learned of her passing and found her son who lives in Florida. She lived in NJ. Amazing, may all financial institutions be so good."

These and other stories tell us that we are making progress toward 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. In short, we help people with their big financial decisions.

#### Acknowledgements

On a personal note, I am grateful for the tremendous support and counsel of Manulife's Board of Directors and our Chairman. Dick DeWolfe.

And I would like to thank retiring Directors Lorna Marsden and Bob Harding for their wise counsel and support as Directors over the years.

Our success could not have occurred without the dedicated efforts of 28,000 employees, 57,500 agents and our hundreds of thousands of other distribution partners around the world.

Also, I would like to thank our shareholders for their continued confidence in our organization and our ability to deliver results. I believe the Company is well positioned to continue to deliver the disciplined and sustainable growth required to meet our long-term objectives.

Droll A. Edmin

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

#### **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 2016 management objectives for core earnings and core ROE, our 2016 goal for pre-tax run rate savings related to our Efficiency and Effectiveness Program, and the potential impact of a new Canadian Actuarial Standards Board Standard related to economic reinvestment assumptions used in the valuation of policy liabilities. 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 forwardlooking 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 2016 management objectives for core earnings and core ROE, the assumptions described under "Key Planning Assumptions and Uncertainties" in this document 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" in this document; 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 quarantors, 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 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 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 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 as well as 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.

# 2013 Manulife Financial Corporation Annual Report

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### MANAGEMENT'S DISCUSSION AND ANALYSIS

This Management's Discussion and Analysis ("MD&A") is current as of February 26, 2014.

#### Overview

Manulife Financial is a leading Canada-based financial services company with principal operations in Asia, Canada and the United States. Manulife Financial's vision is 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 international network of more than 84,000 employees and agents offers our clients a broad range of financial protection and wealth management products and services. We offer personal and corporate products to millions of customers across our three operating divisions: Asia, Canada and the United States, each of which represents about one third of our overall business.

#### Funds under management<sup>1</sup> by Manulife Financial and its subsidiaries were \$599 billion as at December 31, 2013.

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

In 2013 we made significant progress towards our strategic priorities:

- Developing our Asian opportunity to the fullest,
- Growing our wealth and asset management businesses in Asia, Canada, and the U.S.,
- Continuing to build our balanced Canadian franchise, and
- Continuing to grow higher return on equity ("ROE"), lower risk U.S. businesses.

Since 2010, we have enjoyed a positive progression in earnings and in 2013 our reported **net income attributed to shareholders** was \$3,130 million, an increase of \$1,320 million compared with \$1,810 million in 2012. The increase was driven by a \$368 million increase in core earnings<sup>1</sup> and \$952 million of items excluded from core earnings, the two most significant items of which were a \$592 million reduction in charges related to changes in actuarial methods and assumptions and a \$350 million gain on the sale of our Taiwan insurance business.

In 2012 we introduced "core earnings" – a non-GAAP financial measure which management believes better reflects our underlying earnings capacity. Core earnings excludes investment-related experience in excess of \$200 million per annum (the \$200 million per annum to be included in core earnings compares with an average of over \$320 million per annum reported from 2007 to 2011). It also excludes the mark-to-market accounting impact of equity markets and interest rates as well as a number of other items, outlined in the "Performance and Non-GAAP Measures" section below.

**Core earnings** in 2013 was \$2,617 million compared with \$2,249 million in 2012. The \$368 million increase in core earnings was driven by higher fee income growth in our wealth management businesses, increased new business margins in our North American insurance businesses and lower amortization of deferred acquisition costs on our closed blocks of variable annuity business, partially offset by higher expenses. The increase in expenses related to higher legal and variable compensation accruals. While we reported overall policy experience losses in both years of about the same amount, there was significantly improved claims experience in the U.S. in 2013 offset by one-time gains reported in 2012 related to specific run-off accident and health reinsurance business settlements and the release of excess Property and Casualty Reinsurance provisions related to 2011 events. We also reported net favourable tax items in both periods of about equal amounts.

**Asia Division** continues to build a pan-Asian life insurance and wealth franchise that is well positioned to satisfy the protection and retirement needs of the fast growing customer base in the region. Our core strategy focuses on expanding our professional agency force and alternative channel distribution, growing our wealth and asset management businesses and investing in our brand across Asia. In 2013, we achieved record sales¹ for wealth products, further expanded our network of bank partnerships and achieved solid growth in our professional agency force in several key markets. Our wealth sales in 2013 grew by 57 per cent over 2012², as new products and expanded distribution contributed to broad-based growth across most of our markets. Our 2013 insurance sales of US\$1.0 billion were below our expectations and decreased 16 per cent compared with 2012. Sales in 2012 were higher primarily due to a run up in cancer product sales in Japan, prior to a tax change in April of last year and lower corporate product sales, a result of pricing actions in late 2012. We did see improved momentum in the fourth quarter of 2013 as both Hong Kong and Indonesia had record sales quarters and Japan sales grew by 18 per cent over the third quarter of 2013.

**Canadian Division** continued to build our diversified Canadian franchise. In 2013, we achieved record full year sales in Manulife Mutual Funds, strong Group Retirement Solutions sales and once again led the market in Group Benefits sales<sup>3</sup>. Manulife Bank responded to significant regulatory changes and ended the year with record net lending assets despite a slowdown in the residential mortgage market and an aggressive competitive environment. We continued to drive our desired shift in product mix in 2013,

<sup>&</sup>lt;sup>1</sup> This item is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

<sup>&</sup>lt;sup>2</sup> Growth (declines) in sales, premiums and deposits and funds under management are stated on a constant currency basis. Constant currency basis is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

<sup>&</sup>lt;sup>3</sup> Based on quarterly sales survey by LIMRA, an insurance industry organization as at September 30, 2013.

reducing the proportion of insurance and segregated fund sales with long-duration guarantee features. We expanded our distribution reach by welcoming new advisors, extending existing relationships and enhancing support to our distribution partners as well as through two strategic transactions in travel insurance and mortgage creditor life insurance. In 2013, we were the first company in Canada licensed by the Office of the Superintendent of Financial Institutions ("OSFI") to administer the new federal Pooled Registered Pension Plans ("PRPPs") which are expected to be available for sale in certain provinces in 2014.

**U.S. Division** continued to make substantive progress towards our strategic priority of growing higher ROE and lower risk businesses. Our focus is on building a leading company in the U.S. that helps Americans with their retirement, long-term care and estate planning needs. We are leveraging our trusted brand, diverse and broad distribution, and core business strength of product innovation to profitably grow our de-risked insurance and wealth management franchises. During 2013, we have executed an acquisition of Symetra Investment Services, increasing our affiliated advisor headcount by 15 per cent. We achieved record sales in our mutual fund business in 2013, benefiting from the significant investments made in distribution and the investment product line-up. Through product re-design, re-pricing and business re-positioning, we have reduced the equity and interest rate risk and earnings sensitivity of our product portfolio, while we continue to invest in the growth of fee-based products with lower capital requirements and higher return potential, including our 401(k), mutual fund and lower risk insurance products. We are seeing the desired impact of these actions on our sales mix and improved new business strain with a continued shift away from guaranteed, long-duration products in 2013. To improve operating efficiencies, we combined JH Life Insurance and JH Long-Term Care Insurance into a single business unit. In addition, at the end of 2013, we announced plans to file for state approvals of a long-term care in-force rate increase during 2014. In December 2013, shareholders of the John Hancock Variable Insurance Trust ("JHVIT") Lifestyle Portfolios approved a change to the investment objectives of the JHVIT Lifestyle Portfolios to include a volatility management overlay. The managed volatility program is aimed at helping John Hancock contract owners and policyholders diversify risk, manage volatility of returns, and limit the magnitude of portfolio losses during periods of elevated volatility.

**Investment Division** continued to deliver strong investment-related gains in 2013 with the vast majority of those gains coming from excellent credit experience, fixed income and alternative long-duration asset investing and asset allocation activities that enhanced surplus liquidity and resulted in higher yields in the liability segments. The favourable credit experience reflects the strength of our underwriting combined with the benign economic environment. Attractive long corporate bond and alternative long-duration asset acquisitions enhanced our risk-adjusted returns. We continue to focus our acquisitions on high quality, good relative value assets.

**Manulife Asset Management** ("MAM") experienced significant growth in 2013 across its global franchise, with external assets under management increasing by 18 per cent to \$242.8 billion. We made several strategic additions to our portfolio management teams in the fourth quarter including the purchase of MAAKL Holdings Berhad in Malaysia. Outstanding investment performance continues to differentiate MAM with all public asset classes outperforming their benchmarks on a 1, 3, and 5-year basis.

The Minimum Continuing Capital and Surplus Requirements ("MCCSR") ratio for The Manufacturers Life Insurance Company ("MLI") closed 2013 at 248 per cent, up 37 points from the 211 per cent reported at the end of 2012. This increase reflects the contribution from earnings, a reduction in capital requirements for variable annuity and segregated fund guarantees due to the strong equity markets, the sale of our Taiwan insurance business and net capital issuance as well as the 2013 MCCSR Guideline change that reduced capital required for lapse risk.

# **Financial Performance**

As at and for the years ended December 31, (C\$ millions, unless otherwise stated)		2013	re	estated <sup>(1)</sup> 2012		2011
Net income attributed to shareholders	\$	3,130	\$	1,810	\$	129
Preferred share dividends		(131)		(112)		(85)
Common shareholders' net income	\$	2,999	\$	1,698	\$	44
Reconciliation of core earnings to net income attributed to shareholders:						
Core earnings <sup>(2)</sup> Investment-related experience in excess of amounts included in core earnings	\$	2,617 706	\$	2,249 949	\$	2,169 1,290
Core earnings plus investment-related experience in excess of amounts included in core earnings  Other items to reconcile core earnings to net income attributed to shareholders:  Direct impact of equity markets and interest rates and variable annuity guarantee liabilities	\$	3,323	\$	3,198	\$	3,459
that are dynamically hedged Changes in actuarial methods and assumptions Disposition of Taiwan insurance business <sup>(3)</sup> Other items		(336) (489) 350 282		(582) (1,081) (50) 325		(2,217) (751) - (362)
Net income attributed to shareholders	\$	3,130	\$	1,810	\$	129
Basic earnings per common share (C\$) Diluted earnings per common share (C\$) Diluted core earnings per common share (C\$)(2) Return on common shareholders' equity ("ROE") (%) Core ROE (%)(2) U.S. GAAP net (loss) income attributed to shareholders(2) Sales(2)	\$ \$ \$	1.63 1.62 1.34 12.8% 10.6% (648)	\$ \$ \$	0.94 0.92 1.15 7.8% 9.8% 2,557	\$ \$ \$	0.02 0.02 1.14 0.2% 9.1% 3,674
Insurance products <sup>(4)</sup> Wealth products Premiums and deposits <sup>(2)</sup> Insurance products Wealth products Funds under management (C\$ billions) <sup>(2)</sup>	\$	2,757 49,681 24,549 63,701 599	\$	3,279 35,940 24,221 51,280 531	\$	2,456 34,299 22,278 43,783 500
Capital (C\$ billions)(2) MLI's MCCSR ratio Sensitivities to equity markets and interest rates: % of underlying earnings sensitivity to equity market movements offset by hedges(5) Earnings impact of a 1% parallel decline in interest rates(6)	\$ 64 † \$	33.5 248% to 82% (400)	\$ 72 \$	29.2 211% to 83% (400)		29.0 216% to 70% (1,000)

<sup>(1)</sup> The 2012 results were restated to reflect the retrospective application of new International Financial Reporting Standards ("IFRS") accounting standards effective January 1, 2013. For a detailed description of the change see note 2 to the 2013 Consolidated Financial Statements. The 2011 results were not required to be restated.

#### **Analysis of Net Income**

In 2013, Manulife reported net income attributed to shareholders of \$3,130 million (2012 – \$1,810 million) and core earnings of \$2,617 million (2012 – \$2,249 million). Net income attributed to shareholders increased \$1,320 million compared with 2012, of which \$368 million was driven by higher core earnings and \$952 million related to items excluded from core earnings.

The \$368 million increase in core earnings was driven by growth in fee income due to growth in our wealth businesses, increased new business margins in our North American insurance businesses and lower amortization of deferred acquisition costs on our closed blocks of variable annuity business, partially offset by higher expenses. The increase in expenses related to higher legal and variable compensation accruals. While we reported overall policy experience losses in both years of about the same amount, there was significantly improved claims experience in the U.S. in 2013 offset by one-time gains reported in 2012 related to specific run-off accident and health reinsurance business settlements and the release of excess Property and Casualty Reinsurance provisions related to 2011 events. We also reported net favourable tax items in both periods of about equal amounts.

The net amount of items excluded from core earnings in 2013 was a gain of \$513 million compared to a charge of \$439 million in 2012. This \$952 million change was driven by a \$592 million reduction in charges related to changes in actuarial methods and assumptions (2013 – \$489 million charge, 2012 – \$1,081 million charge) and a \$350 million gain on the sale of our Taiwan insurance business. While investment-related experience was strong in both years, the \$706 million gain reported in 2013 (in excess of the \$200

<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> This \$50 million charge in 2012 represents closing adjustments to the 2011 disposition of our Life Retrocession business.

<sup>(4)</sup> Insurance sales have been adjusted to exclude Taiwan for all periods.

<sup>(5)</sup> The lower end of the range assumes that the change in value of the hedge assets does not completely offset the change in the dynamically hedged variable annuity guarantee liabilities, including the provisions for adverse deviation. The estimated amount that would not be completely offset assumes that provision for adverse deviation is not offset and that the hedge assets are based on the actual position at the period end.

<sup>(6)</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 have reduced the impact by \$600 million, \$800 million and \$800 million, respectively, for the years ended December 31, 2013, 2012 and 2011.

million of investment gains included in core earnings) was \$243 million lower than in 2012. This decrease was offset by \$246 million of lower charges related to the direct impact of equity markets and interest rates and variable annuity guarantee liabilities that are dynamically hedged. Other items excluded from core earnings netted to a gain of \$282 million in 2013 and \$275 million in 2012. The 2013 amount primarily related to policyholder approved changes to the investment objectives of separate accounts that support our Variable Annuity products in the U.S. and a reinsurance recapture transaction in Asia. The 2012 amount primarily related to in-force product changes, the recapture of a reinsurance treaty and tax items, partially offset by a \$200 million goodwill impairment charge.

As noted above, investment-related experience totaled \$906 million in 2013 and was \$243 million lower than in 2012. The investment-related experience gains are a combination of reported investment experience as well as the impact of investing activities on the measurement of our policy liabilities. The investment-related experience in 2013 included: \$516 million primarily related to the impact of investing activities (both fixed income and alternative long-duration assets) on the measurement of our policy liabilities; \$228 million related to planned asset allocation activities that enhanced surplus liquidity and resulted in higher yielding assets in the respective liability segments; and \$162 million due to favourable credit experience relative to our long-term assumptions. The investment-related experience in 2012 included: \$1,117 million primarily related to the impact of investing activities (both fixed income and alternative long-duration assets) on the measurement of our policy liabilities; and \$32 million due to favourable credit experience relative to our long-term assumptions (see "Financial Performance - Impact of Fair Value Accounting" below).

The table below reconciles 2013 core earnings of \$2,617 million to the reported net income attributed to shareholders of \$3,130 million.

For the years ended December 31,		restated(1)	
(C\$ millions, unaudited)	2013	2012	2011
Core earnings <sup>(2)</sup>			
Asia Division <sup>(3)</sup>	\$ 921	\$ 963	\$ 938
Canadian Division <sup>(3)</sup>	905	835	849
U.S. Division <sup>(3)</sup>	1,510	1,085	1,005
Corporate and Other (excluding expected cost of macro hedges and core investment gains)	(506)	(345)	(415)
Expected cost of macro hedges <sup>(3),(4)</sup>	(413)	(489)	(408)
Investment-related experience in core earnings <sup>(5)</sup>	200	200	200
Total core earnings	\$ 2,617	\$ 2,249	\$ 2,169
Investment-related experience in excess of amounts included in core earnings(5)	706	949	1,290
Core earnings plus investment-related experience in excess of amounts included in core			
earnings	\$ 3,323	\$ 3,198	\$ 3,459
Changes in actuarial methods and assumptions <sup>(6)</sup>	(489)	(1,081)	(751)
Direct impact of equity markets and interest rates and variable annuity quarantee liabilities that are			
dynamically hedged <sup>(7)</sup> (see table below)	(336)	(582)	(2,217)
Disposition of Taiwan insurance business in 2013 <sup>(8)</sup>	350	(50)	303
Impact of in-force product changes and recapture of reinsurance treaties(9)	261	260	_
Material and exceptional tax related items <sup>(10)</sup>	47	322	_
Goodwill impairment charge	_	(200)	(665)
Restructuring charge related to organizational design(11)	(26)	(57)	_
Net income attributed to shareholders	\$ 3,130	\$ 1,810	\$ 129

<sup>(1)</sup> The 2012 results were restated to reflect the retrospective application of new IFRS accounting standards effective January 1, 2013. For a detailed description of the change see note 2 to the 2013 Consolidated Financial Statements. The 2011 results were not required to be restated.

- (6) Of the \$489 million charge for change in actuarial methods and assumptions in 2013, \$252 million was reported in the third quarter as part of the comprehensive annual review of valuation assumptions. See "Review of Actuarial Methods and Assumptions" section below.
- (7) The direct impact of equity markets and interest rates is relative to our policy liability valuation assumptions and includes changes to interest rate assumptions, as well as experience gains and losses on derivatives associated with our macro equity hedges. We also include gains and losses on the sale of AFS debt securities as management may have the ability to partially offset the direct impacts of changes in interest rates reported in the liability segments. See table below for components of this item.
- (8) The 2011 gain of \$303 million relates to the sale of our Life Retrocession business and the \$50 million charge in 2012 represents closing adjustments to that disposition.
- (9) The 2013 gain of \$261 million includes the impact on the measurement of policy liabilities of policyholder-approved changes to the investment objectives of separate accounts that support our Variable Annuity products in the U.S. and a reinsurance recapture transaction in Asia. The \$260 million gain in 2012 largely relates to a recapture of a reinsurance treaty and in-force segregated funds product changes in Canada.
- (10) The 2013 tax item primarily reflects the impact on our deferred tax asset position of Canadian provincial tax rate changes. Included in the 2012 tax items are \$264 million of material and exceptional U.S. tax items and \$58 million for changes to tax rates in Japan.
- (11) The restructuring charge is related to severance, pension and consulting costs for the Company's Organizational Design Project, which was completed in the second quarter of 2013.

<sup>(2)</sup> This item is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

<sup>(3)</sup> The decrease in expected macro hedging cost in 2013 compared with 2012 was partially offset by an increase in dynamic hedging costs included in Asia, Canada and U.S. divisional core earnings.

<sup>(4)</sup> The 2013 net loss from macro equity hedges was \$1,851 million and consisted of a \$413 million charge related to the estimated expected cost of the macro equity hedges relative to our long-term valuation assumptions and a charge of \$1,438 million because actual markets outperformed our valuation assumptions. The latter amount is included in the direct impact of equity markets and interest rates (see table below).

<sup>(5)</sup> As outlined under "Critical Accounting and Actuarial Policies" below, net insurance contract liabilities under IFRS for Canadian insurers are determined using the Canadian Asset Liability Method ("CALM"). Under CALM, the measurement of policy liabilities includes estimates regarding future expected investment income on assets supporting the policies. Experience gains and losses are reported when current period activity differs from what was assumed in the policy liabilities at the beginning of the period. These gains and losses can relate to both the investment returns earned in the period, as well as to the change in our policy liabilities driven by the impact of current period investing activities on future expected investment income assumptions.

The net loss related to the direct impact of equity markets and interest rates and variable annuity guarantee liabilities that are dynamically hedged in the table above is attributable to:

For the years ended December 31,

(C\$ millions, unaudited)	2013	2012	2011
Variable annuity guarantee liabilities that are dynamically hedged <sup>(1)</sup> Variable annuity guarantee liabilities that are not dynamically hedged General fund equity investments supporting policy liabilities and on fee income <sup>(2)</sup> Macro equity hedges relative to expected costs <sup>(3)</sup>	\$ 392 1,293 211 (1,438)	\$ 176 1,078 108 (511)	\$ (1,153) (1,092) (214) 636
Direct impact of equity markets and variable annuity guarantees that are dynamically hedged <sup>(4)</sup> Fixed income reinvestment rates assumed in the valuation of policy liabilities <sup>(5)</sup> Sale of AFS bonds and derivative positions in the Corporate and Other segment Charges due to lower fixed income URR assumptions used in the valuation of policy liabilities <sup>(6)</sup>	\$ 458 (276) (262) (256)	\$ 851 (740) (16) (677)	\$ (1,823) (281) 324 (437)
Direct impact of equity markets and interest rates and variable annuity guarantees that are dynamically hedged	\$ (336)	\$ (582)	\$ (2,217)
Direct impact of equity markets and interest rates	\$ (728)	\$ (758)	\$ (1,064)

<sup>(1)</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. The gain in 2013 was primarily due to our equity fund results outperforming indices and a gain on the release of provision for adverse deviation associated with more favourable equity markets. See: "Risk Management and Risk Factors" below.

#### Earnings per Common Share and Return on Common Shareholders' Equity

Net income per common share for 2013 was \$1.63, compared to \$0.94 in 2012. Return on common shareholders' equity for 2013 was 12.8 per cent, compared to 7.8 per cent for 2012.

#### **Sales**

**Insurance sales** of \$2.8 billion in 2013 declined by 13 per cent compared with 2012. In Asia, insurance sales declined 16 per cent due to lower sales in Japan as a result of tax and product changes, partially offset by growth in most territories. In Canada, insurance sales declined 14 per cent driven by normal variability in our Group Benefits business. John Hancock Life sales declined six per cent reflecting our actions to reposition our new business mix to products with increased margins and more favourable risk profiles.

Record **wealth sales** of \$49.7 billion in 2013, increased 37 per cent compared to 2012. Record wealth sales in Asia increased 57 per cent driven by new fund launches and strong pension sales following the launch of Hong Kong's Mandatory Provident Fund's ("MPF") new Employee Choice Arrangement. In Canada, wealth sales rose 21 per cent due to continued strong mutual fund sales and higher pension sales. U.S. Division wealth sales rose 39 per cent driven by strong mutual fund sales, partly offset by a decline in pension and annuity sales.

#### **Premiums and Deposits**

Total Company premiums and deposits<sup>4</sup> for insurance products increased to \$24.5 billion in 2013, an increase<sup>5</sup> of two per cent over 2012 which included a two per cent increase in Asia and Canada and a three per cent increase in the U.S.

Total Company premiums and deposits for wealth products increased to \$63.7 billion in 2013, an increase of 24 per cent over 2012. The increase was 54 per cent in Asia, 36 per cent in Canada and 31 per cent in the U.S. The strong total Company result was partly offset by lower Manulife Asset Management institutional deposits, a business line where variability is expected.

#### **Funds under Management**

Funds under management<sup>4</sup> as at December 31, 2013 were a record \$599 billion, an increase of \$68 billion, or eight per cent, compared with December 31, 2012. The increase was largely attributable to growth in our asset management business and favourable equity markets, partially offset by the mark-to-market impact of the increase in interest rates on fixed income investments.

<sup>(2)</sup> The impact on general fund equity investments supporting policy liabilities and on fee income includes the capitalized impact on fees for variable universal life policies.

<sup>(3)</sup> As described in the previous table, we incurred a charge of \$1,438 million in 2013 because actual markets outperformed our valuation assumptions.

<sup>(4)</sup> In 2013, gross equity exposure gains of \$4,357 million were partially offset by gross equity hedging charges of \$1,438 million from macro hedge experience and charges of \$2,461 million from dynamic hedging experience which resulted in a gain of \$458 million.

<sup>(5)</sup> The charge in 2013 for fixed income reinvestment assumptions was driven by the increase in swap spreads and the decrease in corporate spreads, partially offset by the increase in risk free rates.

<sup>(6)</sup> Beginning with the first quarter of 2013 for North America and the third quarter of 2013 for Japan, the URR impact was calculated on a quarterly basis, whereas in 2012, it was calculated on an annual basis in the second quarter.

<sup>&</sup>lt;sup>4</sup> This item is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

<sup>&</sup>lt;sup>5</sup> Sales, premiums and deposits and funds under management growth (decline) in rates are quoted on a constant currency basis. Constant currency basis is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

#### **Funds under management**

As at December 31, (C\$ millions)	2013	restated <sup>(1)</sup> 2012	2011
General fund Segregated funds net assets <sup>(2)</sup> Mutual funds, institutional advisory accounts and other <sup>(2),(3)</sup>	\$ 232,709 239,871 126,353	\$ 227,932 209,197 94,029	\$ 226,520 195,933 77,199
Total funds under management	\$ 598,933	\$ 531,158	\$ 499,652

<sup>(1)</sup> The 2012 results were restated to reflect the retrospective application of new IFRS accounting standards effective January 1, 2013. For a detailed description of the change see note 2 of the Consolidated Financial Statements. The 2011 results were not required to be restated.

#### Capita

Total capital<sup>6</sup> was \$33.5 billion as at December 31, 2013 compared to \$29.2 billion as at December 31, 2012, an increase of \$4.3 billion. The increase included net earnings of \$3.1 billion, the \$1 billion impact from favourable currency movements on translation of foreign operations and net capital issued of \$0.7 billion, partially offset by cash dividends of \$0.8 billion over the period.

#### Impact of Fair Value Accounting

Fair value accounting policies affect the measurement of both our assets and our liabilities. The difference between the reported amounts of our assets and liabilities determined as of the balance sheet date in accordance with the applicable mark-to-market accounting principles is reported as investment-related experience, the direct impact of equity markets and interest rates and variable annuity guarantees that are dynamically hedged, each of which impacts net income (see "Analysis of Net Income" above).

We reported \$17.6 billion of net realized and unrealized losses reported in investment income in 2013. These amounts were driven by the mark-to-market impact of the increase in interest rates on our bond and fixed income derivative holdings and the increase in equity markets on our equity futures in our macro and dynamic hedging program, as well as other items.

As outlined under "Critical Accounting and Actuarial Policies" below, net insurance contract liabilities under IFRS are determined using the Canadian Asset Liability Method ("CALM"), as required by the Canadian Institute of Actuaries. The measurement of policy liabilities includes 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, reduced by the future expected policy revenues and future expected investment income on assets supporting the policies. Investment returns are projected using the current asset portfolios and projected reinvestment strategies. Experience gains and losses are reported when current period activity differs from what was assumed in the policy liabilities at the beginning of the period. We classify gains and losses by assumption type. For example, current period investing activities that increase (decrease) the future expected investment income on assets supporting the policies will result in an investment-related experience gain (loss).

#### **Public Equity Risk and Interest Rate Risk Reduction Plans**

At December 31, 2013 between 64 per cent and 82 per cent of our underlying earnings sensitivity to a 10 per cent decline in equity markets was offset by hedges and the impact of a 100 basis point decline in interest rates on our earnings was \$400 million. See "Risk Management and Risk Factors" below.

#### **Fourth Quarter Financial Highlights**

For the quarters ended December 31, (C\$ millions, except per share amounts)	2013	restated <sup>(1)</sup> 2012	2011
Net income (loss) attributed to shareholders	\$ 1,297	\$ 1,077	\$ (69)
Core earnings <sup>(2)</sup> (see table below for reconciliation)	\$ 685	\$ 554	\$ 373
Diluted earnings (loss) per common share (C\$)	\$ 0.68	\$ 0.57	\$ (0.05)
Diluted core earnings per common share $(C\$)^{(2)}$	\$ 0.35	\$ 0.28	\$ 0.19
Return on common shareholders' equity (annualized)	20.2%	19.2%	(1.6)%
Sales <sup>(2)</sup>			
Insurance products <sup>(3)</sup>	\$ 617	\$ 922	\$ 619
Wealth products	\$ 12,241	\$ 10.439	\$ 8,141
Premiums and deposits <sup>(2)</sup>	•	, ,,	, ,,
Insurance products	\$ 6,169	\$ 6,629	\$ 5,749
Wealth products	\$ 15,367	\$ 17,499	\$ 10,168

<sup>(1)</sup> The 2012 results were restated to reflect the retrospective application of new IFRS accounting standards effective January 1, 2013. For a detailed description of the change see note 2 to the 2013 Consolidated Financial Statements. The 2011 results were not required to be restated.

#### **Net Income Attributed to Shareholders**

Manulife reported fourth quarter 2013 net income attributed to shareholders of \$1,297 million and core earnings of \$685 million. Net income attributed to shareholders increased \$220 million compared with the fourth quarter of 2012, of which \$131 million was driven by higher core earnings and \$89 million related to other items.

<sup>(2)</sup> Segregated fund assets, mutual fund assets and other funds are not available to satisfy the liabilities of the Company's general fund.

<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>(2)</sup> This item is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

<sup>(3)</sup> Insurance sales have been adjusted to exclude Taiwan for all periods.

<sup>&</sup>lt;sup>6</sup> This item is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

The \$131 million increase in core earnings was driven by increased new business margins in North America, higher fee income due to growth in our asset management businesses, lower hedging costs and net modestly favourable currency impacts, partially offset by higher legal and variable compensation accruals. Core earnings in the fourth quarter of both 2013 and 2012 included favourable policy related experience and favourable tax related items.

Items excluded from core earnings in the fourth quarter of 2013 netted to a gain of \$612 million and included \$215 million of favourable investment-related experience (in excess of the \$50 million included in core earnings), a \$350 million gain on the sale of our Taiwan insurance business, and \$261 million related to policyholder approved changes to the investment objectives of separate accounts that support our Variable Annuity products in the U.S., as well as a reinsurance recapture transaction in Asia. These items were partially offset by an \$81 million net charge related to the direct impact of equity markets and interest rates and variable annuity guarantee liabilities that are dynamically hedged, and \$133 million related to changes in actuarial methods and assumptions of which \$69 million resulted from our review of our modeling of future tax cash flows for our U.S. Variable Annuity business and the remainder from other modeling refinements. Items excluded from core earnings in the fourth quarter of 2012 netted to a gain of \$523 million.

#### **Analysis of Net Income**

The table below reconciles the fourth quarter 2013 core earnings of \$685 million to the reported net income attributed to shareholders of \$1,297 million.

			res	tated <sup>(1)</sup>
(C\$ millions, unaudited)	40	2013	4	Q 2012
Core earnings <sup>(2)</sup> Asia Division <sup>(3)</sup>	\$	227	\$	180
Canadian Division <sup>(3)</sup> U.S. Division <sup>(3)</sup>		233 366		233 293
Corporate and Other (excluding expected cost of macro hedges and core investment gains)  Expected cost of macro hedges <sup>(3),(4)</sup> Investment-related experience in core earnings <sup>(5)</sup>		(138) (53) 50		(62) (140) 50
Core earnings Investment-related experience in excess of amounts included in core earnings(5)	\$	685 215	\$	554 321
Core earnings plus investment-related experience in excess of amounts included in core earnings  Other items to reconcile core earnings to net income attributed to shareholders:  (Charges) gains on direct impact of equity markets and interest rates and variable annuity guarantee liabilities	\$	900	\$	875
that are dynamically hedged (see table below) <sup>(5),(6)</sup>		(81)		82
Changes in actuarial methods and assumptions <sup>(7)</sup> Disposition of Taiwan insurance business		(133) 350		(87) –
Impact of in-force product changes and recapture of a reinsurance treaty <sup>(8)</sup>		261		-
Restructuring charge related to organizational design Material and exceptional tax related items		_		(57) 264
Net income attributed to shareholders	\$	1,297	\$	1,077

- (1) The 2012 results were restated to reflect the retrospective application of new IFRS accounting standards effective January 1, 2013. For a detailed description of the change see note 2 to the 2013 Consolidated Financial Statements.
- (2) This is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.
- (3) The fourth quarter 2012 was partially offset by increases in dynamic hedging costs included in core earnings across all divisions.
- (4) The fourth quarter 2013 net loss from macro equity hedges was \$285 million and consisted of a \$53 million charge related to the estimated expected cost of the macro equity hedges relative to our long-term valuation assumptions and a charge of \$232 million because actual markets outperformed our valuation assumptions. This latter amount is included in the direct impact of equity markets and interest rates.
- (5) As outlined under "Critical Accounting and Actuarial Policies" below, net insurance contract liabilities under IFRS for Canadian insurers are determined using CALM. Under CALM, the measurement of policy liabilities includes estimates regarding future expected investment income on assets supporting the policies. Experience gains and losses are reported when current period activity differs from what was assumed in the policy liabilities at the beginning of the period. These gains and losses can relate to both the investment returns earned in the period, as well as to the change in our policy liabilities driven by the impact of current period investing activities on future expected investment income assumptions.
- (6) The direct impact of equity markets and interest rates is relative to our policy liability valuation assumptions and includes changes to interest rate assumptions, including a quarterly URR update for North America, starting in the first quarter of 2013, and for Japan, starting in the third quarter of 2013, as well as experience gains and losses on derivatives associated with our macro equity hedges. We also include gains and losses on the sale of available-for-sale ("AFS") bonds and derivative positions in the surplus segment. See table below for components of this item.
- (7) The fourth quarter 2013 charge of \$133 million was primarily attributable to the impact of method and modeling refinements of which \$69 million resulted from our review of our modeling of future tax cash flows for our U.S. Variable Annuity business and the remainder from other modeling refinements.
- (8) The fourth quarter 2013 gain of \$261 million included \$193 million related to policyholder approved changes to the investment objectives of separate accounts that support our Variable Annuity products in the U.S. and \$68 million related to a recapture of a reinsurance treaty in Asia.

The gain (charge) related to the direct impact of equity markets and interest rates and variable annuity guarantee liabilities that are dynamically hedged in the table above is attributable to:

(C\$ millions, unaudited)	4Q 2013	4Q 2012
Variable annuity guarantee liabilities that are dynamically hedged <sup>(1)</sup> Variable annuity guarantee liabilities that are not dynamically hedged General fund equity investments supporting policy liabilities and on fee income <sup>(2)</sup> Macro equity hedges relative to expected costs <sup>(3)</sup>	\$ 101 155 81 (232)	\$ 100 556 48 (292)
Direct impact of equity markets and variable annuity guarantees that are dynamically hedged <sup>(4)</sup> Fixed income reinvestment rates assumed in the valuation of policy liabilities <sup>(5)</sup> Sale of AFS bonds and derivative positions in the Corporate and Other segment Charges due to lower fixed income URR assumptions used in the valuation of policy liabilities <sup>(6)</sup>	\$ 105 (105) (55) (26)	\$ 412 (290) (40)
Direct impact of equity markets and interest rates and variable annuity guarantees that are dynamically hedged  Direct impact of equity markets and interest rates	\$ (81) \$ (182)	\$ 82 \$ (18)

<sup>(1)</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. The gain in the fourth quarter of 2013 was primarily due to our equity fund results outperforming indices, and a gain on the release of provision for adverse deviation associated with more favourable equity markets. See "Risk Management and Risk Factors" below.

#### Sales<sup>7</sup>

**Insurance sales** of \$617 million in the fourth quarter of 2013 decreased 32 per cent<sup>8</sup> compared with the fourth quarter of 2012. While we reported record quarterly sales in Hong Kong and Indonesia, overall sales were lower due to the high level of sales in Japan in fourth quarter 2012 in advance of product changes and normal variability of sales in Canadian Group Benefits. As a result, sales in Asia and Canada declined five per cent and 59 per cent, respectively. In the U.S., insurance sales decreased 21 per cent reflecting our actions to increase margins.

**Wealth sales** exceeded \$12 billion in the fourth quarter of 2013, an increase of 15 per cent compared with the fourth quarter of 2012. In Asia, fourth quarter wealth sales exceeded US\$1.5 billion, a decline of 18 per cent from a fourth quarter of 2012 that benefited from a successful fund launch in Japan and the start of Hong Kong MPF's Employee Choice Arrangement. Fourth quarter Canadian and U.S. wealth sales reported year-over-year growth of 24 per cent and 22 per cent, respectively, driven by continued strong mutual fund sales and also included a 79 per cent increase in Canadian Group Retirement Solutions sales.

<sup>(2)</sup> The impact on general fund equity investments supporting policy liabilities and on fee income includes the capitalized impact on fees for variable universal life policies.

<sup>(3)</sup> As described in the previous table, we incurred a charge of \$232 million because actual markets outperformed our valuation assumptions.

<sup>(4)</sup> In the fourth quarter of 2013, gross equity exposure gains of \$1,017 million were partially offset by gross equity hedging charges of \$232 million from macro hedge experience and charges of \$680 million from dynamic hedging experience which resulted in a gain of \$105 million.

<sup>(5)</sup> The charge in the fourth quarter of 2013 for fixed income reinvestment assumptions was driven by a decrease in corporate spreads in North America.

<sup>(6)</sup> Beginning with the first quarter of 2013 for North America and the third quarter of 2013 for Japan, the URR impact was calculated on a quarterly basis, whereas in 2012, it was calculated on an annual basis in the second quarter.

<sup>&</sup>lt;sup>7</sup> This is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

<sup>&</sup>lt;sup>8</sup> Growth (declines) in sales, premiums and deposits and funds under management are stated on a constant currency basis. Constant currency basis is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

# Performance by Division Asia Division

Manulife Financial has a demonstrated business expertise in Asia dating back more than 100 years. Since issuing our first Asian policy in Shanghai in 1897, we have pursued strong, sustained growth and remained a leading provider of financial protection and wealth management products in Asia. We are relentlessly focused on helping our Asian customers prepare for their futures, and that focus drives our growth strategy and underpins our commitment to the region. We are diversified across Asia, including some of the world's largest and fastest-growing economies, with operations in Hong Kong, Japan, Indonesia, the Philippines, Singapore, China, Taiwan, Vietnam, Malaysia, Thailand, Macau and Cambodia. We now have more than 57,000 contracted agents selling our products and have expanded our distribution capabilities to include more than 100 bank partnerships and more than 500 dealers, independent agents and brokers.

In 2013, Asia Division contributed 19 per cent of total premiums and deposits and, as at December 31, 2013, accounted for 13 per cent of the Company's funds under management.

#### **Financial Performance**

Asia Division's net income attributed to shareholders was US\$2,451 million in 2013 compared to US\$1,979 million for 2012. The increase was driven by the gain on the sale of our Taiwan insurance business and higher earnings from the direct impact of equity markets and interest rates and other investment-related items, partially offset by a decrease in core earnings, primarily related to changes in currency rates.

Core earnings of US\$893 million decreased by US\$70 million primarily related to changes in currency rates. On a currency neutral basis, the favourable impact on core earnings from the growth in in-force business was more than offset by higher dynamic hedging costs and the high new business margins reported in the first half of 2012 in Japan in advance of tax changes. Sales of these high margin products significantly declined following the tax changes.

On a Canadian dollar basis, the net income attributed to shareholders for 2013 was \$2,519 million compared to \$1,969 million reported a year earlier.

The table below reconciles core earnings to net income (loss) attributed to shareholders for Asia Division for 2013, 2012 and 2011.

For the years ended December 31,	Canadian \$				US \$			
(\$ millions)	2013	20	012	2011	2013	2012	2011	
Core earnings <sup>(1)</sup>	\$ 921	\$ 9	963	\$ 938	\$ 893	\$ 963	\$ 950	
Items to reconcile core earnings to net income attributed to shareholders:								
Direct impact of equity markets and interest rates and variable annuity guarantee liabilities that are								
dynamically hedged <sup>(2)</sup>	1,164	9	911	(1,190)	1,142	920	(1,217)	
Investment-related experience related to fixed income trading, market value increases in excess of expected alternative assets investment returns, asset mix changes								
and credit experience	16		55	204	18	56	205	
Favourable impact of enacted tax rate changes	_		40	_	_	40	_	
Disposition of Taiwan insurance business	350		_	_	334	_	_	
Impact of recapture of a reinsurance treaty	68		_	_	64	_	_	
Net income (loss) attributed to shareholders	\$ 2,519	\$ 1,9	969	\$ (48)	\$ 2,451	\$ 1,979	\$ (62)	

<sup>(1)</sup> This item is non-GAAP measure. See "Performance and Non-GAAP Measure" below.

#### Sales

Asia Division's insurance sales in 2013 were US\$1.0 billion, a decrease of 16 per cent compared with 2012. Sales in Japan of US\$400 million were 36 per cent lower in 2013 than the prior year due to the run up in sales of cancer products prior to a tax change in April of last year and lower corporate product sales, a result of pricing actions in late 2012. Indonesia sales of US\$120 million increased 18 per cent from 2012, driven by improved agency productivity and by sales generated by Bank Danamon which continue to meet our expectations set when we entered the exclusive relationship. Sales in Hong Kong of US\$256 million were in line with 2012 as the favourable impact of 12 per cent more professional agents during 2013 was offset by the higher sales in 2012 related to announced pricing actions. Asia Other insurance sales (Asia excluding Japan, Hong Kong, Indonesia and Taiwan) of US\$244 million were five per cent higher than 2012 primarily driven by an expanded agency force in Vietnam.

The direct impact of equity markets and interest rates is relative to our policy liability valuation assumptions and includes changes to interest rate assumptions. The net gain of C\$1,192 million in 2013 (2012 – net gain of C\$906 million) consisted of a C\$1,057 million gain (2012 – C\$946 million gain) related to variable annuities that are not dynamically hedged, a C\$60 million gain (2012 – C\$70 million gain) on general fund equity investments supporting policy liabilities and on fee income and a C\$75 million gain (2012 – C\$110 million loss) related to fixed income reinvestment rates assumed in the valuation of policy liabilities and a C\$28 million charge (2012 – C\$5 million gain) related to variable annuity guarantee liabilities that are dynamically hedged. The amount of variable annuity guaranteed value that was dynamically hedged at the end of 2013 was 49 per cent (2012 – 14 per cent). 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.

Asia Division's wealth sales in 2013 were a record US\$8.3 billion, an increase of 57 per cent compared with 2012. Japan sales of US\$1.9 billion increased 33 per cent from 2012, driven by higher sales of the Strategic Income Fund during the first half of 2013, along with new fund launches in the second half of the year. Indonesia sales of US\$974 million were in line with last year. A significant rise in Indonesian interest rates, a drop in the local equity market and depreciation of the Rupiah in the second half of 2013 caused many investors to delay investment decisions. Hong Kong sales of US\$1.1 billion increased 44 per cent from 2012, primarily driven by continued momentum in Pension sales following the launch of the Mandatory Provident Fund's new Employee Choice Arrangement late 2012. Asia Other wealth sales (Asia excluding Japan, Hong Kong and Indonesia) reached a record level of US\$4.3 billion, almost double 2012 sales, driven by new fund launches in China, higher mutual fund sales in Taiwan and strong single premium unit-linked product sales in the Philippines in the first half of the year.

#### Sales

For the years ended December 31,		Canadian \$		US \$			
(\$ millions)	2013	2012	2011	2013	2012	2011	
Insurance products <sup>(1)</sup> Wealth products	\$ 1,052 8,536	\$ 1,370 5,690	\$ 1,179 4,131	\$ 1,020 8,319	\$ 1,370 5,698	\$ 1,193 4,186	

<sup>(1)</sup> All periods have been restated to exclude insurance product sales from Taiwan.

#### **Premiums and Deposits**

Premiums and deposits in 2013 were US\$16.1 billion, up 29 per cent over 2012 on a constant currency basis.

Insurance premiums and deposits increased by two per cent to US\$6.2 billion in 2013 driven by in-force business growth partly offset by a 2012 one-time initial reinsurance premium, the exceptionally high level of cancer product sales prior to tax changes in the first half of 2012 and strong corporate product sales prior to pricing actions in the fourth quarter of 2012 in Japan.

Wealth premiums and deposits increased by 54 per cent to US\$9.9 billion, for the same reasons as noted in the wealth sales section above.

#### **Premiums and Deposits**

For the years ended December 31,		Canadian \$		US \$			
(\$ millions)	2013	2012	2011	2013	2012	2011	
Insurance products Wealth products	\$ 6,337 10,167	\$ 6,650 6,811	\$ 5,311 4,992	\$ 6,154 9,908	\$ 6,655 6,822	\$ 5,365 5,057	
Total premiums and deposits	\$ 16,504	\$ 13,461	\$ 10,303	\$ 16,062	\$ 13,477	\$ 10,422	

#### **Funds under Management**

Asia Division funds under management as at December 31, 2013 were US\$72.0 billion, an increase of one per cent on a constant currency basis, compared with December 31, 2012. Net policyholder cash flows of US\$4.8 billion and favourable investment returns in the past year were mostly offset by the negative impact of a weaker Japanese Yen compared to the U.S. dollar and the sale of our Taiwan insurance business.

#### **Funds under Management**

As at December 31,		Canadian \$		US \$			
(\$ millions)	2013	2012	2011	2013	2012	2011	
General funds	\$ 34,756	\$ 36,608	\$ 34,757	\$ 32,680	\$ 36,800	\$ 34,172	
Segregated funds	23,568	24,647	23,524	22,160	24,780	23,130	
Mutual and other funds	18,254	16,480	13,109	17,164	16,563	12,889	
Total funds under management	\$ 76,578	\$ 77,735	\$ 71,390	\$ 72,004	\$ 78,143	\$ 70,191	

#### **Strategic Direction**

Asia Division continues to build a premier pan-Asian insurance and wealth franchise that is well positioned to meet the evolving protection, savings and retirement needs of the customers in the region. Our core strategy focuses on expanding our professional agency force and alternative channel distribution, building and expanding our portfolio of products in wealth and protection, as well as investing in our brand across Asia. We remain committed to grow our wealth and asset management businesses to leverage our asset management capabilities.

In 2013, we further expanded our network of bank partnerships, highlighted by our exclusive agreement with Alliance Bank in Malaysia, achieved solid growth in our professional agency force in key markets and strengthened our brand awareness in Asia through various brand building campaigns and activities. We also acquired a 100 per cent interest in MAAKL Mutual Bhd, lifting our asset management franchise in Malaysia to a Top 10 market position<sup>9</sup>.

<sup>&</sup>lt;sup>9</sup> Based on pro-forma Lipper rankings of all private unit trust funds in Malaysia as at December 31, 2013.

In Hong Kong, we continue to execute our growth strategy based on diversified product offerings and broadened distribution capabilities. Our professional agency force now exceeds 6,200, and we signed up two new brokerage partners to distribute our insurance products. We successfully executed on the new Employee Choice Arrangement within the Mandatory Provident Fund business, and improved our market share from 17.0 per cent to 17.7 per cent<sup>10</sup>. We also launched a suite of new protection products, including a medical product targeting the high net-worth segment and three new critical illness products. On the technology side, we continue to make progress in rolling out our mobile point of sales platform, which enables our advisors to perform financial planning analysis and complete an insurance application electronically.

In Japan, we focused on growing the number of captive agents, maintaining our strong momentum in the corporate market and continuing the build out of the retail business in the independent agent channel. Our mutual fund business grew significantly with a series of new fund launches and expansion of the distributor network. We are well placed to take advantage of the new Nippon Individual Savings Account program to further grow our mutual fund business in 2014.

In Indonesia, we continued to expand our distribution network and product mix. In 2013, we achieved double digit insurance sales growth over the prior year despite a challenging economic environment in the second half of the year. Growth in our professional agency force was relatively flat, as we shifted our strategy to focus on enhancing productivity and professionalism. Our partnership with Bank Danamon that began in July 2012 delivered strong results, consistent with our expectations. We plan to launch a series of new products in 2014 to cater to the growing protection and investment needs of the middle class. We also launched a series of branding campaigns in 2013 to further our brand awareness in the market.

In the Other Asia territories, we continued investing to expand and diversify our distribution channels, as well as develop our wealth and asset management businesses. We achieved a record number of agents in 2013 in the Philippines, Vietnam and Thailand. We also significantly grew our wealth sales through our bank partners in the Philippines, Malaysia and Thailand. In China, Manulife Sinochem is now licensed in 51 cities (2012 – 50 cities) within 14 provinces and municipalities, one of the broadest geographic footprints among foreign joint venture insurance companies. Our focus in China has shifted to enhancing the productivity and professionalism of our agency force. We have also recently expanded into bancassurance and direct distribution channels, and we are exploring ways to capitalize on potential pension and mutual fund distribution opportunities in China.

<sup>&</sup>lt;sup>10</sup> The calculation of market share is based on the Aggregate Net Asset Values of all Mandatory Provident Fund Schemes (including assets transferred from Occupational Retirement Schemes) as at September 30, 2013, as published in the Statistical Digest by the Mandatory Provident Fund Schemes Authority.

## **Canadian Division**

Serving one in five Canadians, Canadian Division is one of the leading financial services organizations in Canada. We offer a broad portfolio of protection, estate planning, investment and banking solutions through a diversified independent distribution network, supported by a team of more than 8,700 employees.

Our Individual Insurance business offers a broad portfolio of insurance products, including universal, whole and term life, as well as living benefits insurance, designed to meet protection, estate and retirement planning needs for middle- and upper-income customers. Manulife Investments offers a range of investment products and services that span the investor spectrum, from those just starting to build their financial portfolio to individuals and families with complex retirement and estate planning needs, while Manulife Private Wealth provides personalized investment management, private banking and estate solutions to affluent clients. Manulife Bank helps Canadians with flexible debt and cash flow management solutions as part of their financial plan. We provide group life, health, disability and retirement solutions to Canadian employers; more than 19,000 Canadian businesses and organizations entrust their employee benefit programs to Manulife's Group Benefits. Life, health and specialty products, such as travel insurance, are also offered through alternative distribution channels, including sponsor groups and associations, as well as direct-to-customer marketing.

In 2013, Canadian Division contributed 24 per cent of the Company's total premiums and deposits and, as at December 31, 2013, accounted for 24 per cent of the Company's funds under management.

#### **Financial Performance**

Canadian Division's net income attributed to shareholders was \$828 million in 2013 compared with \$1,169 million in 2012. The decline was primarily related to the favourable impacts in 2012 of a major reinsurance transaction and reserve releases due to segregated funds product changes, as well as the unfavourable direct impact of interest rates on the valuation of policy liabilities in 2013.

Core earnings were \$905 million in 2013 compared with \$835 million in 2012. The \$70 million increase in core earnings was driven by growth of in-force business, including higher fee income on higher assets under management; higher new business margins, due to price increases and higher interest rates; and improvements in operational efficiency. These increases were partially offset by unfavourable policyholder experience and a lower release of tax provisions related to the closure of prior years' tax filings.

The table below reconciles core earnings to the net income attributed to shareholders for Canadian Division for 2013, 2012 and 2011.

For the years ended December 31,			
(C\$ millions)	2013	2012	2011
Core earnings <sup>(1),(2)</sup>	\$ 905	\$ 835	\$ 849
Items to reconcile core earnings to net income attributed to shareholders:			
Impact of recapture of a reinsurance treaty and in-force product changes(3)	_	259	_
Direct impact of equity markets and interest rates and variable annuity guarantee			
liabilities that are dynamically hedged <sup>(4)</sup>	(40)	85	(266)
Investment gains related to fixed income trading, market value increases in excess of			
expected alternative assets investment returns, asset mix changes and credit			
experience	(34)	(10)	344
Impact of change in marginal tax rate <sup>(5)</sup>	(3)	_	_
Net income attributed to shareholders	\$ 828	\$ 1,169	\$ 927

<sup>(1)</sup> The Company moved the reporting of its International Group Program business unit from the U.S. Division to the Canadian Division in 2012. Prior period results have been restated to reflect this change.

#### Sales

Sales of wealth products in 2013 were a record \$12.1 billion, an increase of \$2.1 billion or 21 per cent from 2012 levels driven by record mutual fund deposits and strong sales in Group Retirement Solutions ("GRS"). Manulife Bank's new loan volumes declined modestly from 2012 reflecting an industry-wide slowdown in the retail mortgage market and a highly competitive environment. Sales of segregated funds<sup>11</sup> and Individual Insurance continued to reflect the impact of our deliberate product re-positioning away from long duration guarantees.

<sup>(2)</sup> Core earnings is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

<sup>(3)</sup> The \$259 million gain in 2012 included \$137 million related to the recapture of a reinsurance treaty and \$122 million related to in-force segregated funds product changes.

<sup>(4)</sup> The direct impact of equity markets and interest rates is relative to our policy liability valuation assumptions and includes changes to interest rate assumptions. The loss of \$40 million in 2013 (2012 – \$85 million gain) consisted of a \$28 million gain (2012 – nil) on general fund equity investments supporting policy liabilities, a \$187 million loss (2012 – \$31 million gain) related to fixed income reinvestment rates assumed in the valuation of policy liabilities, a \$12 million gain (2012 – \$4 million gain) related to unhedged variable annuities and a \$107 million gain (2012 – \$50 million gain) related to variable annuity guarantee liabilities that are dynamically hedged. The amount of variable annuity guaranteed value that was dynamically hedged at the end of 2013 was 92 per cent (2012 – 86 per cent). 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.

<sup>(5)</sup> Impact of enacted or substantially enacted income tax rate changes.

<sup>&</sup>lt;sup>11</sup> Segregated fund products include guarantees. These products are also referred to as variable annuities.

Gross mutual fund deposits of \$6.6 billion were 60 per cent higher than 2012 levels. The sales success reflects our expanded distribution reach and strong fund performance, leveraging our global asset management expertise across a diverse global platform. GRS ranked second<sup>12</sup> in the Canadian group retirement industry for the first three quarters of 2013 and had sales of \$1.4 billion in 2013, 25 per cent higher than 2012 levels. Manulife Bank achieved record net lending assets of \$19 billion at December 31, 2013, up nine per cent from 2012 due to continued favourable retention and new lending volumes of \$4.1 billion for the year. Fixed product sales of \$379 million increased 25 per cent compared with 2012, while segregated fund sales of \$1.5 billion were 28 per cent lower than in 2012.

Insurance sales for 2013 were \$1.1 billion, 14 per cent lower than our record 2012 sales. Sales in both 2013 and 2012 included significant one-time single premium sales. Excluding these single premium sales, insurance sales decreased eight per cent from 2012. Group Benefits led the market in sales<sup>12</sup> for the first three quarters of 2013. Sales in Individual Insurance declined by one per cent as we continued to reduce exposure to long-term guarantees.

#### Sales

(C\$ millions)	2013	2012	2011
Insurance products	\$ 1,125	\$ 1,310	\$ 658
Wealth products	12,133	10,057	10,784

#### **Premiums and Deposits**

Canadian Division premiums and deposits of \$21.2 billion in 2013 grew 17 per cent from \$18.1 billion in 2012. The increase was driven by record mutual fund deposits and growth in our group retirement business driven by sales and deposits from a growing in-force block of plan participants.

#### **Premiums and Deposits**

For the years ended December 31, (C\$ millions)	2013	2012	2011
Insurance products Wealth products	\$ 10,552 10,620	\$ 10,310 7,809	\$ 9,603 8,213
Total premiums and deposits	\$ 21,172	\$ 18,119	\$ 17,816

#### **Funds under Management**

Funds under management of \$145.2 billion as at December 31, 2013 grew by \$12.0 billion or nine per cent from \$133.2 billion at December 31, 2012 driven by business growth in our wealth management business.

#### **Funds under Management**

			_	
Δc	at	Decen	nhar	21

(C\$ millions)	2013	2012	2011
General fund	\$ 80,611	\$ 79,961	\$ 73,926
Segregated funds	51,681	44,701	40,826
Mutual and other funds	27,560	20,675	17,708
Less mutual funds held by segregated funds	(14,641)	(12,138)	(10,333)
Total funds under management	\$ 145,211	\$ 133,199	\$ 122,127

#### **Strategic Direction**

Our strategic aspiration is to be the trusted partner for broad-based integrated financial solutions in Canada. We have realigned our organization to facilitate a more unified approach to enhancing our customer focus in everything we do. We will continue to leverage our historic core competencies of product innovation, distribution excellence and service quality to meet our customers' needs in the manner suited to them. We have built a large customer base and strong market positions in our core businesses. Through disciplined, risk-appropriate growth, we aim to achieve scale in our less mature businesses and maintain or improve market share in our core businesses in order to deliver high quality sustainable earnings and shareholder value.

With over 70,000 licensed advisors and 650 Manulife sales professionals, we serve one in five Canadians. In 2013, we expanded our distribution reach through increased broker-dealer penetration; by adding new advisors and extending existing relationships; as well as through two strategic transactions in the mortgage creditor life and travel insurance businesses. We will continue to expand our distribution relationships and to invest in support for our advisors to help their businesses thrive, including our wholesaler teams that assist advisors with creative product and sales solutions for their customers, as well as our leading professional tax and estate planning teams. We will also continue to develop our cross-selling and direct-to-consumer marketing capabilities, which will help build stronger relationships with a broader base of customers in a manner tailored to their needs.

<sup>&</sup>lt;sup>12</sup> As per quarterly sales surveys by LIMRA, an insurance industry organization, as at September 30, 2013.

Our broad product offerings, including our ability to offer guarantees, is a key competitive strength. Further expansion and integration of this broad portfolio, combined with expanded distribution capabilities and enhanced service delivery, will allow us to provide solutions that meet our customers' needs. In 2013, we launched RetirementPlus, an innovative, flexible retirement savings and income solution which customers can personalize to meet their retirement needs. This further enhanced our retail wealth management platform, which spans the investor spectrum, ranging from those just starting out to established individuals and families with more complex retirement and estate planning needs.

In the group benefits and retirement markets, we will continue to increase our profile with small business employers and leverage our strong market position to support employers across all market segments by providing cost effective options to their employees. In 2013, we were the first company in Canada licensed by the Office of the Superintendent of Financial Institutions ("OSFI") to administer the new federal Pooled Registered Pension Plans ("PRPPs") which are expected to be available for sale in certain provinces in 2014, providing new opportunities for growth in the small business market.

Service quality is critical to building relationships with existing customers and to attracting new customers. We closely monitor customer and advisor feedback to proactively improve the service experience. We will continue to focus on enhancing our customers' experience, putting their needs at the centre of everything we do as we make service improvements across the Division through process improvement initiatives, increased automation and outsourcing and off-shoring opportunities.

## **U.S. Division**

In the United States, Manulife Financial operates as John Hancock with a team of approximately 6,000 employees. John Hancock's core retail products in the U.S. focus on providing financial solutions at every stage of the financial lives of our customers. We distribute our products primarily through licensed financial advisors and through Signator Investors, Inc. ("Signator"), our affiliated broker-dealers comprised of a national network of independent firms. John Hancock is the number one provider of target Lifestyle Portfolios in the U.S. based on assets invested in Annuities, Retirement Plan Services, Variable Life Insurance and Mutual Funds. John Hancock has become a household name in the U.S. with 89 per cent overall brand recognition<sup>13</sup>.

Our U.S. insurance businesses include John Hancock Life ("JH Life") and John Hancock Long-Term Care ("JH LTC"). JH Life offers a broad portfolio of insurance products, including universal, variable, whole, and term life insurance designed to provide estate, business, and retirement solutions for high net worth and emerging affluent markets. JH LTC provides solutions for middle-income through affluent clients in need of care advisory services, 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.

U.S. Wealth Management offers a broad range of products and services focused on individuals and business markets, as well as institutional oriented products for employee benefit plan funding solutions. John Hancock Retirement Plan Services ("Retirement Plan Services") provides 401(k) plans to small and medium-sized businesses. John Hancock Investments ("JH Investments") offers a variety of mutual funds and 529 College Savings plans. Our Annuity business manages an in-force block of fixed deferred, variable deferred and payout annuity products.

In 2013, U.S. Division contributed 53 per cent of the Company's total premiums and deposits and, as at December 31, 2013, accounted for 57 per cent of the Company's funds under management.

#### **Financial Performance**

U.S. Division reported net income attributed to shareholders of US\$2,820 million for 2013 compared to US\$1,926 million for 2012. Of the US\$894 million increase, US\$381 million was attributable to an increase in core earnings. Core earnings were US\$1,469 million in 2013 compared with US\$1,088 million in 2012 and increased due to: higher insurance new business margins resulting from product design actions, price increases and business mix; lower amortization of variable annuity deferred acquisition costs; improved claims experience primarily in our Life business; higher fee income from growth in our assets under management and the favourable impact of changes related to uncertain tax positions. These items were partially offset by costs associated with dynamically hedging additional in-force variable annuity guaranteed value.

Gains excluded from core earnings totaled US\$1,351 million in 2013 and netted to US\$838 million in 2012. Similar to the results at the total Company level, we reported favourable investment-related experience in both periods (2013 – US\$868 million and 2012 – US\$1,029 million). These investment-related experience gains were a result of the same factors as outlined in the "Analysis of Income" section for the full year above. Other items excluded from core earnings are outlined in the table below.

On a Canadian dollar basis, the net income attributed to shareholders for 2013 was \$2,908 million compared to \$1,919 million in 2012.

<sup>13</sup> The 2013 GfK Brand Tracking Study.

The table below reconciles core earnings to net income attributed to shareholders for U.S. Division for 2013, 2012 and 2011.

		Canadian \$		US \$				
For the years ended December 31,		restated <sup>(1)</sup>		restated <sup>(1)</sup>				
(\$ millions)	2013	2012	2011	2013	2012	2011		
Core earnings <sup>(2)</sup>	\$ 1,510	\$ 1,085	\$ 1,005	\$ 1,469	\$ 1,088	\$ 1,018		
Items to reconcile core earnings to net income attributed to shareholders: Investment-related experience related to fixed income trading, market value increases in excess of expected alternative assets investment returns, asset mix changes and								
credit experience Impact of release of tax reserves, in-force product changes and major reinsurance	893	1,026	857	868	1,029	871		
transactions <sup>(3),(4)</sup> Direct impact of equity markets and interest rates and on variable annuity guarantee	193	171	_	184	173	-		
liabilities that are dynamically hedged <sup>(5)</sup>	312	(363)	(1,241)	299	(364)	(1,275)		
Net income attributed to shareholders	\$ 2,908	\$ 1,919	\$ 621	\$ 2,820	\$ 1,926	\$ 614		

<sup>(1)</sup> The 2012 results were restated to reflect the retrospective application of new International Financial Reporting Standards ("IFRS") accounting standards effective January 1, 2013. For a detailed description of the change see note 2 to the 2013 Consolidated Financial Statements. The 2011 results were not required to be restated.

#### **Sales**

In 2013, U.S. Division achieved record sales in our mutual fund business and continued to achieve success in the repositioning of our insurance products. However, sales in our 401(k) business declined due to lower market activity and competitive pressures.

U.S. Division sales of insurance products were US\$563 million in 2013, a decrease of US\$36 million or six per cent compared with 2012. Through product redesign, repricing and business repositioning, we have reduced the equity and interest rate risk and earnings sensitivity of our product portfolio. JH Life's sales declined six per cent. The business continued to drive improvements in business mix and profitability driven by double digit growth of targeted Protection universal life ("UL") and Indexed UL products in 2013. JH LTC's sales declined five per cent due to the closure of group plans to new entrants and the non-recurrence of the Federal Government Plan buy-up option in 2012, partially offset by higher retail product sales.

U.S. Division sales of wealth management products were US\$28.2 billion in 2013, an increase of US\$8.0 billion or 39 per cent compared with 2012. Wealth Asset Management sales increased 47 per cent driven by record mutual funds sales. Improved sales force productivity, strong focus on key distribution partners and continued strong product performance drove the record sales and increases across all distribution channels. The increase in mutual fund sales was partially offset by lower 401(k) sales and the closure of sales in our Annuity business.

#### Sales

For the years ended December 31,		Canadian \$					US \$					
(\$ millions)		2013		2012		2011		2013		2012		2011
Insurance products Wealth management products	\$ 29	580 9,012	\$ 2	599 20,193	\$	619 19,384	\$	563 28,174	\$	599 20,213	\$	625 19,609

#### **Premiums and Deposits**

U.S. Division total premiums and deposits for 2013 were US\$45.2 billion, an increase of US\$9.2 billion or 26 per cent compared with 2012

Premiums and deposits for 2013 for insurance products of US\$7.4 billion increased US\$0.2 billion, compared with 2012, driven by UL premiums and the termination of a reinsurance assumed contract in 2012.

<sup>(2)</sup> Core earnings is a non-GAAP measure. See "Performance and Non-GAAP Measure" below.

<sup>(3)</sup> The US\$173 million net gain for impact of release of tax reserves and recapture of reinsurance treaties in 2012 included US\$172 million due to an updated assessment of prior years' uncertain tax positions and net gains of US\$10 million on the Life recapture of a reinsurance treaty offset by net losses of US\$9 million on the fixed deferred annuity reinsurance transactions.

<sup>(4)</sup> The US\$184 million gain in 2013 was related to policyholder-approved changes to the investment objectives of separate accounts that support our Variable Annuity products.

<sup>(5)</sup> The direct impact of equity markets and interest rates is relative to our policy liability valuation assumptions and includes changes to interest rate assumptions. 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 US\$299 million gain in 2013 (2012 – US\$364 million loss) consisted of a US\$121 million gain (2012 – US\$38 million gain) on general fund equity investments supporting policy liabilities, a US\$321 million loss (2012 – US\$665 million loss) related to fixed income reinvestment rates assumed in the valuation of policy liabilities, a US\$197 million gain (2012 – US\$140 million gain) related to variable annuities that are not dynamically hedged, and a US\$302 million gain (2012 – US\$123 million gain) related to variable annuities that are dynamically hedged. The amount of variable annuity guaranteed value that was dynamically hedged or reinsured at the end of 2013 was 94 per cent (2012 – 60 per cent).

Premiums and deposits for 2013 for wealth management products of US\$37.8 billion increased US\$9.0 billion compared with 2012, for reasons consistent with the wealth sales results discussed above.

#### **Premiums and Deposits**

For the years ended December 31,		Canadian \$		US \$			
(\$ millions)	2013	2012	2011	2013	2012	2011	
Insurance products Wealth management products	\$ 7,579 38,939	\$ 7,165 28,779	\$ 6,999 27,413	\$ 7,359 37,827	\$ 7,168 28,799	\$ 7,070 27,737	
Total premiums and deposits	\$ 46,518	\$ 35,944	\$ 34,412	\$ 45,186	\$ 35,967	\$ 34,807	

#### **Funds under Management**

U.S. Division funds under management as at December 31, 2013 were a record US\$320.1 billion, up nine per cent from December 31, 2012. The increase was due to positive investment returns and strong net mutual fund sales in John Hancock Wealth Asset Management partially offset by surrender and benefit payments in John Hancock Annuities.

#### **Funds under Management**

		Canadian \$			US \$			
As at December 31, (\$ millions)	2013	2012	2011	2013	restated <sup>(1)</sup> 2012	2011		
General fund Segregated funds Mutual funds and other	\$ 112,930 162,596 64,894	\$ 112,405 137,931 42,321	\$ 114,939 129,581 35,063	\$ 106,177 152,873 61,014	\$ 112,979 138,635 42,536	\$ 113,018 127,415 34,475		
Total funds under management	\$ 340,420	\$ 292,657	\$ 279,583	\$ 320,064	\$ 294,150	\$ 274,908		

<sup>(1)</sup> The 2012 results were restated to reflect the retrospective application of new IFRS accounting standards effective January 1, 2013. For a detailed description of the change see note 2 to the 2013 Consolidated Financial Statements. The 2011 results were not required to be restated.

#### **Strategic Direction**

Execution of the U.S. Division strategy is aimed at driving sustainable earnings growth and sales growth in select markets we are targeting. Our focus remains building a leading company that leverages our trusted brand and capabilities to provide innovative solutions to our customers' wealth and protection needs. We will use our diverse and broad distribution and core business strength of product innovation to profitably grow our insurance and wealth management franchises. Our growth focus on selective business lines has allowed us to preserve scale in our businesses while retaining significant relationships with our distributors and strong brand awareness by our customers. Our strategic direction continues to build on the priority of growing our higher ROE, lower risk businesses. Our objectives are to:

- Expand our insurance business into new market segments and distribution channels;
- Retain leadership in our core retirement plan services market while continuing to execute on our expansion to the mid-sized plan market;
- Grow our mutual fund product lineup and increase the efficiency of our distribution;
- Grow and improve the productivity of our affiliated broker-dealers;
- Develop and implement a centralized customer service centre to provide a uniform service experience while also benefiting from scale and expense efficiencies; and
- Explore new and innovative distribution models.

In our U.S. Insurance business, JH Life has successfully transitioned away from guaranteed products on the strength of our highly regarded distribution franchise. New product development continues to drive success with new indexed universal life insurance products helping to make this rapidly growing product category a significant contributor to overall sales. We intend to build on this success with new products and to leverage and expand our strong distribution relationships, innovative underwriting and new business processes, and service to support profitable growth. By integrating JH Life and JH LTC into a single business unit we are able to achieve expense efficiencies and invest in technology and business process improvements to enhance the overall service experience.

We remain an active participant in the long-term care insurance market and continue to work on new product design ideas that make sense in the low interest rate environment as well as address affordability of coverage and help to fill a gap in customers' retirement planning. Benefit Builder, a product that offers an innovative alternative to traditional inflation options, gained momentum in 2013. We also continue to actively manage our in-force block of Long-Term Care Insurance. At the end of 2013, we announced plans to file for state approvals of an in-force rate increase during 2014.

Our mutual fund business, JH Investments, achieved very strong growth in 2013. We will continue to leverage the significant investments made in distribution, investment product line-up, and the continued identification and launch of superior risk-adjusted return products in order to drive earnings growth. We will also continue to drive growth through expanding distribution relationships and through our success in adding our funds to strategic partner recommended lists. JH Investments and Manulife Asset Management are working closely together on plans to capitalize on and to further develop our in-house asset management capabilities into products that will support future growth.

Retirement Plan Services plans on maintaining its strong market position in the core 401(k) small plan market segment while expanding in the mid-sized plan segment, a market we entered in 2013. We will continue to leverage our core strengths including service excellence, participant enrollment and education, distribution and field infrastructure to drive success in this business line. Our mid-size plan platform uses industry-leading technology to support our service focus and innovative product features and benefits. We believe our technology can be a significant differentiator as we continue our expansion efforts.

In addition, the Retirement Plan Services will continue to drive growth in the 401(k) roll-in and roll-over market. We offer a dedicated "Consolidation Centre" where John Hancock employees work with new enrollees to identify old 401(k) plans a participant has that can be consolidated into a 401(k) account with us. We also offer an education centre for when participants leave a plan that is staffed with customer service employees and licensed registered representatives. The education centre is able to provide a full range of services from basic information and forms to full financial planning and investment advice, depending upon the level of guidance the participant needs.

We administer over one million annuity contracts. In December 2013, shareholders of the JH Variable Insurance Trust ("JHVIT") Lifestyle Portfolios approved a change to the investment objectives of the JHVIT Lifestyle Portfolios to include a volatility management overlay. The managed volatility program is aimed at helping John Hancock contract owners and policyholders diversify risk, manage volatility of returns, and limit the magnitude of portfolio losses during periods of elevated volatility. If the new investment objectives are successful in improving performance and achieving more consistent returns over time, the John Hancock life insurance companies will benefit from reduced financial exposure to the guarantees of the contracts and correspondingly lower financial resources to support these guarantees.

We continue to expand Signator (formally "John Hancock Financial Network"). Signator is a strong distributor of insurance products and is building capacity to grow wealth product sales. During 2013 we executed the acquisition of Symetra Investment Services, increasing our affiliated advisor headcount by 15 per cent. We continue to invest in this enterprise that provides meaningful and diversified distribution opportunities to support our growth in the Retirement Planning and Insurance markets.

# **Corporate and Other**

Corporate and Other is comprised of investment performance on assets backing capital, net of amounts allocated to operating divisions, financing costs, Investment Division's external asset management business (Manulife Asset Management), our Property and Casualty ("P&C") Reinsurance business as well as our run-off reinsurance business lines including variable annuities and accident and health.

For segment reporting purposes the impact of updates to actuarial assumptions, settlement costs for macro equity hedges and other non-operating items are included in this segment's earnings.

As at December 31, 2013, Corporate and Other contributed five per cent of the Company's premiums and deposits and as at December 31, 2013, accounted for six per cent of the Company's funds under management.

#### **Financial Performance**

Corporate and Other reported a full year net loss attributed to shareholders of \$3,125 million in 2013 compared to a net loss of \$3,247 million in 2012. Core losses were \$719 million in 2013 compared with \$634 million in 2012 and both years included \$200 million of favourable total company investment-related experience that are reported in core earnings. Items excluded from core losses improved by \$207 million from charges of \$2,613 million in 2012 to charges of \$2,406 million in 2013.

The \$85 million increase in core losses in 2013 compared to 2012 related to two items reported in 2012: a release of excess P&C Reinsurance provisions related to the 2011 Japan earthquake and tsunami and commutation gains related to our run-off accident and health reinsurance business. In addition, the reduction in macro hedging costs in 2013 compared with 2012 was mostly offset by higher expenses and tax related items. The \$207 million improvement in charges excluded from core earnings was primarily due to a \$592 million lower charge related to changes in actuarial methods and assumptions (see "Critical Accounting and Actuarial Policies" below); the non-recurrence of a \$677 million charge in 2012 related to lower fixed income URR assumptions used in the valuation of policy liabilities (starting in 2013 the URR assumptions were updated quarterly and reported in the operating segments); and a \$200 million goodwill impairment charge in 2012. These items were partially offset by higher losses of \$1,234 million primarily related to the impact of higher equity markets and interest rates on our equity (macro) hedges and interest rate sensitivity management strategies.

The table below reconciles core losses to the net loss attributed to shareholders for Corporate and Other for 2013, 2012 and 2011.

For the years ended December 31, (C\$ millions)	2013	re	stated <sup>(1)</sup> 2012	2011
Core losses excluding expected cost of macro hedges and core investment gains Expected cost of macro hedges	\$ (506) (413)	\$	(345) (489)	\$ (415) (408)
Investment-related experience included in core earnings	200		200	200
Total core losses <sup>(2)</sup>	\$ (719)	\$	(634)	\$ (623)
Items to reconcile core earnings to net loss attributed to shareholders:  Direct impact of equity markets and interest rates <sup>(3)</sup> Changes in actuarial methods and assumptions Goodwill impairment charge Investment-related experience related to mark-to-market items <sup>(4)</sup> Offset to core investment-related experience above Restructuring charges Impact of tax changes and business dispositions	\$ (1,772) (489) - 31 (200) (26) 50	\$	(1,215) (1,081) (200) 78 (200) (57) 62	\$ 480 (751) (665) 85 (200) - 303
Net loss attributed to shareholders	\$ (3,125)	\$	(3,247)	\$ (1,371)

<sup>(1)</sup> The 2012 results were restated to reflect the retrospective application of new IFRS accounting standards effective January 1, 2013. For a detailed description of the change see note 2 to the 2013 Consolidated Financial Statements. The 2011 results were not required to be restated.

#### **Premiums and Deposits**

Premiums and deposits were \$4.1 billion for 2013 compared with \$8.0 billion reported in 2012. The 2012 amount included a substantial institutional fixed income investment mandate awarded to Manulife Asset Management in the fourth guarter of 2012.

 $<sup>^{(2)}</sup>$  This item is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

<sup>(3)</sup> The direct impact of equity markets and interest rates included \$1,438 million (2012 – \$511 million) of losses on derivatives associated with our macro equity hedges and losses of \$262 million (2012 – \$16 million) on the sale of AFS bonds. In 2012 it also included a \$677 million charge related to lower fixed income URR assumptions used in the valuation of policy liabilities. Starting in 2013 the URR assumptions were updated quarterly and reported in the operating segments. In 2013 the charge reported in the operating divisions was \$256 million. Other items in this category netted to a charge of \$72 million (2012 – charge of \$11 million).

<sup>(4)</sup> Investment-related experience includes mark-to-market gains or losses on assets held in the Corporate and Other segment other than gains on AFS equities and seed money investments in new segregated or mutual funds.

#### **Premiums and Deposits**

For the years ended December 31,

(C\$ millions)	2013	2012	2011	
Life Retrocession	\$ 2	\$ 2	\$ 253	
Property and Casualty Reinsurance	80	95	113	
Institutional and other deposits	3,974	7,880	3,164	
Total premiums and deposits	\$ 4,056	\$ 7,977	\$ 3,530	

#### **Funds under Management**

Funds under management of \$36.7 billion as at December 31, 2013 (December 31, 2012 – \$27.6 billion) included assets managed by Manulife Asset Management on behalf of institutional clients of \$32.5 billion (2012 – \$28.8 billion) and the Company's own funds of \$4.2 billion (2012 – \$(1.2) billion). The increase in the Company's own funds primarily related to the adjustment of net derivative positions from invested assets to other assets and other liabilities and was partially offset by tax payments in the U.S. and an increase in assets allocated to the operating divisions.

#### **Funds under Management**

As at December 31, (C\$ millions)	2013	restated <sup>(1)</sup> 2012	2011
General fund Segregated funds – elimination of amounts held by the Company Institutional advisory accounts	\$ 4,413 (175) 32,486	\$ (1,043) (166) 28,776	\$ 2,898 (124) 23,778
Total funds under management	\$ 36,724	\$ 27,567	\$ 26,552

<sup>(1)</sup> The 2012 results were restated to reflect the retrospective application of new IFRS accounting standards effective January 1, 2013. For a detailed description of the change see note 2 to the 2013 Consolidated Financial Statements. The 2011 results were not required to be restated.

#### **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 Company continues to monitor its exposure to natural catastrophes and manages such exposures in relation to the overall balance sheet risk and volatility. The amount of premium we write each year may fluctuate depending on prevailing market conditions.

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 businesses: management of the Company's General Fund investments and Manulife Asset Management ("MAM"), a leading global asset management business.

The General Fund is comprised of a broad range of investments including: public and private bonds, mortgages, public and private equities, and real assets, which include real estate, power and infrastructure, oil and gas, timberland and farmland. Our investment philosophy for the General Fund is to invest in an asset mix that optimizes our risk adjusted returns and matches the characteristics of our underlying liabilities.

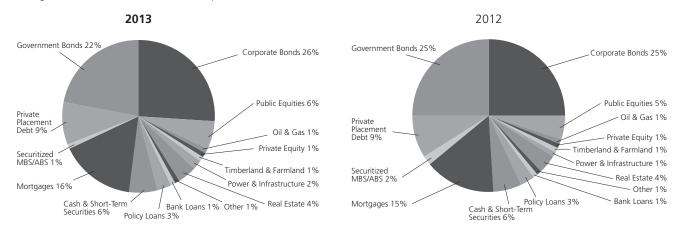
Manulife Asset Management is the global asset management arm of Manulife Financial, providing comprehensive asset management solutions for institutional investors and retail clients in key markets around the world. Our expertise extends across a broad range of public and private asset classes as well as asset allocation solutions. We serve retail clients, through our wealth management affiliates, and directly service institutional clients such as pension plans, foundations, endowments and financial institutions. In 2013, we introduced a new unit, Manulife Asset Management Private Markets, to bring together our specialized private market teams managing funds for third party investors and to provide access to the Company's other specialized teams that historically have primarily served the General Fund.

#### **General Fund Investment Philosophy**

Our investment philosophy employs a bottom-up approach which combines our strong asset management skills with an in-depth understanding of the characteristics of each investment. We invest in a diversified blend of assets, including a variety of alternative long-duration asset classes. Our diversification strategy has historically produced superior risk adjusted returns while reducing overall risk. We use a disciplined approach across all asset classes and we do not chase yield in the riskier end of the fixed income market. This strategy has resulted in a well-diversified, high quality investment portfolio which continues to deliver strong and steady investment-related experience. Our risk management strategy is outlined in the "Risk Management and Risk Factors" section below.

#### **General Fund Assets**

As at December 31, 2013, our General Fund invested assets totaled \$232.7 billion compared to \$227.9 billion at the end of 2012. The following charts show the asset class composition as at December 31, 2013 and December 31, 2012.



#### **Net Investment Income**

For the year ended December 31,	2013		2012		
(C\$ millions, unless otherwise stated)	Income	Yield <sup>14</sup>	Income	Yield <sup>14</sup>	
Interest income Dividend, rental and other income Impairments and provision for loan losses Other	\$ 8,670 1,425 (30) (195)	3.8% 0.6% 0.0% -0.1%	\$ 8,629 1,180 (106) 99	3.9% 0.5% 0.0% 0.0%	
	\$ 9,870		\$ 9,802		
Realized and unrealized gains (losses) on assets supporting insurance and investment contract liabilities and on macro equity hedges					
Debt securities	\$ (7,759)	-3.3%	\$ 2,874	1.3%	
Public equities	1,351	0.6%	826	0.4%	
Mortgages	53	0.0%	103	0.0%	
Private placements	(15)	0.0%	94	0.0%	
Real estate	98	0.0%	420	0.2%	
Other investments	615	0.3%	307	0.1%	
Derivatives, including macro equity hedging program	(11,960)	-5.0%	(2,799)	-1.2%	
	\$ (17,617)		\$ 1,825		
Total investment income (loss)	\$ (7,747)	-3.3%	\$ 11,627	5.3%	

Realized and unrealized gains and losses of \$17.6 billion were primarily due to the impact of changes in interest rates and equity markets on assets carried at fair value. In 2013, the general increase in interest rates resulted in losses of \$7.8 billion on debt securities while the general increase in equity markets resulted in gains of \$1.4 billion on public equities supporting insurance and investment contract liabilities. There was a net charge of \$12.0 billion on derivatives, including the macro equity hedging program, primarily related to the impact of higher interest rates on the fair value of interest rate swaps and the impact of higher equity markets on shorted equity futures. Other net realized gains were \$0.8 billion. As the measurement of insurance and investment contract liabilities includes estimates regarding future expected investment income on assets supporting the insurance and investment contract liabilities, only the difference between the mark-to-market accounting on the measurement of both assets and liabilities impacts net income. Refer to "Financial Performance" section above.

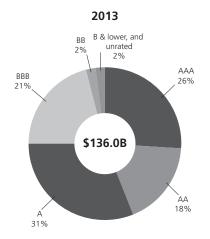
#### **Debt Securities and Private Placement Debt**

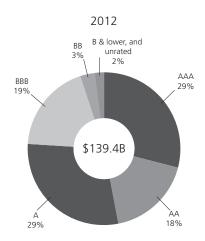
We manage our high quality fixed income portfolio to optimize yield and quality while ensuring that the asset portfolio remains diversified by sector, industry, duration, issuer, and geography.

As at December 31, 2013, the fixed income portfolio of \$136.0 billion (2012 – \$139.4 billion) was 96 per cent investment grade and 75 per cent was rated A or higher (2012 – 95 and 76 per cent, respectively). The private placement debt holdings provide diversification benefits (issuer, industry, and geography) and, because they often provide stronger protective covenants and collateral than debt securities, they typically provide better credit protection and potentially higher recoveries in the event of default. As at December 31, 2013, 50 per cent of the portfolio was invested in the United States (2012 – 51 per cent), 29 per cent in Canada (2012 – 28 per cent), 17 per cent in Asia and Other (2012 – 17 per cent), and four per cent in Europe (2012 – four per cent).

<sup>14</sup> Yields are based on IFRS income and are calculated using the geometric average of assets held at IFRS carrying value during the reporting period.

#### **Debt Securities and Private Placement Debt - Credit Quality**(1)





(1) Reflects credit quality ratings as assigned by Nationally Recognized Statistical Rating Organizations ("NRSRO") using the following priority sequence order: Standard & Poor's, Moody's, Dominion Bond Rating Service, Fitch, and Japan Credit Rating. For those assets where ratings by NRSRO are not available, disclosures are based upon internal ratings as described in the "Risk Management and Risk Factors" section below.

		2013			2012	
As at December 31, Per cent of carrying value	Debt securities	Private placement debt	Total	Debt securities	Private placement debt	Total
Government and agency	44	10	39	48	10	42
Financial	16	9	15	15	11	15
Telecommunications	2	_	2	2	1	2
Utilities	12	41	17	11	38	15
Energy	7	9	7	7	8	7
Industrial	5	7	5	5	8	5
Securitized (MBS/ABS)	3	_	2	3	_	3
Consumer (non-cyclical)	5	10	6	4	12	5
Consumer (cyclical)	2	7	2	1	6	2
Basic materials	2	6	3	2	5	2
Technology	1	_	1	1	_	1
Media and internet	1	1	1	1	1	1
Total per cent	100	100	100	100	100	100
Total carrying value (\$ billions)	\$ 115.0	\$ 21.0	\$ 136.0	\$ 119.1	\$ 20.3	\$ 139.4

As at December 31, 2013, gross unrealized losses on our fixed income holdings were \$2.9 billion or two per cent of the amortized cost of these holdings (2012 – \$0.7 billion or one per cent). Of this amount, \$73 million (2012 – \$160 million) relates to debt securities trading below 80 per cent of amortized cost for more than six months. Securitized assets represented \$55 million of the gross unrealized losses and \$14 million of the amounts trading below 80 per cent of amortized cost for more than six months (2012 – \$116 million and \$80 million, respectively). After adjusting for debt securities 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' pretax earnings for bonds trading at less than 80 per cent of amortized cost for greater than six months was approximately \$52 million as at December 31, 2013 (2012 – \$93 million).

As at December 31, 2013, the Company had \$3.4 billion of both public and private securitized assets, consisting of Commercial Mortgage Backed Securities ("CMBS"), Residential Mortgage Backed Securities ("RMBS"), and Asset Backed Securities ("ABS") representing one per cent of total invested assets (2012 – \$3.8 billion and two per cent).

#### **Mortgages**

As at December 31, 2013, mortgages represented 16 per cent (2012 – 15 per cent) of invested assets with 62 per cent of the mortgage portfolio invested in Canada (2012 – 63 per cent) and 38 per cent in the U.S. (2012 – 37 per cent). The overall portfolio is also diversified by geographic region, property type, and borrower. Of the total mortgage portfolio, 28 per cent (2012 – 31 per cent) is insured, primarily by Canada Mortgage and Housing Corporation ("CMHC") – Canada's AAA rated government backed national housing agency, with 54 per cent (2012 – 61 per cent) of residential mortgages insured and seven per cent (2012 – eight 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,	2013		2012			
(C\$ millions)	Carrying value	% of total	Carrying value	% of total		
Commercial						
Multi-family residential	\$ 3,533	9	\$ 3,320	9		
Retail	5,901	16	5,689	16		
Office	5,647	15	5,169	15		
Industrial	2,103	6	2,394	7		
Other commercial	2,143	6	1,957	6		
	\$ 19,327	52	\$ 18,529	53		
Manulife Bank single residential	16,998	45	15,220	43		
Agriculture	1,233	3	1,333	4		
Total mortgages	\$ 37,558	100	\$ 35,082	100		

Commercial mortgages have been conservatively underwritten and accounted for 52 per cent (2012 – 53 per cent) of total mortgages. Geographically, 33 per cent are in Canada and 67 per cent are in the U.S. (2012 – 37 per cent and 63 per cent, respectively). We are well diversified by property type and largely avoid risky market segments 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 very few loans are in arrears.

# Non-CMHC Insured Commercial Mortgages(1),(2)

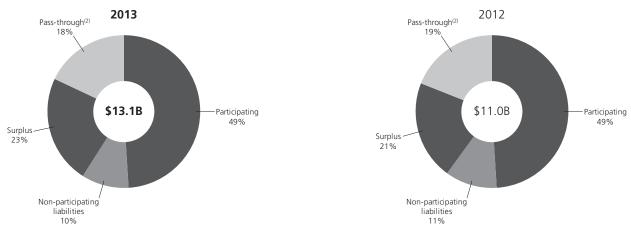
	2013	3	2012				
As at December 31,	Canada	U.S.	Canada	U.S.			
Loan-to-Value ratio(3)	59%	61%	59%	63%			
Debt-Service Coverage ratio <sup>(3)</sup>	1.47x	1.85x	1.48x	1.75x			
Average duration	3.1 years	5.6 years	2.8 years	5.5 years			
Average loan size (C\$ millions)	\$ 5.4	\$ 12.0	\$ 4.9	\$ 10.4			
Loans in arrears <sup>(4)</sup>	0.00%	0.00%	0.01%	0.00%			

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

### **Public Equities**

As at December 31, 2013, public equity holdings of \$13.1 billion represented six per cent (2012 – \$11.0 billion and five per cent) of invested assets, and when excluding pass-through and participating business, represent two per cent (2012 – two per cent) of invested assets. The portfolio is diversified by industry sector and issuer. Geographically, 34 per cent (2012 – 36 per cent) is held in Canada, 32 per cent (2012 – 29 per cent) is held in the U.S., and the remaining 34 per cent (2012 – 35 per cent) is held in Asia, Europe and other geographic areas. The composition of holdings by segment is outlined below.

# Public Equities – by Segment(1)



<sup>(1)</sup> Restated for a reclassification of certain assets, which primarily included public equities, from General Fund AUM to External Clients AUM. In reviewing our segregated fund arrangements, the Company also corrected the classification of certain funds. This retroactive correction resulted in an increase in both segregated fund net assets and net liabilities and a corresponding decrease in both total invested assets and insurance contract liabilities as at December 31, 2012.

<sup>(2)</sup> Excludes Manulife Bank commercial mortgage loans of \$38 million (2012 – \$23 million).

<sup>(3)</sup> Loan-to-Value and Debt-Service Coverage 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.

<sup>(2)</sup> Public equities denoted as pass-through are held by the Company to support the yield credited on equity-linked investment funds for Canadian and Indonesian life insurance products.

# **Alternative Long-Duration Assets**

Our alternative long-duration asset portfolio is comprised of a diverse range of asset classes with varying but largely uncorrelated characteristics. These are typically private assets representing investments in varied sectors of the economy which act as a hedge against future inflation and serve as an alternative source of asset supply to long-term corporate bonds. In addition to being a suitable match against our long-duration liabilities, these assets provide enhanced yields and diversification relative to traditional fixed income markets. The vast majority of our alternative long-duration assets are managed in-house.

As at December 31, 2013, alternative long-duration assets of \$19.9 billion represented nine per cent (2012 – \$16.8 billion and seven per cent) of invested assets. The fair value of total alternative long-duration assets was \$20.8 billion at December 31, 2013 (2012 – \$17.6 billion). The carrying value by sector and/or asset type as follows:

# **Alternative Long-Duration Assets**

	2013				2012				
As at December 31, (C\$ millions)	Carryir	% of total Carrying value carrying value		Carry	ng value	% of total carrying value			
Real estate									
Office	\$	7,149	36	\$	6,168	37			
Industrial		603	3		614	4			
Company use		804	4		789	5			
Other		1,152	6		942	6			
Total real estate	\$	9,708	49	\$	8,513	52			
Power and infrastructure		3,486	18		2,913	17			
Private equity		2,181	11		1,761	10			
Timberland		1,712	9		1,489	9			
Oil and gas		1,643	8		1,355	8			
Farmland		1,058	5		754	4			
Other		126	_		_	_			
Total alternative long-duration assets	\$	19,914	100	\$	16,785	100			

### **Real Estate**

The real estate portfolio is diversified by geographic region, with 61 per cent located in the U.S., 35 per cent in Canada, and four per cent in Asia as at December 31, 2013 (2012 – 56 per cent, 40 per cent, and four per cent, respectively). The high quality portfolio has virtually no leverage and is primarily invested in 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 95 per cent (2012 – 94.6 per cent) and an average lease term of 6.5 years (2012 – 6.1 years). During 2013 we executed five acquisitions, representing over \$0.8 billion market value of commercial real estate assets.

### **Power & Infrastructure**

Investments include electrical power generation, electricity transmission, water distribution, toll roads, ports, social infrastructure investments (including schools and hospitals), and midstream gas infrastructure assets (including gas gathering, transportation, distribution and storage). The portfolio is well diversified geographically across over 300 portfolio companies, with holdings predominantly in the U.S. and Canada, but also in the U.K., Western Europe and Australia.

# **Timberland & Farmland**

The Company's timberland and farmland assets are managed by our proprietary Hancock Natural Resources Group ("HNRG"). In addition to being the world's largest timberland investment manager for institutional investors<sup>15</sup>, with properties in the U.S., New Zealand and Australia, HNRG also manages farmland properties in the U.S., Australia and Canada. The General Fund's timberland portfolio comprised 17 per cent of HNRG's total timberland assets under management ("AUM") (2012 – 18 per cent). The farmland portfolio includes annual (row) crops, fruit crops, wine grapes, and nut crops. The Company's holdings comprised 45 per cent of HNRG's total farmland AUM (2012 – 41 per cent).

### **Private Equities**

Our portfolio includes both directly held private equity and private equity funds. Both are diversified across vintage years and industry sectors.

# Oil & Gas

This category is comprised of our conventional Canadian oil and gas properties which are managed by our subsidiary NAL Resources and various other oil and gas private equity interests. Production mix in 2013 was approximately 55 per cent crude oil, 36 per cent natural gas, and nine per cent natural gas liquids (2012 – 53 per cent, 37 per cent, and 10 per cent, respectively).

### **Other Invested Assets**

Other invested assets are comprised of leases, affordable housing, and other miscellaneous invested assets. As at December 31, 2013, other invested assets of \$3.3 billion represented one per cent (2012 – \$3.3 billion and one per cent) of invested assets.

<sup>&</sup>lt;sup>15</sup> Based on HRNG internal studies using industry data.

# **Manulife Asset Management**

# **Assets Under Management**

Total assets managed by Manulife Asset Management grew by \$39.8 billion from December 31, 2012, to \$280.2 billion as at December 31, 2013. Assets managed for external clients grew by \$37.4 billion to \$242.8 billion during the same period.

# **Manulife Asset Management AUM Composition**

As at December 31,		
(C\$ millions)	2013	2012
Affiliate / Retail <sup>(1),(2)</sup> : Fixed income Balanced Equity Asset allocation <sup>(3)</sup> Alternatives	\$ 61,045 11,972 64,937 71,865 199	\$ 56,128 8,312 47,618 64,087 179
	\$ 210,018	\$ 176,324
Institutional: Fixed income Balanced Equity Asset allocation Alternatives	\$ 12,974 1,702 6,429 19 11,666	\$ 12,232 1,769 4,241 18 10,840
	\$ 32,790	\$ 29,100
Manulife Asset Management External Clients AUM	\$ 242,808	\$ 205,424
General Fund <sup>(2)</sup> : Fixed income Equity Alternative long-duration assets	\$ 23,642 10,630 3,145	\$ 24,517 7,822 2,636
Total Barry Pf. Accord Barry on the Allina	\$ 37,417	\$ 34,975
Total Manulife Asset Management AUM	\$ 280,225	\$ 240,399

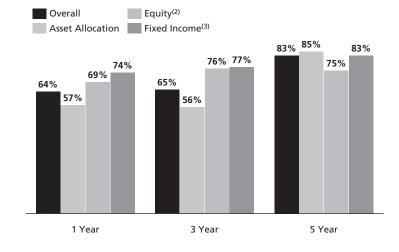
<sup>(1)</sup> Includes 49 per cent share of Manulife TEDA Fund Management Company Ltd., based on the joint venture ownership structure.

### Sales

In 2013, our public markets teams earned significant mandates across Asia, Europe, and North America. These wins came from a diverse group of existing and new clients and spanned pensions, sovereign wealth funds, and financial institutions, amongst others. Gross inflows in our Institutional business were \$4.0 billion (2012 – \$7.9 billion).

### **Public Markets - Investment Performance**

# % of MAM Public Markets AUM Outperforming Benchmarks(1)



We target at least 55 per cent of assets under management to outperform their benchmarks or peer group. As at December 31, 2013, investment performance has exceeded our target across all classes on a 1, 3 and 5-year basis.

<sup>(2)</sup> Restated for a reclassification of certain assets from General Fund AUM to External Clients AUM.

<sup>(3)</sup> Asset Allocation excludes \$48,098 million and \$35,592 million internally managed underlying funds in 2013 and 2012, respectively, already included in the other asset categories to avoid double-counting.

<sup>(1)</sup> Investment performance is based on actively managed Manulife Asset Management Public Markets account-based, asset-weighted performance versus their primary internal targets, which includes accounts managed by portfolio managers of Manulife Asset Management. Some retail accounts are evaluated net of fees versus their respective Morningstar peer group. All institutional accounts and all other retail accounts are evaluated gross of fees versus their respective index.

<sup>(2)</sup> Includes balanced funds

<sup>(3)</sup> Includes money market funds

At year end, MAM had 70 funds rated Four- or Five-stars by Morningstar<sup>16</sup>, an increase of nine funds since December 31, 2012, excluding money market funds. In addition to providing industry-leading performance<sup>17</sup> for our Wealth Management Affiliates, we also created 64 new mutual funds and segregated funds.

# **Strategic Direction**

As institutional and retail investors alike continue to pursue risk-adjusted returns across the globe, demand for multi-asset class solutions, real assets and global and emerging market equities and fixed income persists. Our strategic priorities are aligned to continue to capitalize on these trends.

**Manulife Asset Management's public markets business** continues to grow across each of our key geographies, backed by continuing strong investment performance. Our defining characteristics are alpha-focused<sup>18</sup> active management, a boutique environment, a global footprint and a client-centric culture. The core of our continuing success is our strong investment performance.

In 2013, we expanded our global investment capabilities with the addition of three new teams and the acquisition of MAAKL Mutual Bhd in Malaysia. We also added specialist talent across our global strategies, including Korean equity and Japan fixed income capabilities. Going forward, Manulife Asset Management public markets will continue to enhance its investment capabilities via acquisition and organic build to meet end-clients' evolving needs with best-in-class investment solutions.

Manulife Asset Management Private Markets' vision is to be recognized as a leading third party manager of private assets.

Private assets are a large and growing part of the asset management market. Investor trends have shown increased allocations to private assets to enhance yields in a low-rate environment, with allocations expected to further increase, as investors look to diversify their portfolios.

Our short term strategy is to pursue "core" offerings, consistent with Manulife's current investing approach, targeting institutional as well as ultra-high and high net worth investors. In addition to our existing timberland, farmland, and mezzanine debt offerings, Private Markets expects to expand its offerings in three prioritized growth asset classes: commercial real estate equity, commercial mortgages and private placement debt, based on their market potential and ability to leverage Manulife's existing capabilities and capacity. As the business grows, we will further expand our offerings.

<sup>&</sup>lt;sup>16</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>&</sup>lt;sup>17</sup> Performance above median for all asset classes in 1, 3, and 5 year time frames.

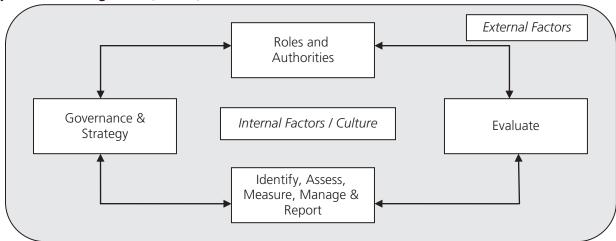
<sup>&</sup>lt;sup>18</sup> Excess returns relative to internal benchmarks.

# **Risk Management and Risk Factors**

### **Overview**

Manulife Financial is a global financial institution offering insurance, wealth and asset management products and other financial services. These businesses subject the Company to a broad range of risks. 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 and strategies with appropriate risk/return profiles; establishing sufficient management expertise to effectively execute strategies, and to identify, understand and manage underlying inherent risks; pursuing strategies and activities aligned with the Company's corporate and ethical standards and operational capabilities; pursuing opportunities and risks that enhance diversification; and, making risk taking decisions with analyses of inherent risks, risk controls and mitigations, and risk/return trade-off.

# **Enterprise Risk Management ("ERM") Framework**



The Company's ERM Framework provides a structured approach to implementing risk taking and risk management activities at an enterprise level supporting the Company's long-term revenue, earnings and capital growth strategy. It is communicated through risk policies and standards which ensure consistent design and execution of strategies across the organization. We have a common approach to managing all risks to which the Company is exposed, and a consistent evaluation of potential returns on contemplated business activities on a risk-adjusted basis. These policies and standards of practice cover:

- Assignment of accountability and delegation of authority for risk oversight and risk management.
- The types and levels of risk the Company seeks given its strategic plan and risk appetite.
- Risk identification, measurement, assessment and mitigation which enable effective management and monitoring of risk.
- Validation, back testing and independent oversight to confirm that the Company generated the risk profile it intended and the root
  cause analysis of any notable variation.

Manulife's ERM practices are influenced and impacted by internal and external factors (such as economic conditions, political environments, technology, risk culture etc.) which can significantly impact the levels and types of risks the Company might face in its pursuit to strategically optimize risk taking and risk management. Our ERM Framework incorporates relevant impacts and mitigating actions as appropriate.

A strong risk culture and a common approach to risk management are integral to Manulife's risk management practices. Manulife's Board of Directors is accountable for the oversight of risk management, and delegates this authority through a governance framework that is centered on the "three lines of defense" model that includes a network of risk oversight committees, global risk officers, global risk managers and global risk policies and practices:

The Company's first line of defense includes the Chief Executive Officer ("CEO") and Business Unit General Managers. Businesses are ultimately accountable for the risks they assume and for the day to day management of the risks and related controls. They are supported by global risk managers and risk management professionals across the enterprise that are responsible for specific risk taking activities and the design and execution of risk mitigation practices that are consistent with this Policy and individual risk management strategies.

The second line of defense is comprised of the Company's Chief Risk Officer ("CRO"), the Group Risk Management ("GRM") function, global oversight functions and divisional chief risk officers and functions. Together this group provides independent oversight of risk taking and risk mitigation activities across the enterprise. Enterprise-level risk oversight committees, including the Executive Risk Committee ("ERC"), also provide oversight of risk taking and risk mitigation activities.

The third line of defense is comprised of Audit Services, which provides independent assurance that controls are effective and appropriate relative to the risk inherent in the business, and that risk mitigation programs and risk oversight functions are effective in managing risks.

### **Risk Culture**

Manulife strives for a risk aware culture, where individuals and groups are encouraged, feel comfortable and are proactive in making transparent, balanced risk-return decisions that are in the long term interests of the Company. Key areas of focus pertaining to risk culture include: aligning individual and Company objectives; identifying and escalating risks before they become significant issues; promoting a collaborative approach that enables appropriate risk taking; ensuring transparency in identifying, communicating and tracking risks; and systematically acknowledging and surfacing material risks.

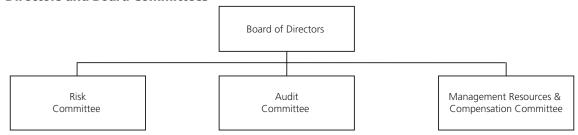
### **Risk Governance**

The Board of Directors oversees management's implementation of appropriate frameworks, processes and 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 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 CRO as well as by the 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.

GRM, 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. GRM seeks to ensure a consistent enterprise-wide assessment of risk, risk based capital and risk adjusted returns across all operations.

### **Board of Directors and 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. It also 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, risk management standards of practice and oversees the credit risk management program. The Credit Committee monitors our overall credit risk profile, key and emerging risk exposures, risk management activities, and ensures compliance with credit risk policies. The committee also approves large individual credits and investments, and manages credit risk jointly with the Global Asset Liability Committee.

**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 and, as noted above, manages credit risk jointly with the Credit Committee.

**Capital Committee** – The Capital Committee oversees our capital management policy framework and provides direction on strategic issues affecting our regulatory capital for all our operating companies. The committee considers and approves internal target regulatory capital ratios and capital structure for the Company.

**Product Oversight Committee** ("POC") – The POC establishes 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. It oversees the insurance risk management program and the process for approval of new product initiatives and third party reinsurance arrangements for new business. The POC monitors product design and pricing, and insurance risk across the Company, as well as, oversees underwriting and claims risk committee activities, including retention management and underwriting and claims risk oversight.

**Operational Risk Committee** ("ORC") – The ORC oversees operational risk exposures and associated governance and risk processes. It oversees the maintenance and enhancement of our overall Operational Risk Management Framework, including implementation of our Operational Risk Management Program and overseeing specific operational risk management programs and practices. The ORC reviews and approves operational risk policies and monitors compliance with such policies.

# **Risk Appetite**

Risk taking activities are managed within the Company's overall risk appetite, which defines the amount and types of risks the Company is willing to assume, and is comprised of three components: risk philosophy, risk appetite statements, and risk limits and tolerances.

Manulife Financial is a global financial institution offering insurance, wealth and asset management products and other financial services. All of these activities involve some elements of risk taking. Our objective is to balance the Company's level of risk with our business, growth and profitability goals, in order to achieve consistent and sustainable performance over the long-term that benefits our customers and shareholders. When making decisions about risk taking and risk management, Manulife places the highest priority on the following risk management objectives:

- To safeguard the commitments and expectations we have established with our shareholders, customers and creditors;
- To prudently and effectively deploy the capital invested in the Company by our shareholders with appropriate risk/return profiles;
- To protect and/or enhance the Company's reputation and brand; and
- To maintain the Company's targeted financial strength rating.

The Company's risk appetite defines the tolerance levels for the total level, and various types of risk that the Company is willing to accept. It is a key part of our strategic planning and operational execution. The following statements provide guideposts for risk taking at Manulife:

- Manulife accepts a total level of risk that provides a very high level of confidence to meeting customer obligations while targeting
  an acceptable overall return to shareholders over time;
- The Company targets a credit rating amongst the strongest of its global peers;
- Manulife values customer-focused innovation and encourages prudent initiatives intended to increase competitive advantage;
- Capital market risks are acceptable when they are managed within specific risk limits and tolerances;
- The Company believes a balanced investment portfolio reduces overall risk and enhances returns; therefore it accepts credit and alternative long-duration asset related risks;
- The Company pursues insurance risks that add customer and shareholder value where we have competence to assess and monitor them, and for which we receive appropriate compensation;
- Manulife accepts that operational risks are an inherent part of our business but will protect its business and customers' assets through cost-effective operational risk mitigation; and
- Manulife expects its officers and employees to act in accordance with our values, ethics and standards; and to preserve and enhance our brand and reputation.

Risk tolerances and limits are established for risks within our risk classification framework that are inherent in our strategies in order to define the types and amount of risk the Company will assume. Risk tolerance levels are set for risks deemed to be most significant to the Company and are established in relation to economic capital, earnings at risk and regulatory capital required. The purpose of risk limits is to cascade the total Company risk appetite to a level that can be effectively managed. Manulife establishes standalone risk limits for risk categories to avoid excessive concentration in any individual risk category and manage the overall risk profile of the organization.

### 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. Divisions, business units and functional groups are responsible for identifying and assessing key and emerging risks on an ongoing basis. 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: 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 stress tests on earnings, regulatory capital ratios, economic capital, earnings at risk and liquidity, that consider significant, but plausible events. 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 required 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**

Under the direction of the CRO, GRM oversees a formal process for monitoring and reporting on all significant risk at the Group level. Risk exposures are also discussed at various risk oversight committees, along with any exceptions or proposed remedial actions, 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 limits. The ERC reviews key financial risk exposures and sensitivities at least monthly.

Our Chief Actuary presents the results of the Dynamic Capital Adequacy Test to the Board of Directors annually. Our Chief 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 within established risk 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. Such controls are an integral part of day to day activity, business management and decision making.

GRM 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. 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 and regulatory environments and changes to accounting or 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 strategic and business planning that is executed by divisional management and is reviewed by the CEO, the Chief Operating Officer, the Group Chief Financial Officer ("CFO"), the CRO, and other members of the Executive Committee;
- 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 of Directors 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 risk/return profile 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 continue to mitigate our in-force public equity and interest rate risks. Depending upon market conditions, these actions could result in costs which might 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**

Under the Canadian insurance accounting and regulatory capital regimes, the impact of the current market conditions are largely reflected in our current period results. Weak or worsening economic conditions could result in material charges to income and reductions in our capital position, notwithstanding our improved risk profile and strong underlying regulatory capital position.

In 2012 we set objectives of \$4 billion in core earnings and core ROE of 13 per cent in 2016<sup>19</sup> based on our macro-economic and other assumptions.

Risk factors that may result in an inability to achieve our objectives include the following:

- Actions taken by management to bolster capital and further reduce the Company's risk profile and strengthen capital could reduce future 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. In the stochastic valuations of our segregated fund guarantee business, those rates inclusive of dividends are 9.6% per annum in Canada, 9.6% per annum in the U.S., 6.2% per annum in Japan, and vary between 7.8% and 9.85% per annum for European equity funds. The calibration of the economic scenario generators that are used to value segregated fund guarantee business complies with current actuarial Standards of Practice for the valuation of these products. Implicit margins are determined through stochastic valuation processes which results in lower net yields used to determine policy liabilities. Assumptions used for alternative assets backing liabilities are constrained by different Standards of Practice and are marginally lower than those used in stochastic valuations. Alternative asset return assumptions vary based on asset class but are largely consistent, after application of valuation margins and differences in taxation, with returns assumed for public equities.

<sup>&</sup>lt;sup>19</sup> See "Caution regarding forward-looking statements" above.

- A prolonged low interest environment would result in charges related to lower fixed income ultimate reinvestment rate assumptions and an increase in new business strain:
  - The fixed income ultimate reinvestment rate is based on five and ten year rolling averages of government bond rates. The potential impact on net income attributed to shareholders assuming government bond rates remain at December 31, 2013 levels or change by 50 basis points is outlined under the "Critical Accounting and Actuarial Policies" section below.
  - 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 the ultimate reinvestment rate 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 weak 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 cost of hedging, and as a result the offering of segregated fund guarantees could become uneconomic.
  - The reinvestment 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 embedded guarantees in other annuity or insurance products, and could result in future adverse policyholder behaviour experience.
  - Lower interest rates could lead to lower mean bond parameters used for the stochastic valuation of segregated fund guarantees, resulting in higher policy liabilities.

# **Regulatory and Capital Risk Factors**

The Company is subject to a wide variety of laws and regulations that vary by jurisdiction and are intended to protect policyholders and beneficiaries first and foremost, rather than investors. Insurance authorities and regulators in many countries are reviewing their capital requirements and implementing or considering changes aimed at strengthening risk management and the capitalization of financial institutions. Changes in regulatory capital guidelines for banks under the Basel Accord or the International Association of Insurance Supervisors ("IAIS") initiatives to create Basic Capital Requirements, a special Higher Loss Absorbency capital surcharge on select activities, and International Capital Standards may also have implications for insurance companies. In addition, legal and regulatory capital could be impacted by changes to accounting standards being proposed by the IASB with respect to insurance contracts, financial instruments, and hedge accounting as well as by changes to the actuarial standards being proposed by the Canadian Actuarial Standards Board.

The potential changes to regulatory capital, actuarial and accounting standards could have a material adverse effect on the Company's Consolidated Financial Statements and regulatory capital both on transition and going forward. The impact of these changes remains uncertain but could lead to higher levels of required capital going forward. These changes could also 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, or to pursue actions that would support capital needs but adversely impact our subsequent earnings potential. In addition, the timing and outcome of these initiatives could have a significantly adverse impact 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 earnings and/or capital position are provided below.

- In December 2013 the Canadian Actuarial Standards Board ("ASB") issued its Exposure Draft updating the Standards of Practice related to economic reinvestment assumptions used in the valuation of policy liabilities. The new Standards are expected to be effective in the fourth quarter of 2014. We do not anticipate the impact on net income in the quarter of implementation will be significant. However, the actual impact will vary based on the level of prevailing interest rates at the time of implementation, changes to the Exposure Draft between now and the effective date of the new Standards, or changes to interpretation of the revised Standards. In addition, the new Standards will impact our net income sensitivities to changes in interest rates. The impact on our sensitivities could be positive or negative and the direction will be influenced by the approach we take to modeling interest rates under the new standards as well as any risk management actions taken. It should be noted that although sensitivities may change, the nature of the risks related to the business are unchanged.<sup>20</sup>
- The Canadian Institute of Actuaries is also expected to publish guidance on calibration criteria for fixed income funds with respect to the valuation of segregated fund guarantees, which we believe will be effective in 2014. Once effective, the new calibration criteria will apply to the determination of segregated fund guarantee actuarial liabilities and required capital and may result in a reduction in net income and MLI's MCCSR ratio.
- The International Accounting Standards Board ("IASB") issued exposure drafts of new accounting standards for insurance contracts in June 2013. As drafted, the standard would create material unwarranted volatility on our financial results and capital position. The

<sup>&</sup>lt;sup>20</sup> See "Caution regarding forward-looking statements" above.

final standards are not expected to be effective until at least 2018 and it is not known if changes would be made to regulatory capital to adjust for the unwarranted volatility.

- 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 are expected to become applicable to MFC effective January 1, 2016. In addition, OSFI is evaluating a possible overhaul of the regulatory capital framework in Canada intended for implementation in 2018.
- The NAIC has been reviewing reserving and capital methodologies as well as the overall risk management framework. These reviews will affect U.S. life insurers, including John Hancock, and could lead to increased reserving and/or capital requirements for our business in the United States. In the fall of 2013, the IAIS committed to the completion of several capital initiatives in the next few years that will apply to select or all global insurance groups. These include Basic Capital Requirements, a special Higher Loss Absorbency capital surcharge on select activities, and International Capital Standards. It is not yet known how the proposals will affect capital requirements and the competitive position of the Company.
- The Company currently has reinsurance agreements, including agreements with third parties and affiliate reinsurance agreements. Regulators in the U.S. and elsewhere are in the process of reviewing life insurers' use of affiliate reinsurance companies, and in some cases, the use of reinsurance arrangements more generally. We cannot predict what, if any, changes may result from this review. Changes to the regulatory treatment of affiliate and third party reinsurance arrangements could potentially have an adverse effect on the financial results, liquidity and capital position of some of our subsidiaries result in increased collateral requirements, and/or our use of affiliate reinsurance companies.

# The Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank")

Dodd-Frank Title VII in the United States establishes a new framework for regulation of over-the-counter ("OTC") derivatives which affects activities of the Company which use derivatives for various purposes, including hedging equity market, interest rate and foreign currency exposures. Regulations by the U.S. Commodities Futures Trading Commission and the U.S. Securities and Exchange Commission under Dodd-Frank (since June 10, 2013) requires certain types of OTC derivative transactions to be executed through a centralized exchange or regulated facility and be cleared through a regulated clearinghouse. These new rules cause additional costs, including new capital and funding requirements, and additional regulation on the Company.

Derivative transactions executed through exchanges or regulated facilities attract incremental collateral requirements in the form of initial margin, and require variation margin to be cash settled on a daily basis which increases liquidity risk for the Company. The increase in margin requirements (relative to bilateral agreements), combined with a more restricted list of securities that qualify as eligible collateral, requires us to hold larger positions in cash and treasuries, which could 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 OTC derivative transactions are grandfathered and will migrate to being cleared through exchanges over time, or the Company may elect to accelerate the migration. As such, this does not become a significant risk for Manulife until a large portion of our derivatives have transitioned to clearing houses and market conditions adverse to liquidity (material increases in interest rates and/ or equity markets) have been experienced.

Similar regulations in other jurisdictions we operate in are expected to become effective in as early as 2014. We cannot predict the effect of the legislation on our hedging costs, our hedging strategy or its implementation, or whether Dodd-Frank and similar regulations in other jurisdictions will lead to an increase or decrease in or change in composition of the risks we hedge.

### **International Financial Reporting Standards**

The IASB and the Financial Accounting Standards Board ("FASB") issued exposure drafts of new accounting standards for insurance contracts in June 2013. The two proposals are similar in some of their main principles, but differ in many of the requirements around measurement of ongoing obligations to policyholders. These proposals will have a material impact on our financial results if implemented in their current form. The Company's capital position and income for accounting purposes would be highly correlated to prevailing market conditions, resulting in massive unwarranted volatility that will make it difficult for investors, regulators, and other authorities to distinguish between the performance of the underlying business and meaningless short-term market noise. This could also result in life insurers exiting the long duration contracts business and pulling out of alternative long-duration investments ultimately reducing the stability and long-term view of the insurance business.

The comment periods on the exposure drafts ended on October 25, 2013 and the final standards are not expected to be effective until at least 2018. We, along with other companies in the industry from around the world, provided feedback on the significant issues we see with the IASB and FASB exposure draft proposals. In addition, Manulife, MetLife Inc., New York Life and Prudential Financial Inc. performed comprehensive field testing of both the IASB and FASB proposals within the exposure draft response period. The results of these field tests supported the concerns raised with the IASB and FASB.

Additionally, for IFRS, other jurisdictions may not adopt the standard as issued or on the same timeline as published by the IASB, and there is a possibility that Canada will be the first to adopt the standard. Adopting the standard in Canada before it is adopted elsewhere would increase our cost of capital compared to global competitors and the banking sector in Canada.

The insurance industry in Canada has support from OSFI and the federal government with respect to the potential impact of these proposals on Canadian insurance companies. 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.

### Entities within the MFC Group are interconnected which may make separation difficult

Linkages between MFC and its subsidiaries may make it difficult to dispose of or separate a subsidiary within the group by way of spin-off or similar transaction. See the Company's Annual Information Form – "Risk Factors – Additional risks – Entities within the MFC Group are interconnected which may make separation difficult." In addition to the possible negative consequences outlined in such disclosure, other negative consequences could include a requirement for significant capital injections, and increased net income and capital sensitivities of MFC and its remaining subsidiaries to market declines.

### **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's primary insurance operating subsidiaries have received financial strength/claims paying ability 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.

### **Risk Factors and IFRS 7 Disclosure**

The shaded text and tables in the following sections of this MD&A represent our disclosure on market and liquidity risk in accordance with IFRS 7, "Financial Instruments – Disclosures", and include a discussion on how we measure risk and our objectives, policies and methodologies for managing these risks. Therefore, the following shaded text and tables represent an integral part of our audited annual Consolidated Financial Statements for the years ended December 31, 2013 and December 31, 2012. The fact that certain text and tables are considered an integral part of the Consolidated Financial Statements does not imply that the disclosures are of any greater importance than the sections not part of the disclosure. Accordingly the "Risk Management and Risk Factors" disclosure should be read in its entirety.

# **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 long-duration assets.

### **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 limits.

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 and Spread Risk	Alternative Long-Duration Asset Performance Risk	Foreign Exchange Risk
Product Design and Pricing	Χ	Χ	Χ	Χ
Variable Annuity Guarantee Dynamic Hedging	Χ	Χ		Χ
Macro Equity Risk Hedging	Χ			Χ
Asset Liability Management	Χ	Χ	X	Χ
Foreign Exchange Management				Χ

To reduce public equity risk, we primarily use a variable annuity guarantee dynamic hedging strategy which is complemented by a general macro equity risk hedging strategy. As a result of our dynamic and macro hedging program, as at December 31, 2013, we estimate that approximately 64 to 82 per cent of our underlying earnings sensitivity to a 10 per cent decline in equity markets would be offset by hedges. The lower end of the range is based on the dynamically hedged assets that exist at December 31, 2013 and assumes re-balancing of equity hedges for dynamically hedged variable annuity liabilities at five per cent intervals and the upper end of the range assumes the performance of the dynamic hedging program 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 "Publicly Traded Equity Performance Risk" section below.

In general, to reduce interest rate risk, we lengthen the duration of our fixed income investments in both our liability and surplus segments by investing in longer duration bonds, and by executing lengthening interest rate swaps. During 2013, the sensitivity of net income attributed to shareholders to declines in interest rates increased slightly, remaining well within our risk appetites. The increase was driven by the impact of market movements, as interest rates and equity markets increased significantly during the year in most jurisdictions. Risk management activity was limited to interest rate swaps executed in the Japanese market.

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. While we have a history of being able to realize a portion of these gains or losses, it is not certain that we would crystallize any of the unrealized gains or losses available.

# **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.

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, which may increase policy liabilities and reduce 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. Furthermore, 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 for key markets are based on long-term historical observed experience. In the stochastic valuations of our segregated fund guarantee business, those rates inclusive of dividends are 9.6% per annum in Canada, 9.6% per annum in the U.S., 6.2% per annum in Japan and vary between 7.8% and 9.85% per annum for European equity funds. The calibration of the economic scenario generators that are used to value segregated fund guarantee business complies with current actuarial Standards of Practice for the valuation of these products. Implicit margins are determined through stochastic valuation processes which results in lower net yields used to determine policy liabilities. Assumptions used for alternative long-duration assets backing liabilities are constrained by different Standards of Practice and result in marginally lower returns for public equities than those used in stochastic valuations. Alternative asset return assumptions vary based on asset class but are largely consistent, after application of valuation margins and differences in taxation, with returns assumed for public equities.

### **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 invested or 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 or increases in swap spreads will result in an increase in policy liabilities and a reduction in net income, while an increase in corporate bond spreads or 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 Long-Duration Asset Performance Risk**

Alternative long-duration asset performance risk arises from general fund investments in commercial real estate, timber properties, agricultural properties, infrastructure, 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. Alternative long-duration asset assumptions vary by asset class and generally have a similar impact on policy liabilities as publicly traded 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 long-duration 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 long-duration 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 relative to these currencies, 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 Strategy**

Our policies, standards and standards of practice with respect to product design and pricing are designed with the objective of aligning our product offerings with our risk taking philosophy and risk appetite, and in particular, that incremental risk generated from new sales aligns with our strategic risk objectives and risk limits. 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 profit targets and staying within risk limits. Certain of our general fund adjustable benefit products have minimum rate guarantees. The rate guarantees for any particular policy are set at the time the policy is issued and governed by insurance regulation in each jurisdiction where the products are sold. The contractual provisions allow crediting rates to be re-set at pre-established intervals subject to the established minimum crediting rate guarantees. The Company may partially mitigate the interest rate exposure by setting new rates on new business and by adjusting rates on in-force business where permitted. In addition, the Company partially mitigates this interest rate risk through its asset liability management process, product design elements, and crediting rate strategies. New product initiatives, new business reinsurance arrangements and material insurance underwriting initiatives must be reviewed and approved by the CRO or key individuals within the global risk management group.

# **Hedging Strategies for Variable Annuity and Other Equity Risks**

The Company's exposure to movement in public equity market values primarily arises from variable annuity guarantees and to a smaller extent from asset-based fees and general fund public equity holdings.

Dynamic hedging is the primary hedging strategy for variable annuity market risks. As at December 31, 2013, approximately 64 per cent to 82 per cent of our in-force variable annuity guarantee values, net of amounts reinsured, were dynamically hedged. Dynamic hedging is employed for new variable annuity guarantees business when written, or as soon as practical thereafter.

Public equity risk arising from other sources (not dynamically hedged) is managed through our macro equity risk hedging strategy. Interest rate risk arising from variable annuity business not dynamically hedged is managed within our asset liability management strategy.

# **Dynamic Hedging**

The variable annuity dynamic hedging strategy is designed to hedge the sensitivity of variable annuity guarantee policy liabilities and available capital to fund performance (both public equity and bond funds) and interest rate movements. The objective of the dynamic hedging strategy is to offset, as closely as possible, the change in the economic value of guarantees with the profit and loss from our hedge asset portfolio. The 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. Other derivative instruments (such as equity options) are also utilized and we may consider the use of additional hedge instruments opportunistically in the future.

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;
- Credit spreads widen and actions are not taken to adjust accordingly;
- 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 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 Dynamic and Macro Hedging Strategies".

# **Macro Equity Risk Hedging**

The objective of the macro equity risk hedging program is to maintain our overall earnings sensitivity to public equity market movements within our Board approved risk appetite limits. The macro hedging program thus hedges earnings sensitivity due to movements in public equity markets arising from all sources (outside of dynamically hedged exposures). Sources of equity market sensitivity addressed by the macro equity hedging include:

- Residual equity and currency exposure from variable annuity guarantees not dynamically hedged;
- General fund equity holdings backing non-participating liabilities;
- Variable life insurance;
- Unhedged provisions for adverse deviation related to variable annuity guarantees dynamically hedged; and
- 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.

# Risks Related to Dynamic and Macro Hedging Strategies

Our hedging strategies rely 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 subject to the risk of increased funding and collateral demands which may become significant as equity markets increase.

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 strategies are highly dependent on complex systems and mathematical models that are subject to error and rely on long-term forward-looking 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 strategies there may be additional, unidentified risks that may negatively impact our business and future financial results.

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 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 MCCSR 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 long-duration 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 long-duration 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 long-duration 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 alternative long-duration asset performance by investing in a diversified basket of assets including public and private equities, commercial real estate, infrastructure, timber, agricultural real estate, and oil and gas assets. We further diversify risk by managing publicly traded equities and alternative long-duration asset investments against established 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, to generally match 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.

Risk exposure limits are 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**

# 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.

We seek to mitigate a portion of the risks embedded in our retained (i.e. net of reinsurance) variable annuity and segregated fund guarantee business through the combination of our dynamic and macro hedging strategies (see "Publicly Traded Equity Performance Risk" above).

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

# Variable annuity and segregated fund guarantees, net of reinsurance

		<b>December 31, 2013</b> December 31, 20					I, 2012				
As at (C\$ millions)		Guarantee Amount value Fund value at risk <sup>(4),(5)</sup>		Guara		Fund value	Amount at risk <sup>(4),(5)</sup>				
Guaranteed minimum income benefit <sup>(1)</sup> Guaranteed minimum withdrawal benefit Guaranteed minimum accumulation benefit	66,	194 \$ 5,161 189 63,849 942 20,581	\$ 1,109 4,120 94	\$ 6, 65, 20,		\$ 4,958 58,659 21,468	\$ 1,630 7,183 1,383				
Gross living benefits <sup>(2)</sup> Gross death benefits <sup>(3)</sup>	\$ 89, 12,	325 \$ 89,591 490 11,230	\$ 5,323 1,413	\$ 92, 13,		\$ 85,085 10,622	\$ 10,196 2,206				
Total gross of reinsurance	\$ 101,	815 \$ 100,821	\$ 6,736	\$ 105,	758	\$ 95,707	\$ 12,402				
Living benefits reinsured Death benefits reinsured		422 \$ 4,544 601 3,465	\$ 942 564	, ,	780 573	\$ 4,358 3,140	\$ 1,427 709				
Total reinsured	\$ 9,	023 \$ 8,009	\$ 1,506	\$ 9,	153	\$ 7,498	\$ 2,136				
Total, net of reinsurance	\$ 92,	792 \$ 92,812	\$ 5,230	\$ 96,	305	\$ 88,209	\$ 10,266				

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

The amount at risk on variable annuity contracts, net of reinsurance was \$5.2 billion at December 31, 2013 compared with \$10.3 billion at December 31, 2012. The decrease was driven by the increase in equity markets.

The policy liabilities established for variable annuity and segregated fund guarantees were \$1,197 million at December 31, 2013 (December 31, 2012 - \$7,948 million). For non-dynamically hedged business, policy liabilities declined from \$2,695 million at December 31, 2012 to \$589 million at December 31, 2013. For the dynamically hedged business, the policy liabilities declined from \$5,253 million at December 31, 2012 to \$608 million at December 31, 2013. The decrease in the total policy liabilities for variable annuity and segregated fund guarantees is mainly due to the significant increase in equity markets in 2013, and in the case of dynamically hedged business, is also due to the increase in swap rates in 2013.

# 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 a	t Dece	mbe	r <b>31</b> ,
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(C\$ millions)

Investment category	2013	2012
Equity funds	\$ 37,968	\$ 32,752
Balanced funds	59,198	57,243
Bond funds	10,418	10,243
Money market funds	2,255	2,717
Other fixed interest rate investments	1,601	1,378
Total	\$ 111,440	\$ 104,333

<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.

<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 guaranteed minimum death benefit, the 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 amount at risk is defined as the excess of the current annuitization income base over the current account value. For all guarantees, the amount at risk is floored at zero at the single contract level.

<sup>(5)</sup> The amount at risk net of reinsurance at December 31, 2013 was \$5,230 million (2012 – \$10,266 million) of which: US\$3,124 million (2012 – US\$5,452 million) was on our U.S. business, \$1,248 million (2012 – \$2,354 million) was on our Canadian business, US\$335 million (2012 – US\$2,094 million) was on our Japan business and US\$285 million (2012 – US\$407 million) was related to Asia (other than Japan) and our run-off reinsurance business.

### **Caution Related to Sensitivities**

In the sections that follow, we provide sensitivities and risk exposure measures for certain risks. These include sensitivities 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 activity and investment returns assumed in the determination of policy liabilities. 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, the 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 MCCSR ratio will be as indicated.

# **Publicly Traded Equity Performance Risk**

As at December 31, 2013, we estimate that approximately 64 per cent to 82 per cent of our underlying earnings sensitivity to a 10 per cent decline in equity markets would be offset by hedges, compared with 72 per cent to 83 per cent at December 31, 2012. The upper end of the range assumes the performance of the dynamic hedging program would completely offset the loss from the dynamically hedged variable annuity guarantee liabilities and that the macro-hedge assets are rebalanced in line with the market changes. The lower end of the range assumes that there is not a complete offset due to our practices of not hedging the provisions for adverse deviation and rebalancing equity hedges in the dynamic program at five per cent intervals, and that the macro-hedge assets are rebalanced in line with market changes.

As outlined above, the macro hedging strategy is designed to mitigate public equity risk arising from variable annuity guarantees not dynamically hedged and from other products and fees. In addition, 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 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, including embedded derivatives. The potential impact is shown 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 guarantee 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. The potential impact is shown assuming:

- (a) First that the change in value of the hedge assets completely offsets the change in the dynamically hedged variable annuity guarantee liabilities including the provisions for adverse deviation; and
- (b) Second that the change in value of the dynamically hedged variable annuity guarantee liabilities is not completely offset, including the assumption that the provision for adverse deviation is not offset and that the hedge assets are based on the actual position at the period end. In addition, we assume that we increase our macro equity hedges in negative market shock scenarios and reduce macro equity hedges in positive market shock scenarios.

It is also important to note that these estimates are illustrative, and that the hedging program may underperform these estimates, particularly during periods of high realized volatility and/or periods where both interest rates and equity market movements are unfavourable.

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

A 4 D						
As at December 31, 2013 (C\$ millions)	-30%	-20%	-10%	10%	20%	30%
Underlying sensitivity to net income attributed to shareholders <sup>(2)</sup>						
Variable annuity guarantees	\$ (4,120)	\$ (2,310)	\$ (960)	\$ 610	\$ 1,060	\$ 1,380
Asset based fees General fund equity investments <sup>(3)</sup>	(310) (420)	(210) (280)	(110) (130)	110 140	210 280	310 430
Total underlying sensitivity	\$ (4,850)	\$ (2,800)	\$ (1,200)	\$ 860	\$ 1,550	\$ 2,120
Impact of hedge assets Impact of macro-hedge assets <sup>(4)</sup> Impact of dynamic hedge assets assuming the change in the value	\$ 1,010	\$ 510	\$ 170	\$ (170)	\$ (250)	\$ (330)
of the hedge assets completely offsets the change in the dynamically hedged variable annuity guarantee liabilities <sup>(4)</sup>	3,370	1,900	810	(550)	(960)	(1,250)
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 <sup>(4)</sup>	\$ 4,380	\$ 2,410	\$ 980	\$ (720)	\$ (1,210)	\$ (1,580)
Net impact assuming the change in the value of the hedged assets completely offsets the change in the dynamically hedged variable annuity guarantee liabilities(5)	\$ (470)	\$ (390)	\$ (220)	\$ 140	\$ 340	\$ 540
Net impact of assuming that the provisions for adverse deviation for dynamically hedged liabilities are not offset and that the hedging program rebalances at 5% market intervals <sup>(6)</sup>	(870)	(530)	(210)	40	50	70
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, as described above <sup>(6)</sup>	\$ (1,340)	\$ (920)	\$ (430)	\$ 180	\$ 390	\$ 610
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	90%	86%	82%	84%	78%	75%
Percentage of underlying earnings sensitivity to movements in equity markets that is offset by hedge assets if dynamic hedge assets do not completely offset the change in the dynamically hedged variable annuity guarantee liability <sup>(6)</sup>	72%	67%	64%	79%	75%	71%

<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, 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 participating policy funds are largely self-supporting and generate no material impact on net income attributed to shareholders as a result of changes in equity markets.

<sup>(4)</sup> Includes the impact of rebalancing equity hedges in the macro hedging program.

<sup>(5)</sup> Variable annuity guarantee liability includes the best estimate liabilities and associated provisions for adverse deviation.

<sup>(6)</sup> Represents the impact of rebalancing equity hedges for dynamically hedged variable annuity guarantee liabilities at five per cent market intervals. Also represents the impact of changes in markets on provisions for adverse deviation that are not hedged, but does not include any impact in respect of other sources of hedge ineffectiveness e.g. fund tracking, realized volatility and equity, interest rate correlations different from expected among other factors.

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

As at December 31, 2012 (C\$ millions)	-30%	-20%	-10%		10%	20%	30%
Underlying sensitivity to net income attributed to shareholders <sup>(2)</sup> Variable annuity guarantees Asset based fees General fund equity investments <sup>(3)</sup>	\$ (5,640) (270) (380)	\$ (3,510) (180) (260)	\$ (1,580) (90) (130)	\$	1,260 90 120	 tated <sup>(4)</sup> 2,220 180 230	 tated <sup>(4)</sup> 2,930 270 350
Total underlying sensitivity	\$ (6,290)	\$ (3,950)	\$ (1,800)	\$	1,470	\$ 2,630	\$ 3,550
Impact of hedge assets Impact of macro hedged assets(4) 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(4)	\$ 2,010	\$ 1,340	\$ 670 820	\$	(670)	(1,160)	(1,580)
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 <sup>(4)</sup>	\$	\$ 3,230	\$	\$(	1,270)	(2,170)	(2,880)
Net impact assuming the change in the value of the hedged assets completely offsets the change in the dynamically hedged variable annuity guarantee liabilities <sup>(5)</sup>	\$ (1,210)	\$ (720)	\$ (310)	\$	200	\$ 460	\$ 670
Impact of assuming that the provisions for adverse deviation for dynamically hedged liabilities are not offset and that the hedging program rebalances at 5% market intervals <sup>(6)</sup>	(710)	(470)	(190)		(10)	(40)	(70)
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, as described above <sup>(6)</sup>	\$ (1,920)	\$ (1,190)	\$ (500)	\$	190	\$ 420	\$ 600
Percentage of underlying earnings sensitivitiy 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	81%	82%	83%		86%	83%	81%
Percentage of underlying earnings sensitivity to movements in equity markets that is offset by hedge assets if dynamic hedge assets do not completely offset the change in the dynamically hedged variable annuity guarantee liability <sup>(6)</sup>	69%	70%	72%		87%	84%	83%

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

Changes in equity markets impact our available and required components of the MCCSR ratio. The following table shows the potential impact to MLI's MCCSR 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 MCCSR ratio arising from public equity returns different than the expected return for policy liability valuation<sup>(1),(2)</sup>

	Impact on MLI MCCSR ratio							
Percentage points	-30%	-20%	-10%	+10%	+20%	+30%		
December 31, 2013	(14)	(8)	(4)	13	25	25		
December 31, 2012	(17)	(11)	(5)	1	3	9		

<sup>(1)</sup> See "Caution Related to Sensitivities" above. In addition, estimates exclude changes to the net actuarial gains/losses with respect to the Company's pension obligations as a result of changes in equity markets, as the impact on the quoted sensitivities is not considered to be material.

The favourable impact on the capital ratio to positive equity shocks at December 31, 2013 reflects the fact that the required capital on segregated fund guarantees is at the level at which any additional gains can be immediately reflected in the ratio and do not need to be brought in on a smoothed basis.

<sup>(2)</sup> Defined as earnings sensitivity to a change in public equity markets including settlements on reinsurance contracts, 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 participating policy funds are largely self-supporting and generate no material impact on net income attributed to shareholders as a result of changes in equity markets.

<sup>(4)</sup> The numbers above were restated to reflect the fact that in the first quarter of 2013, we refined our assumptions with respect to the amount of macro hedge offsets in the above calculation. We now assume that we reduce equity hedges in our macro hedging program under positive market shock scenarios.

<sup>(5)</sup> Variable annuity guarantee liability includes the best estimate liabilities and associated provisions for adverse deviation.

<sup>(6)</sup> Represents the impact of rebalancing equity hedges for dynamically hedged variable annuity guarantee liabilities at five per cent market intervals. Also represents the impact of changes in markets on provisions for adverse deviation that are not hedged, but does not include any impact in respect of other sources of hedge ineffectiveness e.g. fund tracking, realized volatility and equity, interest rate correlations different from expected among other factors.

<sup>(2)</sup> The potential impact is shown assuming that the change in value of the hedge assets does not completely offset the change in the dynamically hedged variable annuity guarantee liabilities. The estimated amount that would not be completely offset relates to our practices of not hedging the provisions for adverse deviation and of rebalancing equity hedges for dynamically hedged variable annuity liabilities at five per cent intervals.

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 strategies.

# Notional value of shorted equity futures contracts

#### As at December 31.

(C\$ millions)	2013	2012
For variable annuity guarantee dynamic hedging strategy <sup>(1)</sup> For macro equity risk hedging strategy	\$ 7,500 2,000	\$ 9,500 7,800
Total	\$ 9,500	\$ 17,300

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

The equity futures notional required for the macro hedging program decreased by \$5.8 billion during 2013. The decrease related to normal rebalancing to maintain our desired equity market risk position and to incorporate transfers to the dynamic hedging program.

# **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, including embedded derivatives. We also assume 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 policy liabilities(1),(2),(3),(4)

As at December 31,	2013	3	2012	2
(C\$ millions)	-100bp	+100bp	-100bp	+100bp
General fund products <sup>(3)</sup>	\$ (300)	\$ -	\$ (200)	\$ -
Variable annuity guarantees <sup>(4)</sup>	(100)		(200)	200
Total	\$ (400)	\$ -	\$ (400)	\$ 200

<sup>(1)</sup> See "Caution Related to Sensitivities" above. In addition, estimates exclude changes to the net actuarial gains/losses with respect to the Company's pension obligations as a result of changes in interest rates, as the impact on the quoted sensitivities is not considered to be material.

minimum.

At December 31, 2013, we estimated the sensitivity of our net income attributed to shareholders to a 100 basis point parallel decline in interest rates to be a charge of \$400 million, and to a 100 basis point increase in interest rates to be close to nil.

The 100 basis point parallel change includes 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 and corporate spreads, relative to the rates assumed in the valuation of policy liabilities, including embedded derivatives. As the sensitivity to a 100 basis point change in interest rates includes any associated change in the applicable prescribed reinvestment scenarios, the impact of changes to interest rates for less than, or more than, the amounts indicated are unlikely to be linear. Furthermore the reinvestment scenario changes tend to amplify the negative effects of a decrease in interest rates, and dampen the positive effects of interest rate increases. For variable annuity guarantee liabilities that are dynamically hedged, it is assumed that interest rate hedges are rebalanced at 20 basis point intervals.

The potential impact on annual net income attributed to shareholders provided in the table above does not allow for any future potential changes to the URR assumptions or other potential impacts of lower interest rate levels, for example, increased strain on the sale of new business, lower interest earned on our surplus assets, or updates to actuarial assumptions related to variable annuity bond fund calibration. It also does not reflect 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, 2013, the AFS fixed income assets held in the surplus segment were in a net after-tax unrealized loss position of \$103 million (gross after-tax unrealized gains were \$301 million and gross after-tax unrealized losses were \$404 million).

<sup>(2)</sup> Sensitivities are based on projected asset and liability cash flows at the beginning of the fourth quarter adjusted for the estimated impact of new business, investment markets and asset trading 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.

<sup>(3)</sup> The participating policy funds are largely self-supporting and generate no material impact on net income attributed to shareholders as a result of changes in interest rates.

(4) 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

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 net income attributed to shareholders and MLI's MCCSR ratio 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),(5)</sup>

	2013		2012	
As at December 31,	-100bp	+100bp	-100bp	+100bp
Net income attributed to shareholders (C\$ millions):  Excluding change in market value of AFS fixed income assets held in the surplus segment  From fair value changes in AFS fixed income assets held in surplus, if realized	\$ (400)	\$ -	\$ (400)	\$ 200
	600	(600)	800	(700)
MLI's MCCSR ratio (Percentage points):  Before impact of change in market value of AFS fixed income assets held in the surplus segment <sup>(6)</sup> From fair value changes in AFS fixed income assets held in surplus, if realized	(13)	18	(16)	10
	4	(5)	5	(5)

- (1) See "Caution Related to Sensitivities" above. In addition, estimates exclude changes to the net actuarial gains/losses with respect to the Company's pension obligations as a result of changes in interest rates, as the impact on the quoted sensitivities is not considered to be material.
- (2) Includes guaranteed insurance and annuity products, including variable annuity contracts as well as adjustable benefit products where benefits are generally adjusted as interest rates and investment returns change, a portion of which have minimum credited rate guarantees. For adjustable benefit products subject to minimum rate guarantees, the sensitivities are based on the assumption that credited rates will be floored at the minimum.
- (3) The amount of gain or loss that can be realized on AFS fixed income assets held in the surplus segment will depend on the aggregate amount of unrealized gain or loss.
- (4) Sensitivities are based on projected asset and liability cash flows at the beginning of the quarter adjusted for the estimated impact of new business, investment markets and asset trading 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. Impact of realizing 100% of market value of AFS fixed income is as of the end of the quarter.
- (5) The participating policy funds are largely self-supporting and generate no material impact on net income attributed to shareholders as a result of changes in interest rates.
- (6) The impact on MLI's MCCSR ratio includes both the impact of lower earnings on available capital as well as the increase in required capital that results from a decline in interest rates. The potential increase in required capital accounted for 9 of the 13 points impact of a 100 bp decline in interest rates on MLI's MCCSR ratio in the fourth quarter of 2013.

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(1),(2),(3),(4)

As at December 31,	2013	<u> </u>	2012	
(C\$ millions)	-50bp	+50bp	-50bp	+50bp
Corporate spreads	\$ (400)	\$ 400	\$ (1,000)	\$ 500

- (1) See "Caution Related to Sensitivities" above.
- (2) 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 off-balance sheet bond fund value arising from changes in credit spreads. The participating policy funds are largely self-supporting and generate no material impact on net income attributed to shareholders as a result of changes in corporate spreads.
- (3) Sensitivities are based on projected asset and liability cash flows at the beginning of the fourth quarter adjusted for the estimated impact of new business, investment markets and asset trading 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.
- (4) Corporate spreads are assumed to grade to the long-term average over five years.

As the sensitivity to a 50 basis point decline in corporate spreads includes the impact of a change in prescribed reinvestment scenarios where applicable, the impact of changes to corporate spreads for less than, or more than, the amounts indicated are unlikely to be linear. The potential earnings impact of a 50 basis point decline in corporate spreads related to the impact of the scenario change was not substantial at December 31, 2013 and \$400 million at December 31, 2012, with the difference being the key reason for the decrease in sensitivity during 2013.

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

As at December 31, (C\$ millions)  Swap spreads(2)	2013		2012	
	-20bp	+20bp	-20bp	+20bp
Swap spreads <sup>(2)</sup>	\$ 400	\$ (400)	\$ 600	\$ (600)

- (1) See "Caution Related to Sensitivities" above.
- (2) 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 off-balance sheet bond fund value arising from changes in credit spreads. The participating policy funds are largely self-supporting and generate no material impact on net income attributed to shareholders as a result of changes in swap spreads.
- (3) Sensitivities are based on projected asset and liability cash flows at the beginning of the fourth quarter adjusted for the estimated impact of new business, investment markets and asset trading 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 to a 20 bps decline in swap spreads decreased over the year due to changes in the amount of interest rate swaps being held.

# **Alternative Long-Duration Asset Performance Risk**

The following table shows the potential impact on net income attributed to shareholders resulting from changes in market values of alternative long-duration 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 long-duration asset returns<sup>(1),(2),(3),(4)</sup>

As at December 31,	201	2013			2012		
(C\$ millions)	-10%	+10%		-10%		+10%	
Real estate, agriculture and timber assets Private equities and other alternative long-duration assets	\$ (1,000) (900)	\$ 1,000 800	\$	(900) (800)	\$	900 700	
Alternative long-duration assets	\$ (1,900)	\$ 1,800	\$	(1,700)	\$	1,600	

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

The increased sensitivity from December 31, 2012 to December 31, 2013 is primarily related to the increase in market value of the alternative long-duration assets over the year, due to investment activities and positive investment returns.

### **Foreign Exchange Risk**

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. As at December 31, 2013, the Company did not have a material unmatched currency exposure.

The following table shows the impact on core earnings of a 10 per cent change in the Canadian dollar relative to our key operating currencies.

# Potential impact on core earnings(1),(2)

2013		2012		
As at December 31, (C\$ millions)	+10% strengthening	-10% weakening	+10% strengthening	-10% weakening
10% change in the Canadian Dollar relative to the U.S. Dollar and the Hong Kong Dollar 10% change in the Canadian Dollar relative to the Japanese Yen	\$ (190) (10)	\$ 190 10	\$ (150) (10)	\$ 150 10

<sup>(1)</sup> This item is non-GAAP measure. See "Performance and Non-GAAP Measures" below.

# **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 a change 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.

With the implementation of the Dodd-Frank bill in the United States, clearing of certain derivatives is now mandatory. The execution of derivative transactions through clearing houses or regulated facilities requires incremental liquidity requirements in the form of upfront collateral. Additionally, changes in derivative values are required to be settled in cash on a daily basis instead of pledging collateral. However, this will not become significant for Manulife Financial until a large portion of our derivatives have transitioned to exchanges and market conditions adverse to liquidity (material increases in interest rates and/or equity markets) have been experienced. Other jurisdictions in which Manulife entities operate in are expected to enact similar regulations within the next two years.

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.

<sup>(2)</sup> This impact is calculated as at a point-in-time impact and does not include: (i) any potential impact on alternative long-duration asset weightings; (ii) any gains or losses on alternative long-duration assets held in the Corporate and Other segment; or (iii) any gains or losses on alternative long-duration assets held in Manulife Bank.

<sup>(3)</sup> The participating policy funds are largely self-supporting and generate no material impact on net income attributed to shareholders as a result of changes in alternative long-duration asset returns.

<sup>(4)</sup> Net income impact does not consider any impact of the market correction on assumed future return assumptions.

<sup>(2)</sup> See "Caution Related to Sensitivities" above.

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 recent global financial crisis, 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, 2013.

# **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 \$269.4 billion as at December 31, 2013 (2012 – \$274.4 billion).

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.

The following table outlines the maturity of the Company's significant financial liabilities.

# Maturity of financial liabilities(1),(2)

As at December 31, 2013 (C\$ millions)	Less than 1 year	1 to 3 years	3 to 5 years	Over 5 years	Total
Long-term debt Capital instruments Derivatives Bank deposits Lease obligations	\$ 1,000	\$ 2,235	\$ 413	\$ 1,127	\$ 4,775
	-	-	-	4,041	4,041
	484	357	328	7,760	8,929
	15,311	2,848	1,710	-	19,869
	137	174	64	420	795

<sup>(1)</sup> The amounts shown above are net of the related unamortized deferred issue costs.

# **Risk Exposure Measures**

Consolidated group operating and strategic liquidity levels are managed against established minimums. We set minimum operating liquidity above the level of the highest one month's operating cash outflows projected over the next 12 months. 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 limit. 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.

<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.

Our strategic liquidity ratios are provided in the following table.

	20	13	201	2 <sup>(1)</sup>
As at December 31, (C\$ millions, unless otherwise stated)	Immediate Scenario	Ongoing Scenario	Immediate Scenario	Ongoing Scenario
Adjusted liquid assets	\$ 118,358	\$ 117,350	\$ 123,012	\$ 122,955
Adjusted policy liabilities	26,550	34,250	25,778	33,540
Liquidity ratio	446%	343%	477%	364%

<sup>(1)</sup> The 2012 results were restated to reflect the retrospective application of new IFRS accounting standards effective January 1, 2013. For a detailed description of the change see note 2 to the Consolidated Financial Statements.

Additionally, the market value of our derivative portfolio is periodically stress tested based on market shocks 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. Comprehensive liquidity stress testing measures, on an integrated basis, the impact of market shocks on derivative collateral and margin requirements, reinsurance settlements, policyholder behaviour and the market value of eligible liquid assets. Stressed liquidity ratios are measured against established limits.

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

### 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 a program for selling Credit Default Swaps ("CDS") that employs a highly selective, diversified and conservative approach. All CDS decisions will follow the same 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 Transaction and Portfolio Review 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 (generally 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. Reinsurance counterparty exposure is measured reflecting the level of ceded 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. Credit Risk Management 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 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 2013, 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, 2013 and December 31, 2012, for every 50 per cent that credit defaults over the next year exceed the rates provided for in policy liabilities, net income attributed to shareholders would be reduced by \$49 million and \$56 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)	2013	2012
Net impaired fixed income assets	\$ 307	\$ 337
Net impaired fixed income assets as a per cent of total invested assets	0.13%	0.15%
Allowance for loan losses	\$ 106	\$ 89

### **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 generally based on both Company and industry experience, and assumptions for future policyholder behaviour are generally based on Company experience. Assumptions for future policyholder behaviour include 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 attributed 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 man-made disasters and acts of terrorism. The cost of health insurance benefits may also be impacted by unforeseen trends in the incidence, termination and severity rates of claims. 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, anti-selective lapse behaviour 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 under our Product Design and Pricing Policy, Underwriting and Claims Management Policy and Reinsurance Risk Management Policy, as well as supporting 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 limits, 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. Both the pricing officer and the general manager of each business unit approve the design and pricing of each product, including key claims, policyholder behaviour, investment return and expense assumptions, in accordance with corporate policies and standards. Divisional and Group risk management provides additional oversight and review of all product and pricing initiatives, as well as reinsurance treaties related to new business. In addition, Group Finance Actuarial approves all policy liability valuation methods, assumptions and in-force reinsurance treaties. We perform annual risk and compliance self-assessments of the product development, pricing, underwriting and claims 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 and earnings at risk limits. The policyholder behaviour risk limits cover the combined risk arising from policyholder policy lapses and surrenders, withdrawals and other policyholder driven activity. The claims risk limits 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.

# **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 breaches, human resource management failures, processing errors, modelling errors, 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 our reputation. Operational risk is also embedded in all the practices we use to manage other risks; therefore, if not managed effectively, operational risk can impact our ability to manage other key risks such as credit risk, market risk, liquidity risk and insurance risk. While operational risk can never be fully eliminated, it can be managed to reduce exposure to financial loss, reputational harm or regulatory sanctions.

### **Risk Management Strategy**

Our corporate governance practices, corporate values, and integrated enterprise-wide approach to managing risk set the foundation for mitigating operational risks. This base is further strengthened by internal controls and systems, compensation programs, and seeking to hire and 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 these compensation practices against peer companies.

We have an enterprise operational risk management framework that sets out the processes we use to identify, assess, manage, mitigate and report on significant operational risk exposures. Execution of our operational risk management strategy focuses on change management and working to achieve a cultural shift toward greater awareness and understanding of operational risk. We have an Operational Risk Committee ("ORC"), a sub-committee of the ERC, which is the main decision-making committee for all

operational risk matters with oversight responsibility for operational risk strategy, management and governance. We have enterprise-wide risk management programs for specific operational risks that could materially impact our ability to do business or impact our reputation.

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. We also purchase certain insurance to satisfy legal requirements and/or 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: privacy (i.e. handling of personal and other confidential information), sales and marketing practices, sales compensation practices, asset management practices, fiduciary responsibilities, employment practices, underwriting and claims processing, product design, 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, Global Compliance and divisional compliance personnel 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. Our technology infrastructure, information services and applications are governed and managed according to standards for operational integrity, resiliency, data integrity, confidentiality and information security policies, standards and controls. Disruption due to system failure, security breach (including cyber attacks), privacy breaches, human errors, natural disasters, man-made disasters, criminal activity, fraud or global crisis may occur and have adverse consequences for our business.

We have an enterprise-wide business continuity and disaster recovery program which is overseen by the Chief Information Security Officer. This includes policies, plans and procedures to minimize the impact of natural or man-made disasters, and is designed to ensure that key business functions can continue normal operations in the event of a major disruption. Each business unit is accountable for preparing and maintaining detailed business continuity plans and processes. 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. We maintain off-site backup facilities and failover capability designed to minimize downtime and accelerate system recovery.

Information security breaches could occur and may result in inappropriate disclosure or use of personal and confidential information. To mitigate this risk, we have an enterprise-wide information security program which is overseen by the Chief Information Security Officer. This program establishes the information security framework for the Company, including governance, policies and standards, and appropriate controls to protect information and computer systems. We also have annual security awareness training sessions for all employees.

Privacy breaches could occur and may result in the unauthorized disclosure or use of private and confidential information. Many jurisdictions in which we operate are implementing more stringent privacy legislation. To manage this risk, we have a global privacy program which is overseen by the Chief Privacy Officer. This program includes policies and standards, ongoing monitoring of emerging privacy legislation, and a network of privacy officers. Processes have been established to provide guidance on handling personal information and for reporting privacy incidents and issues to appropriate management for response and resolution.

# **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 a number of human resource policies, practices and programs in place 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 calculations and outputs.

# **Third Party Risk**

The Company relies on third parties to provide many different types of services. Should these third parties fail to deliver services in compliance with contractual or other service arrangements, our business may be adversely impacted. Our governance framework to address third party risk includes appropriate policies (such as our Outsourcing Policy), standards and procedures, and monitoring of ongoing results and contractual compliance of third party arrangements.

# **Project Risk**

To ensure that key projects are successfully implemented and monitored by management, we have a Global Project Management Centre of Expertise, which is responsible for establishing policies and standards for project management. Our policies, standards and practices are regularly benchmarked against leading practices.

### **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 contaminates 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 Financial 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, protocols and due diligence standards within the business units identify environmental issues in advance of acquisition. Historical 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**

Medical advances and legislation related to genetic testing could adversely impact our underwriting abilities. Current or future global legislation in jurisdictions where Manulife operates may restrict its right to underwrite based on access to genetic test results. Without the obligation of disclosure, the asymmetry of information shared between applicant and insurer could increase anti-selection in both new business and in-force policyholder behaviour. The impact of restricting insurers' access to this information and the associated problems of anti-selection becomes more acute where genetic technology leads to advancements in diagnosis of life threatening conditions that are not matched by improvements in treatment. We cannot predict the potential financial impact that this would have on the Company or the industry as a whole. In addition, there may be further unforeseen implications as genetic testing continues to evolve and becomes more established in mainstream medical practice.

The Canadian Accounting Standards Board 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 "Caution regarding 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 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 the stability and flexibility to pursue the Company's business objectives, ensuring best access to capital markets and
  maintaining target credit ratings as a result of retaining the ongoing confidence of regulators, policyholders, rating agencies,
  investors and other creditors; and,
- Optimizing 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 annually. The policy is integrated with the Company's risk and financial frameworks. It establishes guidelines regarding the quantity and quality of capital, internal capital mobility, and proactive management of ongoing and future capital requirements. The Board or its designated committees regularly review the Company's capital position and capital plans. Operational oversight of capital management across the enterprise is provided by the Capital Committee, consisting of senior finance and risk management executives and chaired by the Chief Actuary. In addition, the CFO meets regularly with senior finance and strategy executives to decide on desirable capital actions.

Our capital management framework takes into account the requirements of the Company as a whole as well as the needs of each of our subsidiaries. Our capital adequacy assessment considers expectations of key external stakeholders such as regulators and rating agencies, results of sensitivity testing as well as a comparison to our peers. We set our internal capital targets above regulatory requirements, monitor against these internal targets and initiate actions appropriate to achieving our business objectives.

We also periodically assess the strength of our capital position under various stress scenarios. The annual Dynamic Capital Adequacy Testing ("DCAT") typically quantifies the financial impact of economic events arising from shocks in public equity and other markets, interest rates and credit, amongst others. Our 2013 DCAT results demonstrate that we have sufficient assets to discharge policy liabilities in the various adverse scenarios tested. A variety of other stress tests conducted by the Company support this conclusion.

We integrate capital management 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.

In order to mitigate the impact of currency movements on the consolidated capital ratios, the currency mix of assets supporting capital is managed in relation to the Company's global capital requirements. As a result, 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)	2013	restated <sup>(2)</sup> 2012	2011
Non-controlling interests Participating policyholders' equity Preferred shares Common shareholders' equity	\$ 376	\$ 301	\$ 415
	134	146	249
	2,693	2,497	1,813
	25,830	22,215	22,402
Total equity <sup>(1)</sup> Less accumulated other comprehensive loss on cash flow hedges	\$ 29,033	\$ 25,159	\$ 24,879
	(84)	(185)	(91)
Total equity less accumulated other comprehensive loss on cash flow hedges	\$ 29,117	\$ 25,344	\$ 24,970
Liabilities for preferred shares and capital instruments	4,385	3,903	4,012
Total capital	\$ 33,502	\$ 29,247	\$ 28,982

<sup>(1)</sup> Total equity includes unrealized gains and losses on AFS debt securities and AFS equities, net of taxes. The unrealized gain or loss on AFS debt securities are excluded from the OSFI definition of regulatory capital. As at December 31, 2013, the unrealized loss on AFS debt securities, net of taxes, was \$58 million (2012 – \$312 million unrealized gain).

Total capital was \$33.5 billion as at December 31, 2013 compared to \$29.2 billion as at December 31, 2012, an increase of \$4.3 billion. The increase included net earnings of \$3.1 billion, the \$1 billion impact from favourable currency movements on translation of foreign operations and net capital issued of \$0.7 billion, partially offset by cash dividends of \$0.8 billion over the period.

The "Total capital" above does not include \$5.1 billion (2012 – \$5.5 billion, 2011 – \$5.5 billion) of senior indebtedness issued by MFC because this form of financing does not meet OSFI's definition of regulatory capital at the MFC level. The Company has downstreamed the proceeds from this financing into operating entities in the form that qualifies as 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.

<sup>(2)</sup> The 2012 results were restated to reflect the retrospective application of new IFRS accounting standards effective January 1, 2013. For a detailed description of the change see note 2 to the 2013 Consolidated Financial Statements. The 2011 results were not required to be restated.

# **Capital and Funding Activities**

During 2013 we raised \$650 million of capital and \$350 million matured through the following transactions:

- We issued a total of \$450 million of MLI subordinated debentures during the year: \$200 million (2.819%) on February 25, 2013 and \$250 million (2.926%) on November 29, 2013.
- We issued \$200 million (3.80%) of MFC preferred shares on June 21, 2013.
- On March 28, 2013, \$350 million (4.67%) of MFC medium term notes matured.

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

The declaration and payment of shareholder dividends and the amount thereof are at the discretion of the Board of Directors 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 factors deemed relevant by the Board.

The Company offers a Dividend Reinvestment Program ("DRIP") whereby shareholders may elect to automatically reinvest dividends in the form of MFC common shares instead of receiving cash. The offering of the program and its terms of execution are subject to the Board of Directors' discretion. Participation in the DRIP is strong, with enrolment of approximately one-third of shares outstanding. In 2013 we issued 19 million common shares (2012 – 26 million) for a total consideration of \$325 million (2012 – \$318 million) under this program.

# Regulatory Capital Position<sup>21</sup>

MFC monitors and manages its consolidated capital in compliance with the OSFI Guideline A2 – Capital Regime for Regulated Insurance Holding Companies and Non-Operating Life Companies. 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 the consolidated MFC operation remains in excess of our internal targets.

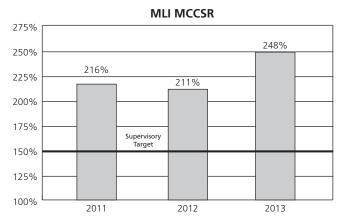
MFC's operating activities are mostly conducted within MLI or its subsidiaries. MLI is regulated by OSFI and is subject to consolidated risk based capital requirements using the OSFI MCCSR framework. Some affiliate reinsurance business is undertaken outside the MLI consolidated framework.

Our MCCSR ratio for MLI ended the year at 248 per cent, up 37 points from the 211 per cent reported at the end of 2012. This increase reflects the contribution from earnings, a reduction in capital requirements for variable annuity and segregated fund guarantees due to the strong equity markets, the sale of our Taiwan insurance business and net capital issuance as well as from the 2013 MCCSR Guideline change that reduced capital required for lapse risk.

We consider MLI's MCCSR ratio strong in view of our materially reduced risk sensitivities and the lack of explicit capital credit for the hedging of our variable annuity liabilities. We achieved our equity market and interest rate risk targets two years ahead of schedule.

The 2014 MCCSR Guideline did not contain changes of material implications for MLI's regulatory capital ratio.

MLI's non-consolidated operations and subsidiaries all maintained capital levels in excess of local requirements as at December 31, 2013. Manulife Canada Ltd., an OSFI regulated Canadian operating insurance company, was wound up as at December 31, 2013.



Actual MLI ratios as at December 31.

OSFI regulatory minimum is 120%, with 150% supervisory target.

<sup>&</sup>lt;sup>21</sup> The "Risk Management and Risk Factors" section above outlines a number of regulatory capital risks.

# **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 financing may increase and our access to funding and capital through the capital markets could be reduced.

During 2013, Moody's, Fitch, DBRS and A.M. Best maintained their assigned ratings of MFC and its primary insurance operation companies. S&P raised the counterparty credit rating of MFC to A from A- and maintained the assigned ratings of its primary insurance operating companies. As at December 31, 2013, S&P, Moody's, DBRS and A.M. Best had a stable outlook on these ratings and Fitch had a negative outlook. In January 2014, Fitch affirmed the financial strength rating of MFC's primary insurance operating companies and credit ratings and revised the outlook to stable from negative.

The following table summarizes the financial strength and claims paying ability ratings of MLI and certain of its subsidiaries as at February 21, 2014.

# **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**

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 Actuarial Standards Board. These standards are designed to ensure we establish an appropriate liability on the Consolidated Statements of Financial Position 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 inforce 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. 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 2013 experience was favourable when compared with our assumptions. Changes to future expected mortality assumptions in the policy liabilities in 2013 resulted in an increase 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 2013 experience was unfavourable when compared with our assumptions. A comprehensive morbidity experience review for our U.S. Long-Term care business was completed in 2013, including assumptions related to in-force price increases. Changes to future expected morbidity assumptions in the policy liabilities in 2013 resulted in an increase in policy liabilities.

### **Property and Casualty**

Our Property and Casualty Reinsurance business insures against losses from natural and human disasters and accidental events. Policy liabilities 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. Both our 2012 and 2013 claims loss experience was favourable with respect to the provisions that were established.

# **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 2013 experience was unfavourable when compared to our assumptions. Revisions were made to future premium persistency assumptions for Universal and Variable Universal Life products in the U.S., and to policy termination assumptions for certain Canadian whole life and term products and certain whole life insurance products in Japan. These revisions resulted in an increase in policy liabilities.

### **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 2013 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 2013, actual investment returns were favourable when compared to our assumptions. In 2012, actual investment returns were unfavourable when compared to our assumptions. Overall investment results, excluding returns on variable annuities, were favourable. While the increase in swap spreads and the decrease in corporate spreads was adverse in the year, this was more than offset by gains from asset trading, origination activity, positive market returns, and the increase in risk free rates.

# **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 2013, experience on assets underlying segregated fund business which has guarantees due to changes in market value of funds under management was favourable for both the business that is hedged and the business that is not hedged. The latter excludes the experience on the macro equity hedges. Note that an unchanged market or an increase of less than our expected returns will still result in an earnings loss, since actual returns would 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)	2013	2012
Best estimate actuarial liability <sup>(1)</sup>	\$ 133,463	\$ 134,625
Provision for adverse deviation		
Insurance risks (mortality/morbidity)	\$ 10,779	\$ 10,181
Policyholder behaviour (lapse/surrender/premium persistency)	3,107	3,216
Expenses	1,872	1,940
Investment risks (non-credit)	17,861	18,343
Investment risks (credit)	1,323	1,294
Segregated fund guarantees	1,586	4,442
Other	11	10
Total provision for adverse deviation ("PfAD")(1)	\$ 36,539	\$ 39,426
Segregated funds – additional margins	8,160	8,571
Total of PfAD and additional segregated fund margins	\$ 44,699	\$ 47,997

<sup>(1)</sup> Reported actuarial liabilities as at December 31, 2013 of \$170,002 million (2012 – \$174,051 million) are composed of \$133,463 million (2012 – \$134,625 million) of best estimate actuarial liability and \$36,539 million (2012 – \$39,426 million) of PfAD.

The change in the 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 the insurance risks PfAD was driven by our review of valuation assumptions and methods. The decline related to segregated fund guarantee PfAD was due to improved equity markets over the year.

### **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 assumptions 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.

# Potential impact on net income attributed to shareholders arising from changes to non-economic assumptions(1)

For the years ended December 31,

(C\$ millions)	2013	2012
Policy Related Assumptions		
2% adverse change in future mortality rates <sup>(2),(4)</sup>		
Products where an increase in rates increases policy liabilities	\$ (300)	\$ (200)
Products where a decrease in rates increases policy liabilities	(300)	(300)
5% increase in future morbidity rates(3),(4),(5)	(2,000)	(1,400)
10% adverse change in future termination rates <sup>(4)</sup>	(1,300)	(1,400)
5% increase in future expense levels	(300)	(400)

<sup>(1)</sup> The participating policy funds are largely self-supporting and generate no material impact on net income attributed to shareholders as a result of changes in non-economic assumptions.

Under Canadian IFRS, we must test a number of prescribed interest rate scenarios. The scenario that produces the largest policy liabilities 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 table below shows the potential impact on annual net income attributed to shareholders where the fixed income ultimate reinvestment rate ("URR") is determined assuming that risk free rates remain at their starting December 31, 2013 or December 31, 2012 levels. It also shows the potential impact if the URR were determined using risk free rates that are assumed to immediately rise or immediately fall by 50 basis points and then stay at these new levels.

# Potential impact on accumulated next five years and the following five years net income attributed to shareholders arising from potential changes to the fixed income ultimate reinvestment rates ("URR")(1),(2)

As at December 31,

illions) 2013		13	2012	
For the periods	2014 – 2018	2019 – 2023	2013 – 2017	2018 – 2022
Risk free rates remain at December 31, 2013 and December 31, 2012 levels, respectively.	\$ (600)	\$ (100)	\$ (1,600)	\$ (300)
Risk free rates rise 50 bp immediately from their December 31, 2013 or December 31, 2012, levels, respectively, and then remain at those new levels thereafter.	(100)	100	(900)	_
Risk free rates fall 50 bp immediately from their December 31, 2013 or December 31, 2012 levels, respectively, and then remain at those new levels thereafter.	(1,000)	(100)	(2,200)	(500)

<sup>(1)</sup> Current URRs in Canada are 0.7% per annum and 2.7% per annum for short and long-term bonds, respectively, and in the U.S. are 0.7% per annum and 3.4% per annum for short and long-term bonds, respectively. Since the URRs are based upon a five and ten year rolling average of government bond rates, continuation of current rates or a further decline could have a material impact on net income.

The sensitivity of net income attributed to shareholders to further updates to the ultimate reinvestment rates at December 31, 2013 has decreased from December 31, 2012 due to the increase in risk free interest rates during that time.

<sup>(2)</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>(3)</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>(4)</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.

<sup>(5)</sup> The morbidity sensitivity for 2013 reflects the changes to assumptions made as part to the 2013 annual review of actuarial assumptions and methods. This includes a change to the margin for adverse deviation on assumed future premium rate increases. In addition, we refined our models to better reflect the extent to which we can raise premium rates should experience deteriorate as indicated above. These changes resulted in an increase in the sensitivity.

<sup>(2)</sup> These impacts assume that the URR changes implied by these shocks do not change which reinvestment scenario produces the largest reserve.

# Potential impact on net income attributed to shareholders arising from changes to asset related assumptions supporting actuarial liabilities, excluding the fixed income URR discussed above

	Increase (decrease) in after-tax income								
As at December 31.		13	20	)12					
(C\$ millions)	Increase	Decrease	Increase	Decrease					
Asset related assumptions updated periodically in valuation basis changes 100 basis point change in future annual returns for publicly traded equities(1),(2) 100 basis point change in future annual returns for alternative long-duration assets(3) 100 basis point change in equity volatility assumption for stochastic segregated fund modeling(4)	\$ 400 3,800 (200)	\$ (400) (3,700) 200	\$ 800 3,900 (300)	\$ (900) (4,000) 300					

<sup>(1)</sup> The sensitivity to public equity returns above 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 a \$200 million increase (December 31, 2012 – \$500 million increase). For a 100 basis point decrease in expected growth rates, the impact from segregated fund guarantee reserves is a \$200 million decrease (December 31, 2012 – \$600 million decrease). Expected long-term annual market growth assumptions for public equities pre-dividends for key markets are based on long-term historical observed experience and compliance with actuarial standards. The growth rates for returns in the major markets used in the stochastic valuation models for valuing segregated fund guarantees are 7.6% per annum in Canada, 7.6% per annum in the U.S. and 5.2% per annum in Japan. Growth assumptions for European equity funds are market-specific and vary between 5.8% and 7.85%.

### **Review of Actuarial Methods and Assumptions**

The 2013 full year review of the actuarial methods and assumptions underlying policy liabilities produced an increase in the policy liabilities of \$948 million net of reinsurance ceded, and includes \$220 million attributed to participating policyholders. Net of the impacts on participating policyholder surplus and non-controlling interests, this resulted in a decrease in net income attributed to shareholders of \$489 million post-tax.

In conjunction with prudent best practices to manage both product and asset related risks, the selection and monitoring of assumptions appropriate to the business is 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 experience and the economic environment is likely to result in future changes to the valuation assumptions, which could be material.

The following table represents the impact to the 2013 changes in actuarial assumptions and models on policy liabilities and net income attributed to shareholders:

		To net income
For the year ended December 31, 2013	To policy	attributed to
(C\$ millions)	liabilities	shareholders
	Increase	Increase
Assumption	(decrease)	(decrease)
Lapses and policyholder behavior		
U.S. Insurance premium persistency update	\$ 320	\$(208)
Insurance lapse updates	472	(233)
Variable annuity lapse update	101	(80)
U.S. Long-Term Care triennial review	18	(12)
Segregated fund parameters update	(220)	203
Other updates	257	(159)
Net impact	\$ 948	\$(489)

### Lapses and policyholder behaviour

Premium persistency assumptions were adjusted in the U.S. for universal life and variable universal life products to reflect recent and expected future experience which led to a \$208 million charge to net income.

Lapse rates across several insurance business units were updated to reflect recent and expected future policyholder lapse experience. This included a review of the lapse experience for the Canadian individual insurance whole life and term products and certain whole life insurance products in Japan. Net of the impact on participating surplus this resulted in a \$233 million charge to net income.

Lapse rate assumptions were updated for a number of Variable Annuity contracts to reflect updated experience results, including reducing base lapse rates in Japan as contracts get closer to maturity. This resulted in an \$80 million charge to net income.

#### **U.S. Long-Term Care triennial review**

U.S. Insurance completed a comprehensive long-term care experience study. This included a review of mortality and morbidity experience, lapse experience, and of the policy liability for in-force rate increases filed for as a result of the 2010 review. The net impact of the review was a \$12 million charge to net income. This included several offsetting items as outlined below.

<sup>(2)</sup> For future annual returns on public equity, the reduction of \$500 million in sensitivity to a decrease from December 31, 2012 to December 31, 2013 is primarily due to strong returns from public equities during the year which lower the sensitivity for our segregated fund guarantee liabilities, and the shift of some of our variable annuity guaranteed value from our macro-hedging program to our dynamic hedging program.

<sup>(3)</sup> Alternative long-duration assets include commercial real estate, timber and agricultural real estate, oil and gas, and private equities. The reduction of \$300 million in sensitivity to a decrease from December 31, 2012 to December 31, 2013 is primarily related to the impact of the increase in risk free rates in some jurisdictions during the period, increasing the rate at which funds can be reinvested.

<sup>(4)</sup> Volatility assumptions for public equities are based on long-term historic observed experience and compliance with actuarial standards. The resulting volatility assumptions are 17.15% per annum in Canada and 17.15% per annum in the U.S. for large cap public equities, and 19% per annum in Japan. For European equity funds, the volatility varies between 16.15% and 18.4%.

Expected claims costs increased primarily due to lower mortality, higher incidence rates, and claims periods longer than expected in policy liabilities. This increase in expected cost was offset by a number of items, including: (i) the expected future premium increases resulting from this year's review, (ii) actual experience on previously filed rate increases as the actual approval rate is higher than what was reflected in policy liabilities, (iii) method and modeling refinements largely related to the modeling of future tax cash flows, and (iv) updated lapse assumptions.

The expected future premium increases assumed in the policy liabilities resulted in a benefit of \$1.0 billion to net income; this includes a total of \$0.5 billion from future premium increases that are related to revised morbidity, mortality and lapse assumptions, while the remainder is a carryover from outstanding amounts from 2010 filings. Premium increases averaging approximately 25 per cent will be sought on about one half of the in-force business, excluding the carryover of 2010 amounts requested. U.S. Insurance have factored into its assumptions the estimated timing and amount of state approved premium increases. The actual experience obtaining price increases could be materially different than was assumed, resulting in further policy liability increases or releases which could be material.

### Segregated fund parameters update

Certain parameters used in the stochastic valuation of the segregated fund valuation were updated and resulted in a \$203 million benefit to net income. The primary updates were to the foreign exchange and bond fund parameters both of which were favourable. The bond parameter reviews included updates to interest rate and volatility assumptions. The impact of interest rate movements between the last review effective March 31, 2012 and March 31, 2013 led to a charge, which was more than offset by the impact of the increase in interest rates in the second guarter of 2013.

### Other updates

The Company made a number of model refinements related to the projection of both asset and liability cash flows which led to a \$109 million charge to net income. This includes several offsetting items: a charge due to a refinement in the modeling of reinsurance contracts for Canadian individual insurance; and a charge due to aligning the modeling of swaps across all segments partially offset by a benefit due to a refinement in the modeling of guaranteed minimum withdrawal benefit products in U.S. Annuities; and a benefit due to further clarity on the treatment of Canadian investment income tax.

Mortality and morbidity charges of \$77 million to net income were the result of the review of assumptions for multiple product lines.

The net impact of all other updates was a \$27 million benefit to net income, which included updates to investment return and future expense assumptions.

### **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:

### **2013 Insurance Contract Liability Movement Analysis**

(C\$ millions)	Canadiar Asia Division Divisior		U.S. Division	Corporate and Other	Total
Balance, January 1, 2013	\$ 27,971	\$ 50,609	\$ 101,300	\$ (166)	\$ 179,714
New business In-force movement Impact of sale of Taiwan Business Changes in methods and assumptions Currency impact	\$ 150 1,167 (1,535) (36) (270)	\$ (73) (1,788) - 352 3	\$ 1,104 (10,329) - 488 6,779	\$ - (64) - 147 (10)	\$ 1,181 (11,014) (1,535) 951 6,502
Total net changes	\$ (524)	\$ (1,506)	\$ (1,958)	\$ 73	\$ (3,915)
Balance, December 31, 2013	\$ 27,447	\$ 49,103	\$ 99,342	\$ (93)	\$ 175,799

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, are 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 net in-force movement over the year was a decrease of \$11,014 million. A material part of the in-force movement decrease was due to a decrease in policyholder liabilities for segregated fund products due to the increase in equity markets, and the increase in interest rates and the resulting impact on the fair value of assets which back those policy liabilities.

The increase of \$951 million from changes in methods and assumptions resulted in a decrease in pre-tax earnings.

Of the \$9,833 million net decrease in insurance contract liabilities related to new business and in-force movement, \$9,784 million was a decrease in actuarial liabilities. The remaining was a decrease of \$49 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, partially offset by the appreciation of the Canadian dollar relative to the Japanese yen. To the extent assets are currency matched to liabilities, the decrease in insurance contract liabilities due to currency is offset by a corresponding decrease from currency in the value of assets supporting those liabilities.

### **2012 Insurance Contract Liability Movement Analysis**

(C\$ millions)	Canad Asia Division Divis		U.S. Division	Corporate and Other	Total		
Balance, January 1, 2012	\$ 26,733	\$ 26,733 \$ 47,144		\$ 26,733 \$ 47,144		\$ 330	\$ 179,638
Adjustment due to reclassification of policy liabilities to segregated fund liability New business	\$ (1,193) 751	\$ – 67	\$ – 1,732	\$ - -	\$ (1,193) 2,550		
In-force movement Changes in methods & assumptions Currency impact	3,035 147 (1,502)	2,244 1,155 (1)	(4,902) 1,367 (2,328)	(510) 17 (3)	(133) 2,686 (3,834)		
Total net changes	\$ 1,238	\$ 3,465	\$ (4,131)	\$ (496)	\$ 76		
Balance, December 31, 2012	\$ 27,971	\$ 50,609	\$ 101,300	\$ (166)	\$ 179,714		

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, are 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 net in-force movement over the year was a decrease of \$133 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 policy liabilities. The \$4.9 billion in-force reserve decrease in the U.S. Division during 2012 included a \$6.9 billion decrease from reinsurance ceded arrangements entered into during the year. The decrease in the Corporate and Other segment was related to the settlement of claims in the Accident and Health Reinsurance operation that is closed to new business, and the Property and Casualty Reinsurance business.

The increase of \$2,686 million from changes in methods and assumptions resulted in a decrease in pre-tax earnings.

Of the \$2,417 million net increase in insurance contract liabilities related to new business and in-force movement, \$2,647 million was an increase in actuarial liabilities. The remaining was a decrease of \$230 million in other insurance contract liabilities.

The decrease in policy liabilities from currency reflects the appreciation 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 decrease in insurance contract liabilities due to currency is offset by a corresponding decrease from currency in the value of assets supporting those liabilities.

### Consolidation

The Company is required to consolidate the financial position and results of entities it controls. Control exists when the Company: 1) has the power to govern the financial and operating policies of the entity, 2) is exposed to a significant portion of the entity's variable returns, and 3) is able to use its power to influence variable returns from the entity. The Company uses the same principles to assess control over any entity it is involved with. In evaluating control, potential factors assessed include the effects of: 1) substantive potential voting rights that are currently exercisable or convertible, 2) contractual management relationships with the entity, 3) rights and obligations resulting from policyholders to manage investments on their behalf, and 4) the effect of any legal or contractual restraints on the Company from using its power to affect its variable returns from the entity.

An assessment of control is based on arrangements in place and the assessed risk exposures at inception. Initial evaluations are reconsidered at a later date if:

- a) the Company acquires additional interests in the entity or its interests in an entity are diluted,
- b) the contractual arrangements of the entity are amended such that the Company's involvement with the entity changes, or
- c) the Company's ability to use its power to affect its variable returns from the entity changes.

Subsidiaries are consolidated from the date on which control is obtained by 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 and note 11 to the 2013 Consolidated Financial Statements for a description of the methods used in determining fair values. 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 including discounted cash flow methodologies, matrix pricing, consensus pricing services, 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, volatilities 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 assets, or the price ultimately realized for these assets, depends upon the demand and liquidity in the market and increases the use of judgment in determining the estimated fair value of certain assets.

### **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. Securities are reviewed on a regular basis and any fair value decrement is transferred out of Accumulated Other Comprehensive Income ("AOCI") and recorded in income when it is deemed probable that the Company will not be able to 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 2013 Consolidated Financial Statements.

### **Derivative Financial Instruments**

The Company uses derivative financial instruments ("derivatives") including swaps, forwards 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. Refer to note 5 to the 2013 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. 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. If it was determined that hedge accounting designations were not appropriately applied, reported net income could be materially affected.

### **Employee Future Benefits**

The Company maintains a number of plans providing pension (defined benefit and defined contribution) and other post-employment benefits to eligible employees and agents after employment. The largest of these – the defined benefit pension and retiree welfare plans in the U.S. and Canada – are the material plans that are discussed herein and are the subject of the disclosures in note 17 to the 2013 Consolidated Financial Statements.

Due to the long-term nature of defined benefit pension and retiree welfare plans, the calculation of the defined benefit obligations and net benefit cost depends on various assumptions such as discount rates, salary increase rates, cash balance interest crediting rates, health care cost trend rates and rates of mortality. These assumptions are determined by management and are reviewed annually. Differences between actual and expected experience give rise to actuarial gains and losses that affect the amount of the defined benefit obligations and OCI. During 2013, the actual experience resulted in an actuarial gain of \$274 million (2012 – \$53 million) for the defined benefit pension plans and an actuarial gain of \$69 million (2012 – \$79 million) for the retiree welfare plans. The aggregate gain of \$343 million (2012 – \$132 million) was fully recognized in OCI in 2013. The key weighted average assumptions, as well as the sensitivity of the defined benefit obligations to these assumptions, are presented in note 17 to the 2013 Consolidated Financial Statements.

Contributions to the broad based defined benefit pension plans are made in accordance with the regulations in the countries in which the plans are offered. During 2013, the Company contributed \$21 million (2012 – \$37 million) to these plans. As at December 31, 2013, the difference between the fair value of assets and the defined benefit obligations for these plans was a surplus of \$137 million (2012 – deficit of \$95 million). For 2014, the contributions to the plans are expected to be approximately \$20 million.

The Company's supplemental pension plans for executives are not funded; benefits under these plans are paid as they become due. During 2013, the Company paid benefits of \$61 million (2012 – \$62 million) under these plans. As at December 31, 2013, the defined benefit obligations amounted to \$713 million (2012 – \$727 million).

The Company's retiree welfare plans are partially funded, although there are no regulations or laws governing or requiring the funding of these plans. As at December 31, 2013, the difference between the fair value of plan assets and the defined benefit plan obligations was a deficit of \$133 million (2012 – \$221 million).

For further details on the defined benefit obligations and net benefit cost for these plans, refer to note 17 to the 2013 Consolidated Financial Statements.

#### **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 carry forward 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 carry forwards;
- 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 had established provisions for disallowance of the tax treatment and for interest on past due taxes. On August 5, 2013, the U.S. Tax Court issued an opinion effectively ruling in the government's favour in the litigation between John Hancock and the Internal Revenue Service involving the tax treatment of leveraged leases. The Company was fully reserved for this result, and the case had no material impact on the Company's 2013 financial results.

### **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. The tests performed in 2013 demonstrated that there was no impairment of goodwill or intangible assets with indefinite lives. Change in the discount rates and cash flow projections used in the determination of embedded values or reductions in market-based earnings multiples may result in impairment charges in the future, which could be material.

Impairment charges could occur in the future as a result of changes in economic conditions. The goodwill testing for 2014 will be updated based on the conditions that exist in 2014 and may result in impairment charges, which could be material.

### **Future Accounting and Reporting Changes**

There are a number of new 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 2014 and subsequently. Summaries of each of the most recently issued key accounting standards are presented below:

### (a) IFRS 9 "Financial Instruments"

IFRS 9 "Financial Instruments" was issued in November 2009 and amended in October 2010 and November 2013, and is intended to replace IAS 39 "Financial Instruments: Recognition and Measurement". The project has been divided into three phases: classification and measurement, impairment of financial assets, and hedge accounting. IFRS 9's current classification and measurement methodology 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. Gains or losses caused by changes in an entity's own credit risk on such liabilities are no longer recognized in profit or loss but instead are reflected in OCI.

Revisions to hedge accounting were issued in November 2013 as part of the overall IFRS 9 project. The amendment introduces a new hedge accounting model, together with corresponding disclosures about risk management activity for those applying hedge accounting. The new model represents a substantial overhaul of hedge accounting that will enable entities to better reflect their risk management activities in their financial statements.

In November 2013, the IASB removed the mandatory effective date of January 1, 2015. The IASB has stated that a new effective date will be determined when all three phases of the IFRS 9 project are closer to completion. The Company is still assessing the impact of these changes.

### (b) Amendments to IAS 32 "Financial Instruments: Presentation"

The amendments to IAS 32 "Offsetting Financial Assets and Financial Liabilities" were issued in December 2011 and are effective for years beginning on or after January 1, 2014. The amendments clarify the basis for offsetting financial instruments presented in the statement of financial position. Adoption of these amendments is not expected to have a significant impact on the Company's Consolidated Financial Statements.

### (c) Amendments to IFRS 10, IFRS 12 and IAS 27 "Investment Entities"

The amendments to IFRS 10, IFRS 12 and IAS 27 "Investment Entities" were issued in October 2012 and are effective for years beginning on or after January 1, 2014. The amendments establish the definition of an investment entity using principles commonly found in the mutual fund industry. The amendments require investment entities to use fair value accounting for all of their investments, including those which they control or have significant influence over. The amendments constitute a scope change for IFRS 10 and, therefore, Investment Entities, as defined, will be exempt from applying consolidation accounting for their investments. Adoption of these amendments is not expected to have a significant impact on the Company's Consolidated Financial Statements.

### (d) IFRS Interpretation Committee ("IFRIC") Interpretation 21 "Levies"

IFRIC Interpretation 21 "Levies" was issued in May 2013 and is effective for years beginning on or after January 1, 2014. IFRIC 21 provides guidance on recognizing liabilities for payments to government in accordance with IAS 37 "Provisions, Contingent Liabilities and Contingent Assets". It does not provide guidance on accounting for income taxes, fines and penalties or for acquisition of assets or services from governments. IFRIC 21 establishes that a liability for a levy is recognized when the activity that triggers payment occurs. Adoption of this amendment is not expected to have a significant impact on the Company's Consolidated Financial Statements.

### (e) Amendments to IAS 39 "Financial Instruments: Recognition and Measurement"

The amendments to IAS 39 "Novation of Derivatives and Continuation of Hedge Accounting" were issued in June 2013 and are effective for years beginning on or after January 1, 2014. The amendments address the accounting for derivatives designated as a hedging instrument when there has been a change in counterparty. Under the amendments, for situations in which a law or regulation requires the novation, the Company can continue the current hedge designation despite the change. A novation occurs when the parties of the derivative agree to change counterparties for the purposes of using a central counterparty for clearing. Adoption of these amendments is not expected to have a significant impact on the Company's Consolidated Financial Statements.

### (f) Annual Improvements 2010-2012 and 2011-2013 Cycles

Annual Improvements 2010-2012 and 2011-2013 Cycles were issued in December 2013, resulting in minor amendments to 10 standards and are effective for the Company starting on January 1, 2015. Adoption of these amendments is not expected to have a significant impact on the Company's Consolidated Financial Statements.

### (g) Amendments to IAS 19 "Employee Benefits"

The amendments to IAS 19 "Employee Benefits" were issued in November 2013 and are effective for the Company starting on January 1, 2015. The amendments clarify the accounting for contributions by employees or third parties to defined benefit plans. Adoption of these amendments is not expected to have a significant impact on the Company's Consolidated Financial Statements.

### **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, 2013, 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 within the Consolidated Financial Statements. Instead, we have elected to disclose certain consolidated U.S. GAAP information in our MD&A. As a result, net income attributed to shareholders in accordance with U.S. GAAP is considered a non-GAAP financial measure.

For the full year 2013, net loss attributed to shareholders in accordance with U.S. GAAP<sup>22</sup> was \$648 million, \$3,778 million lower than the \$3,130 million in net income attributed to shareholders under IFRS. A reconciliation of the major differences between net income attributed to shareholders in accordance with IFRS and the net income attributable to shareholders in accordance with U.S. GAAP follows, with major differences expanded upon below:

### **U.S. GAAP Results**

For the years ended December 31,

(C\$ millions)	2013	2012(1)	2011(2)
Net income attributed to shareholders in accordance with IFRS	\$ 3,130	\$ 1,810	\$ 129
Key earnings differences:			
Variable annuity guarantee liabilities	\$ (2,355)	\$ (1,225)	\$ 2,927
Impact of mark-to-market accounting and investing activities on investment income and policy liabilities <sup>(3)</sup>	(1,276)	1,179	317
New business differences including acquisition costs	(858)	(650)	(322)
Changes in actuarial methods and assumptions, excluding URR	506	492	349
Goodwill impairment charge	-	200	153
Other differences	205	751	121
Total earnings difference	\$ (3,778)	\$ 747	\$ 3,545
Net (loss) income attributed to shareholders in accordance with U.S. GAAP	\$ (648)	\$ 2,557	\$ 3,674

<sup>(1)</sup> The 2012 and 2011 IFRS equity was restated to reflect the retrospective application of new accounting standards effective January 1, 2013. For a detailed description of the change see note 2 to the 2013 Consolidated Financial Statements. The 2011 results were not required to be restated.

Accounting for variable annuity guarantee liabilities – IFRS follows a predominantly "mark-to-market" accounting approach to measure variable annuity guarantee liabilities while U.S. GAAP only uses "mark-to-market" accounting for certain benefit guarantees. The U.S. GAAP accounting results in an accounting mismatch between the hedging assets supporting the dynamically hedged guarantees and the guarantees not accounted for on a mark-to-market basis. Another difference is that U.S. GAAP reflects the Company's own credit standing in the measurement of the liability. In 2013, we reported a net loss of \$670 million (2012 – net gain of \$29 million; 2011 – net gain of \$682 million) in our total variable annuity businesses under U.S. GAAP compared to a net gain of \$1,254 million; 2011 – net loss of \$2,245 million).

Investment income and policy liabilities – Under IFRS, accumulated unrealized gains and losses arising from fixed income investments and interest rate derivatives supporting policy liabilities are largely offset in the valuation of the policy liabilities. The 2013 IFRS impacts of fixed income reinvestment assumptions, general fund equity investments, fixed income and alternative long-duration asset investing totaled a net gain of \$323 million (2012 – net loss of \$176 million; 2011 – net gain of \$504 million) compared to U.S. GAAP net realized losses and other investment losses of \$953 million (2012 – net gain of \$1,003 million; 2011 – net gain of \$821 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 2013, IFRS results benefited from lower new business strain compared to U.S. GAAP.

Changes in actuarial methods and assumptions – The charges recognized under IFRS from the annual review of actuarial methods and assumptions of \$489 million (2012 – \$1,081 million; 2011 – \$751 million) excluding URR charges, compared to gains of \$17 million (2012 – charges of \$589 million; 2011 – charges of \$402 million) on a U.S. GAAP basis.

Goodwill impairment – In 2013 we recorded no IFRS or U.S. GAAP goodwill impairment charges. In 2012 we recorded a \$200 million IFRS goodwill impairment charge related to our Canadian Individual Insurance business. There was no impact on a U.S. GAAP basis. In 2011, under IFRS we recorded a \$665 million IFRS goodwill impairment charge representing the remaining goodwill attributable to our U.S. Life insurance business compared to \$512 million goodwill impairment charge under U.S. GAAP attributable to our U.S. Wealth management businesses. The difference in amounts and business units affected is primarily attributable to the more granular impairment testing methodology prescribed under IFRS.

Total equity in accordance with U.S. GAAP<sup>23</sup> as at December 31, 2013 was approximately \$8 billion higher than under IFRS. Of this difference, approximately \$6 billion was attributable to the higher cumulative net income on a U.S. GAAP basis. The remaining

<sup>(2)</sup> Restated as a result of adopting Accounting Standards Update No. 2010-26, "Accounting for Costs Associated with Acquiring or Renewing Insurance Contracts" ("ASU 2010-26") effective January 1, 2012 but requiring application to 2011. The impact to full year 2011 was a net decrease in earnings of \$48 million, all of which is included in "New business differences including acquisition costs".

<sup>(3)</sup> Includes impacts related to the update of the fixed income ultimate reinvestment rate assumptions used in the valuation of policy liabilities under IFRS which have no direct impact on U.S. GAAP results.

<sup>&</sup>lt;sup>22</sup> This item is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

<sup>&</sup>lt;sup>23</sup> Total equity in accordance with U.S. GAAP is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

difference was 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, 2013 arises from our U.S. businesses.

A reconciliation of the major differences in total equity is as follows:

As at December 31,	Αs	at	De	ce	m	be	r 3	1	,
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(C\$ millions)	2013	2012(1)	2011(2)
Total equity in accordance with IFRS	\$ 29,033	\$ 25,159	\$ 24,879
Differences in shareholders' retained earnings and participating policyholders' equity	5,947	9,715	8,869
Difference in accumulated other comprehensive income attributed to:			
(i) Pension and other post-employment plans	(80)	(47)	(802)
(ii) AFS securities and other	2,231	5,670	5,275
(iii) Cash flow hedges	1,224	2,575	2,570
(iv) Translation of net foreign operations <sup>(3)</sup>	(1,055)	(1,457)	(1,309)
Differences in share capital, contributed surplus and non-controlling interests	136	240	148
Total equity in accordance with U.S. GAAP	\$ 37,436	\$ 41,855	\$ 39,630

<sup>(1)</sup> The 2012 IFRS equity was restated to reflect the retrospective application of new accounting standards effective January 1, 2013. For a detailed description of the change see note 2 to the 2013 Consolidated Financial Statements. The 2011 results were not required to be restated.

<sup>(2)</sup> The 2011 U.S. GAAP equity was restated to reflect the retrospective adoption of ASU No. 2010-26 effective January 1, 2012.

<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.

### **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, 2013, 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, 2013.

MFC's Audit Committee has reviewed this MD&A and the 2013 Consolidated Financial Statements and MFC's Board of Directors approved these reports prior to their release.

### 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, 2013 based on the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") 1992 framework in Internal Control – Integrated Framework. Based on this assessment, management believes that, as of December 31, 2013, 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, 2013 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, 2013. Their report expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting as of December 31, 2013.

### **Changes in Internal Control over Financial Reporting**

No changes were made in our internal control over financial reporting during the year ended December 31, 2013 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 financial statements. Non-GAAP measures include: Core Earnings; Net Income Attributed to Shareholders in Accordance with U.S. GAAP; Total Equity in Accordance with U.S. GAAP; Core ROE; Diluted Core Earnings Per Common Share; Constant Currency Basis; Premiums and Deposits; Funds under Management; Capital; New Business Embedded Value; Sales and Total Annualized Insurance and Wealth Premium Equivalent Basis Sales. Non-GAAP financial measures are not defined terms under GAAP and, therefore, with the exception of Net Income Attributed to Shareholders 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.

**Core earnings (losses)** is a non-GAAP measure which we use to better understand the long-term earnings capacity and valuation of the business. Core earnings excludes the direct impact of equity markets and interest rates as well as a number of other items, outlined below, that are considered material and exceptional in nature. While this metric is relevant to how we manage our business and offers a consistent methodology, it is not insulated from macro-economic factors which can have a significant impact.

Any future changes to the core earnings definition referred to below, will be disclosed.

### Items that are included in core earnings are:

- 1. Expected earnings on in-force policies, including expected release of provisions for adverse deviation, fee income, margins on group business and spread business such as Manulife Bank and asset fund management.
- 2. Macro hedging costs based on expected market returns.
- 3. New business strain.
- 4. Policyholder experience gains or losses.
- 5. Acquisition and operating expenses compared to expense assumptions used in the measurement of policy liabilities.
- 6. Up to \$200 million of favourable investment-related experience reported in a single year, which are referred to as "core investment gains".
- 7. Earnings on surplus other than mark-to-market items. Gains on available-for-sale ("AFS") equities and seed money investments are included in core earnings.
- 8. Routine or non-material legal settlements.
- 9. All other items not specifically excluded.
- 10. Tax on the above items.
- 11. All tax related items except the impact of enacted or substantially enacted income tax rate changes.

### Items excluded from core earnings are:

- 1. The direct impact of equity markets and interest rates, consisting of:
  - Gains (charges) on variable annuity guarantee liabilities not dynamically hedged.
  - Gains (charges) on general fund equity investments supporting policy liabilities and on fee income.
  - Gains (charges) on macro equity hedges relative to expected costs. The expected cost of macro hedges is calculated using the equity assumptions used in the valuation of policy liabilities.
  - Gains (charges) on higher (lower) fixed income reinvestment rates assumed in the valuation of policy liabilities, including the impact on the fixed income ultimate reinvestment rate ("URR").
  - Gains (charges) on sale of AFS bonds and open derivatives not in hedging relationships in the Corporate and Other segment.
- 2. The earnings impact of the difference between the net increase (decrease) in variable annuity liabilities that are dynamically hedged and the performance of the related hedge assets. Our variable annuity dynamic hedging strategy is not designed to completely offset the sensitivity of policy liabilities to all risks or measurements associated with the guarantees embedded in these products for a number of reasons, including: provisions for adverse deviation, fund performance, the portion of the interest rate risk that is not dynamically hedged, realized equity and interest rate volatilities and changes to policyholder behaviour.
- 3. Net favourable investment-related experience in excess of \$200 million per annum or net unfavourable investment-related experience on a year-to-date basis. Investment-related experience relates to fixed income trading, alternative long-duration asset returns, credit experience and asset mix changes. This favourable and unfavourable investment-related experience is a combination of reported investment experience as well as the impact of investing activities on the measurement of our policy liabilities. The maximum of \$200 million per annum to be reported in core earnings compares with an average of over \$80 million per quarter of favourable investment-related experience reported since first quarter 2007.
- 4. Mark-to-market gains or losses on assets held in the Corporate and Other segment other than gains on AFS equities and seed money investments in new segregated or mutual funds.
- 5. Changes in actuarial methods and assumptions, excluding URR.
- 6. The impact on the measurement of policy liabilities of changes in product features or new reinsurance transactions, if material.
- 7. Goodwill impairment charges.
- 8. Gains or losses on disposition of a business.
- 9. Material one-time only adjustments, including highly unusual/extraordinary and material legal settlements or other items that are material and exceptional in nature.
- 10. Tax on the above items.
- 11. Impact of enacted or substantially enacted income tax rate changes.

**Net income attributed to shareholders 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.

**Core return on common shareholders' equity** ("Core ROE") is a non-GAAP profitability measure that presents core earnings available to common shareholders as a percentage of the capital deployed to earn the core earnings. The Company calculates Core ROE using average common shareholders' equity.

**Diluted core earnings per common share** is core earnings available to common shareholders expressed per diluted weighted average common share outstanding.

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 2013.

**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 Statements of Income, (ii) segregated fund deposits, excluding seed money, ("deposits from policyholders"), (iii) adding back the premiums ceded related to FDA coinsurance, (iv) investment contract deposits, (v) mutual fund deposits, (vi) deposits into institutional advisory accounts, (vii) premium equivalents for "administration services only" group benefit contracts ("ASO premium equivalents"), (viii) premiums in the Canadian Group Benefits reinsurance ceded agreement, and (ix) other deposits in other managed funds.

Premiums and deposits	Quarter	Quarterly Results		
For the periods ended December 31, (C\$ millions)	4Q 2013	4Q 2012	2013	2012
Net premium income	\$ 4,548	\$ 4,821	\$ 17,510	\$ 10,194
Deposits from policyholders	5,756	5,728	23,059	23,533
Premiums and deposits per financial statements Add back premiums ceded relating to FDA coinsurance Investment contract deposits Mutual fund deposits	\$ 10,304	\$ 10,549	\$ 40,569	\$ 33,727
	-	2	-	7,229
	15	59	59	212
	8,400	6,117	35,890	18,843
Institutional advisory account deposits ASO premium equivalents Group benefits ceded premiums Other fund deposits	957	5,376	3,974	7,744
	746	706	2,935	2,819
	1,000	1,180	4,404	4,430
	114	139	419	497
Total premiums and deposits	\$ 21,536	\$ 24,128	\$ 88,250	\$ 75,501
Currency impact	-	(229)	1,025	798
Constant currency premiums and deposits	\$ 21,536	\$ 23,899	\$ 89,275	\$ 76,299

**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

As at December 31, (C\$ millions)	2013	(restated) <sup>(1)</sup> 2012
Total invested assets Segregated funds net assets	\$ 232,709 239,871	\$ 227,932 209,197
Funds under management per financial statements Mutual funds Institutional advisory accounts (excluding segregated funds) Other funds	\$ 472,580 91,118 30,284 4,951	\$ 437,129 59,979 26,692 7,358
Total fund under management Currency impact	\$ 598,933 -	\$ 531,158 20,876
Constant currency funds under management	\$ 598,933	\$ 552,034

<sup>(1)</sup> The 2012 results were restated to reflect the retrospective application of new IFRS accounting standards effective January 1, 2013. For a detailed description of the change see note 2 to our 2013 Consolidated Financial Statements.

**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

As at December 31,	2013	restated <sup>(1)</sup> 2012
(C\$ millions)	2013	2012
Total equity	\$ 29,033	\$ 25,159
Add AOCI loss on cash flow hedges	84	185
Add liabilities for preferred shares and capital instruments	4,385	3,903
Total capital	\$ 33,502	\$ 29,247

<sup>(1)</sup> The 2012 results were restated to reflect the retrospective application of new IFRS accounting standards effective January 1, 2013. For a detailed description of the change see note 2 to our 2013 Consolidated Financial Statements.

**Embedded value** is a measure of shareholders' economic value in the current Consolidated Statements of Financial Position of the Company, excluding any value associated with future new business. Manulife Financial's embedded value is defined as adjusted IFRS common shareholders' equity, with adjustments to reflect the fair value of surplus assets and to exclude goodwill and post-tax intangibles, plus the value of future earnings expected from current in-force business. The latter item is calculated net of the cost of capital, using future mortality, morbidity, policyholder behaviour, expense and investment assumptions that are consistent with the assumptions used in the valuation of our policy liabilities.

**New business embedded value** ("NBEV") is the change in shareholders' economic value as a result of sales in the reporting period. NBEV is calculated as the present value of expected future earnings, after the cost of capital, on actual new business sold in the period using future mortality, morbidity, policyholder behaviour, expense and investment assumptions that are consistent with the assumptions used in the valuation of our policy liabilities.

**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; mutual funds; college savings 529 plans; and authorized bank loans and mortgages. As we have discontinued sales of new VA contracts in the U.S., beginning in the first quarter of 2013, subsequent deposits into existing U.S. VA contracts will not be considered sales.
- 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.

**Total Annualized Insurance and Wealth Premium Equivalent ("APE") Basis Sales** are sales that comprise 100 per cent of regular premium/deposit sales and 10 per cent of single premium/deposit sales for both insurance and wealth management products.

### **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, 2013, the Company's contractual obligations and commitments are as follows:

Payments due by period	Less than								After		
(C\$ millions)		Total		1 year	1 -	– 3 years	3 –	5 years		years	
Long-term debt <sup>(1)</sup>	\$	5,525	\$	1,212	\$	2,513	\$	593	\$	1,207	
Liabilities for capital instruments <sup>(1),(2)</sup>		12,002		188		376		370		11,068	
Purchase obligations		720		77		512		_		131	
Operating leases		795		137		174		64		420	
Insurance contract liabilities <sup>(3)</sup>		518,230		7,800		8,295	1	10,324		491,811	
Investment contract liabilities(1)		3,973		246		695		343		2,689	
Bank deposits		21,869		15,311		4,185		2,373		-	
Other		2,951		222		1,730		940		59	
Total contractual obligations	\$ :	566,065	\$	25,193	\$	18,480	\$ 1	15,007	\$	507,385	

<sup>(1)</sup> The contractual payments include principal, interest and distributions. The contractual payments reflect the amounts payable from January 1, 2014 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, 2013 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.

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, 2013, there were \$5,070 million of investment commitments (2012 – \$2,965 million), of which \$1,950 million matures within one year (2012 – \$1,420 million), \$2,186 million matures within one to three years (2012 – \$879 million), \$475 million matures within three to five years (2012 – \$316 million) and \$459 million matures after five years (2012 – \$350 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.

Two class actions against the Company have been certified and are pending in Quebec (on behalf of Quebec residents only) and Ontario (on behalf of investors in Canada, other than Quebec). The actions in Ontario and Quebec 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 decisions to grant leave and certification have been of a procedural nature only and there has been no determination on the merits of either claim to date. 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 2016 management objectives<sup>24</sup> do not constitute guidance and are based on certain key planning assumptions, including: current accounting and regulatory capital standards; no acquisitions; equity market and interest rate assumptions consistent with our long-term assumptions, and favourable investment-related experience included in core earnings.

<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" above). Cash flows include embedded derivatives measured separately at fair value.

<sup>&</sup>lt;sup>24</sup> See "Caution regarding forward-looking statements" above.

### **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)			2013			2012 (restated) <sup>(1)</sup>				)		
(unaudited)		Dec 31	Sep 30	Jun 30	Mar 31		Dec 31	Sep 30	Jun 30	Mar 31		
Revenue Premium income Life and health insurance Annuities and pensions	\$	3,956 \$ 592	3,879 \$ 490	3,681 \$ 495	3,837 580	\$	4,335 \$ 488	3,399 \$ 501	3,704 \$ 626	3,459 911		
Net premium income prior to FDA coinsurance Premiums ceded relating to FDA coinsurance <sup>(2)</sup>	\$	4,548 \$	4,369 \$	4,176 \$	4,417	\$	4,823 \$	3,900 \$ (1,799)	4,330 \$ (5,428)	4,370		
Investment income Realized and unrealized gains (losses) on assets supporting insurance and		2,637	2,483	2,345	2,405		2,520	2,432	2,515	2,335		
investment contract liabilities <sup>(3)</sup> Other revenue		(2,788) 2,645	(2,513) 1,966	(9,355) 2,324	(2,961) 1,974		(2,075) 1,679	1,104 1,802	7,681 2,039	(4,885) 1,769		
Total revenue	\$	7,042 \$	6,305 \$	(510) \$	5,835	\$	6,945	7,439 \$	11,137 \$	3,589		
Income (loss) before income taxes Income tax (expense) recovery	\$	1,854 \$ (497)	1,118 \$ (172)	205 \$ 103	570 (15)	\$	1,091 \$ 14	(679) \$ 360	(485) \$ 186	1,316 (68)		
Net income (loss)	\$	1,357 \$	946 \$	308 \$	555	\$	1,105	(319) \$	(299) \$	1,248		
Net income (loss) attributed to shareholders	\$	1,297 \$	1,034 \$	259 \$	540	\$	1,077	5 (211) \$	(281) \$	1,225		
Basic earnings (loss) per common share	\$	0.69 \$	0.54 \$	0.12 \$	0.28	\$	0.57	(0.13) \$	(0.17) \$	0.67		
Diluted earnings (loss) per common share	\$	0.68 \$	0.54 \$	0.12 \$	0.28	\$	0.57	(0.13) \$	(0.17) \$	0.63		
Segregated funds deposits	\$	5,756 \$	5,321 \$	5,516 \$	6,466	\$	5,728	5,625 \$	5,752 \$	6,428		
Total assets	\$	513,628 \$	498,016 \$	498,243 \$	497,590	\$	484,998	479,331 \$	478,103 \$	463,843		
Weighted average common shares (in millions)		1,844	1,839	1,834	1,828		1,822	1,816	1,808	1,802		
Diluted weighted average common shares (in millions)		1,869	1,864	1,860	1,856		1,854	1,816	1,808	1,919		
Dividends per common share	\$	0.13 \$	0.13 \$	0.13 \$	0.13	\$	0.13	0.13 \$	0.13 \$	0.13		
CDN\$ to US\$1 – Statement of Financial Position		1.0640	1.0285	1.0512	1.0156		0.9949	0.9837	1.0191	0.9991		
CDN\$ to US\$1 – Statement of Income		1.0494	1.0386	1.0230	1.0083		0.9914	0.9953	1.0105	1.0011		
						_						

<sup>(1)</sup> The 2012 IFRS amounts were restated to reflect the retrospective application of new IFRS accounting standards effective January 1, 2013. For a detailed description of the change see note 2 to our 2013 Consolidated Financial Statements.

<sup>(2)</sup> With effective dates of April 1, 2012 and July 1, 2012, the Company entered into coinsurance agreements to reinsure 89 per cent of its book value fixed deferred annuity business. Under the terms of the agreements, the Company will maintain responsibility for servicing of the policies and some of the assets and has retained the remaining exposure.

<sup>(3)</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 gains (losses) on the assets is largely offset in the change in insurance and investment contract liabilities.

#### **Selected Annual Financial Information**

As at and for the years ended December 31, (C\$ millions, except per share amounts)	2013		restated <sup>(1)</sup> 2012		2011
Revenue Asia Division	\$ 8,914	\$	9,955	\$	8,428
Canadian Division	6.060	Ψ	10,229	Ψ	11,942
U.S. Division	5,756		9,701		28,415
Corporate and Other	(2,058)	)	(775)		2,198
Total revenue	\$ 18,672	\$	29,110	\$	50,983
Total assets	\$ 513,628	\$	484,998	\$	461,977
Long-term financial liabilities					
Long-term debt	\$ 4,775	\$	5,046	\$	5,503
Liabilities for preferred shares and capital instruments	4,385		3,903		4,012
Total	\$ 9,160	\$	8,949	\$	9,515
Dividend per common share	\$ 0.52	\$	0.52	\$	0.52
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		1.65
Cash dividend per Class 1 Share, Series 1	1.40		1.40		1.40
Cash dividend per Class 1 Share, Series 3	1.05		1.05		0.81267
Cash dividend per Class 1 Share, Series 5	1.10		1.10		-
Cash dividend per Class 1 Share, Series 7	1.15		0.94678		-
Cash dividend per Class 1 Share, Series 9	1.10		0.63062		_
Cash dividend per Class 1 Share, Series 11	1.00		-		-
Cash dividend per Class 1 Share, Series 13	0.475		-		_

<sup>(1)</sup> The 2012 IFRS amounts were restated to reflect the retrospective application of new IFRS accounting standards effective January 1, 2013. For a detailed description of the change see note 2 to our 2013 Consolidated Financial Statements.

### **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 and on SEDAR at www.sedar.com.

### **Outstanding Shares - Selected Information**

### **Class A Shares Series 1**

As at February 21, 2014, 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 February 21, 2014, MFC had 1,848,655,645 common shares outstanding.

### **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

Toronto, Canada February 26, 2014 Steve B. Roder

Senior Executive Vice President and Chief Financial Officer

### **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, 2013 and 2012 and their change in the Consolidated Statements of Income for the years then ended 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

February 26, 2014

### 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, 2013 and 2012, and the Consolidated Statements of Income, Comprehensive Income, Changes in Equity and Cash Flows for the years then ended, 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, 2013 and 2012, and its financial performance and its cash flows for the years then ended in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

As explained in Note 2 to the consolidated financial statements, in 2013, Manulife Financial Corporation adopted IFRS 10 "Consolidated Financial Statements" and the amendments to IAS 19 "Employee Benefits."

### 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, 2013, based on the criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (1992 framework) and our report dated February 26, 2014, expressed an unqualified opinion on Manulife Financial Corporation's internal control over financial reporting.

Chartered Accountants Licensed Public Accountants

Ernst + young LLP

Toronto, Canada,

February 26, 2014.

# Independent Auditors' Report on Internal Control 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, 2013, based on criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (1992 framework) (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 the Management's Report on Internal Controls over Financial Reporting contained in the 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, 2013 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, 2013 and 2012, and the Consolidated Statements of Income, Comprehensive Income, Changes in Equity and Cash Flows for the years then ended of Manulife Financial Corporation and our report dated February 26, 2014, expressed an unqualified opinion thereon.

Chartered Accountants Licensed Public Accountants

Ernst + young LLP

Toronto, Canada,

February 26, 2014.

### **Consolidated Statements of Financial Position**

As at December 31,		(Restated–note 2)
(Canadian \$ in millions)	2013	2012
ASSETS	¢ 42.620	¢ 42.206
Cash and short-term securities	\$ 13,630	\$ 13,386
Debt securities	114,957	119,159
Public equities	13,075	11,035
Mortgages	37,558	35,082
Private placements	21,015	20,275
Policy loans	7,370	6,793
Bank loans	1,901	2,142
Real estate	9,708	8,513
Other invested assets	13,495	11,547
Total invested assets (note 4)	\$ 232,709	\$ 227,932
Other assets	¢ 4.043	¢ 1702
Accrued investment income	\$ 1,813	\$ 1,792
Outstanding premiums	734	1,009
Derivatives (note 5)	9,673	14,707
Reinsurance assets (note 8)	17,443	18,681
Deferred tax assets (note 6)	2,763	3,177
Goodwill and intangible assets (note 7)	5,298	5,113
Miscellaneous	3,324	3,390
Total other assets	\$ 41,048	\$ 47,869
Segregated funds net assets (note 23)	\$ 239,871	\$ 209,197
Total assets	\$ 513,628	\$ 484,998
LIABILITIES and EQUITY		
Liabilities		
Insurance contract liabilities (note 8)	\$ 193,242	\$ 198,395
Investment contract liabilities (note 9)	2,524	2,420
Bank deposits	19,869	18,857
Derivatives (note 5)	8,929	7,500
Deferred tax liabilities (note 6)	617	603
Other liabilities	10,383	13,918
	\$ 235,564	\$ 241,693
Long-term debt (note 12)	4,775	5,046
Liabilities for preferred shares and capital instruments (note 13)	4,385	3,903
Segregated funds net liabilities (note 23)	239,871	209,197
Total liabilities	\$ 484,595	\$ 459,839
Equity		
Preferred shares (note 14)	\$ 2,693	\$ 2,497
Common shares (note 14)	20,234	19,886
Contributed surplus	256	257
Shareholders' retained earnings	5,294	3,256
Shareholders' accumulated other comprehensive income (loss):	•	,
Pension and other post-employment plans (note 2)	(452)	(653)
Available-for-sale securities	324	363
Cash flow hedges	(84)	(185)
Translation of foreign operations	258	(709)
Total shareholders' equity	\$ 28,523	\$ 24,712
Participating policyholders' equity	134	146
Non-controlling interests	376	301
Total equity	\$ 29,033	\$ 25,159
Total liabilities and equity	\$ 513,628	\$ 484,998

 $\label{thm:companying} \ \text{notes are an integral part of these Consolidated Financial Statements}.$ 

Donald A. Guloien President and Chief Executive Officer

Richard B. DeWolfe Chairman of the Board of Directors

### **Consolidated Statements of Income**

For the years ended December 31, (Canadian \$ in millions except per share amounts)		2013	(Restated–i	note 2) 2012
Revenue				
Premium income				
Gross premiums	\$	24,892	\$ 2	4,617
Premiums ceded to reinsurers		(7,382)	(	7,194)
Net premium income prior to fixed deferred annuity coinsurance	\$	17,510	\$ 1	7,423
Premiums ceded relating to fixed deferred annuity coinsurance (note 8(c))		_	(	7,229)
	\$	17,510	\$ 1	0,194
Investment income (note 4)				
Investment income	\$	9,870	\$	9,802
Realized and unrealized gains (losses) on assets supporting insurance and investment contract liabilities and				•
macro hedge program		(17,617)		1,825
Net investment income (loss)	\$	(7,747)	\$ 1	1,627
Other revenue	\$	8,909	\$	7,289
Total revenue	\$	18,672	\$ 2	9,110
Contract benefits and expenses				•
To contract holders and beneficiaries				
Death, disability and other claims	\$	10,005	\$	9,527
Maturity and surrender benefits		4,683		4,786
Annuity payments		3,504		3,244
Policyholder dividends and experience rating refunds		1,103		1,092
Net transfers from segregated funds		(624)		(718
Change in insurance contract liabilities		(10,130)	1	3,040
Change in investment contract liabilities		162	•	71
Ceded benefits and expenses		(6,376)	(	5,924)
Change in reinsurance assets (note 8(c))		1,526		(8,065)
Net benefits and claims	\$	3,853	\$ 1	7,053
General expenses	7	4,624		4,415
Investment expenses (note 4)		1,172		1,034
Commissions		3,920		3,932
Interest expense		1,045		934
Net premium taxes		311		299
Goodwill impairment (note 7)		-		200
Total contract benefits and expenses	\$	14,925	\$ 2	7,867
Income before income taxes	\$	3,747		1,243
Income tax (expense) recovery (note 6)	Þ	(581)	Þ	492
Net income	\$			
vet income		3,100	<b></b>	1,735
Net income (loss) attributed to:				
Non-controlling interests	\$	48	\$	28
Participating policyholders		(12)		(103)
Shareholders		3,130		1,810
	\$	3,166	\$	1,735
Net income attributed to shareholders	\$	3,130		1,810
Preferred share dividends	٥	(131)	Ф	(112)
Common shareholders' net income	\$		\$	1,698
	٠	_,,,,,	Ψ.	.,050
Earnings per share				
Basic earnings per common share (note 11)	\$		\$	0.94
Diluted earnings per common share (note 11)		1.62		0.92
Dividends per common share		0.52		0.52

# **Consolidated Statements of Comprehensive Income**

For the years ended December 31, (Canadian \$ in millions)	2013	(Restated–note 2) 2012
Net income	\$ 3,166	\$ 1,735
Other comprehensive income ("OCI") (loss), net of tax Items that will not be reclassified to net income: Change in pension and other post-employment plans	\$ 201	\$ 86
Total items that will not be reclassified to net income	\$ 201	\$ 86
Items that may be subsequently reclassified to net income:  Foreign exchange gains (losses) on:     Translation of foreign operations     Net investment hedges  Available-for-sale financial securities:     Unrealized gains (losses) arising during the year     Reclassification of realized (gains) losses and impairments to net income  Cash flow hedges:     Unrealized gains arising during the year     Reclassification of realized losses to net income  Share of other comprehensive loss of associates	\$ 1,015 (48) (171) 131 93 8 -	\$ (812) 41 383 (121) 52 9 (3)
Total items that may be subsequently reclassified to net income	\$ 1,028	\$ (451)
Other comprehensive income (loss), net of tax	\$ 1,229	\$ (365)
Total comprehensive income, net of tax	\$ 4,395	\$ 1,370
Total comprehensive income (loss) attributed to: Non-controlling interests Participating policyholders Shareholders	\$ 47 (12) 4,360	\$ 28 (103) 1,445

# **Income Taxes included in Other Comprehensive Income (Loss)**

For the years ended December 31,		(Restated-note 2)
(Canadian \$ in millions)	2013	2012
Income tax (recovery) expense on		
Items that will not be reclassified to net income:		
Change in pension and other post-employment plans	\$ 104	\$ 51
Total items that will not be reclassified to net income	\$ 104	\$ 51
Items that may be subsequently reclassified to net income:		
Unrealized foreign exchange gains/losses on translation of foreign operations	\$ (3)	\$ 3
Unrealized foreign exchange gains/losses on net investment hedges	(17)	15
Unrealized gains/losses on available-for-sale financial securities	(61)	119
Reclassification of realized gains/losses and recoveries/impairments to net income on available-for-sale financial		
securities	57	(8)
Unrealized gains/losses on cash flow hedges	47	25
Reclassification of realized gains/losses to net income on cash flow hedges	5	4
Share of other comprehensive loss of associates	_	(1)
Total income tax expense on items that may be subsequently reclassified to net income	\$ 28	\$ 157
Total income tax expense	\$ 132	\$ 208

# **Consolidated Statements of Changes in Equity**

For the years ended December 31, (Canadian \$ in millions)		2013	(Restated	d-note 2) 2012
Preferred shares Balance, beginning of year	\$	2,497	\$	1,813
Issued (note 14) Issuance costs, net of tax		200 (4)		700 (16)
Balance, end of year	\$	2,693	\$	2,497
Common shares				
Balance, beginning of year	\$	19,886	\$	19,560
Issued on exercise of stock options Issued under dividend reinvestment and share purchase plans		17 331		326
Balance, end of year	\$	20,234	\$	19,886
balance, end of year		20,234	Ψ	19,000
Contributed surplus				
Balance, beginning of year	\$	257	\$	245
Exercise of stock options and deferred share units Stock option expense		(3) 15		1 17
Acquisition of non-controlling interest		(13)		(6)
Balance, end of year	\$	256	\$	257
Shareholders' retained earnings				
Balance, beginning of year	\$	3,256	\$	2,501
Effect of accounting change (note 2)		_	•	4
Net income attributed to shareholders		3,130		1,810
Preferred share dividends		(131)		(112)
Common share dividends		(961)		(947)
Balance, end of year	\$	5,294	\$	3,256
Shareholders' accumulated other comprehensive income (loss) ("AOCI")				
Balance, beginning of year	\$	(1,184)	\$	96
Effect of accounting change (note 2)		-		(915)
Change in unrealized foreign exchange gains (losses) of net foreign operations		967		(771)
Change in actuarial gains (losses) on pension and other post-employment plans		201		86
Change in unrealized gains (losses) on available-for-sale financial securities		(39)		262
Change in unrealized gains (losses) on derivative instruments designated as cash flow hedges Share of other comprehensive loss of associates		101 –		61 (3)
Balance, end of year	\$	46	\$	(1,184)
		28,523		
Total shareholders' equity, end of year	•	20,323		24,712
Participating policyholders' equity				
Balance, beginning of year	\$	146	\$	
Net loss attributed to participating policyholders		(12)		(103)
Balance, end of year	\$	134	\$	146
Non-controlling interests				
Balance, beginning of year	\$	301	\$	415
Effect of accounting change (note 2)  Net income attributed to non-controlling interests		40		(177)
Other comprehensive loss attributed to non-controlling interests		48 (1)		28
Contributions, net		28		35
Balance, end of year	\$	376	\$	301

### **Consolidated Statements of Cash Flows**

For the years ended December 31, (Canadian \$ in millions)	2013	(Restated–note 2) 2012
Operating activities		
Net income	\$ 3,166	\$ 1,735
Adjustments for non-cash items in net income:  Increase (decrease) in insurance contract liabilities	(10,130)	13,040
Increase in investment contract liabilities	162	71
(Increase) decrease in reinsurance assets, net of premium ceded relating to FDA coinsurance (note 8(c))	1,526	(836)
Amortization of premium/discount on invested assets	(3)	26
Other amortization	426 17,786	390 (2,124)
Net realized and unrealized (gains) losses and impairments on assets  Gain on sale of Taiwan insurance business	(479)	(2,124)
Deferred income tax expense (recovery)	475	(1,526)
Stock option expense	15	17
Goodwill impairment	_	200
Net income adjusted for non-cash items	\$ 12,944	\$ 10,993
Changes in policy related and operating receivables and payables	(3,236)	(198)
Cash provided by operating activities	\$ 9,708	\$ 10,795
Investing activities		
Purchases and mortgage advances	\$ (67,801)	\$ (81,775)
Disposals and repayments	57,721	71,111
Change in investment broker net receivables and payables Net cash decrease from sale and purchase of subsidiaries and businesses	(108) (359)	(171)
Cash used in investing activities	\$ (10,547)	\$ (10,835)
cash asea in investing activities	\$ (10,547)	¥ (10,055)
Financing activities		
Increase (decrease) in repurchase agreements and securities sold but not yet purchased	\$ (471)	\$ 14
Repayment of long-term debt	(350)	407
Issue of capital instruments, net Repayment of capital instruments	448	497 (1,000)
Net redemption of investment contract liabilities	(205)	(120)
Funds repaid, net	(127)	(11)
Secured borrowing from securitization transactions	750	500
Changes in bank deposits, net	981	880
Shareholders dividends paid in cash	(761)	(733)
Contributions from non-controlling interests, net	15	29
Common shares issued, net Preferred shares issued, net	17	-
Cash provided by financing activities	196 \$ 493	\$ 740
	\$ 493	\$ 740
Cash and short-term securities	¢ (246)	¢ 700
Increase (decrease) during the year Effect of foreign exchange rate changes on cash and short-term securities	\$ (346) 479	\$ 700 (213)
Balance, beginning of year	12,753	12,266
Balance, December 31	\$ 12,886	\$ 12,753
·	<b>,</b> ,,,,,,	<b>4</b> 12,111
Cash and short-term securities Beginning of year		
Gross cash and short-term securities	\$ 13,386	\$ 12,799
Net payments in transit, included in other liabilities	(633)	(533)
Net cash and short-term securities, January 1	\$ 12,753	\$ 12,266
End of year		
Gross cash and short-term securities	\$ 13,630	\$ 13,386
Net payments in transit, included in other liabilities	(744)	(633)
Net cash and short-term securities, December 31	\$ 12,886	\$ 12,753
Supplemental disclosures on cash flow information		
Interest received	\$ 8,616	\$ 8,668
Interest received	1,046	950
		230

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# **Notes to 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 personal and business clients as well as asset management services to institutional customers. The Company operates as Manulife Financial in Canada, Manulife in 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 outlined in note 1 (h) below, IFRS does not currently prescribe 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").

These Consolidated Financial Statements should be read in conjunction with "Risk Management and Risk Factors" in the 2013 Management's Discussion and Analysis ("MD&A") dealing with IFRS 7 "Financial Instrument: Disclosures" as the discussion on market risk and liquidity risk includes disclosures that are considered an integral part of these Consolidated Financial Statements.

These Consolidated Financial Statements of MFC as at and for the year ended December 31, 2013 were authorized for issue by the Board of Directors on February 26, 2014.

### (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 assumption used in measuring insurance and investment contract liabilities, assessing assets for impairment, determination of pension and other post-employment benefit obligation and expense assumptions, determining income taxes and uncertain tax positions, fair valuation of certain financial instruments, eligibility of hedge accounting requirements, 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 entities, including certain structured entities that it controls. Subsidiaries are entities controlled by the Company. The Company has control over an entity when the Company has the power to govern the financial and operating policies of the entity, is exposed to variable returns from its activities which are significant in relation to the total variable returns of the entity and the Company is able to use its power over the entity to affect its share of variable returns. In assessing control, significant judgment is applied while considering all relevant facts and circumstances. When assessing decision making power, the Company considers the extent of its rights relative to the management of an entity, the level of voting rights held in an entity which are potentially or presently exercisable, the existence of any contractual management agreements which may provide the Company with power over an entity's financial and operating policies and to the extent of minority ownership in an entity, if any, the possibility for de facto control being present. When assessing returns, the Company considers the significance of direct and indirect financial and non-financial variable returns to the Company from an entity's activities in addition to the proportionate significance of such returns. The Company also considers the degree to which its interests are aligned with those of other parties investing in an entity and the degree to which it may act in its own interest.

The financial statements of the subsidiaries and controlled structured entities are included in the Company's consolidated results from the date control is established and are excluded from consolidation from the date control ceases. The initial control assessment is performed at inception and is reconsidered at a later date if the Company acquires or loses power over the key operating and financial policies of the entity; acquires additional interests or disposes of interests in the entity; the contractual arrangements of the entity are amended such that the Company's proportionate exposure to variable returns changes; or if the Company's ability to use its power to affect its variable returns from the entity changes.

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 interests are interests of other parties in the equity of the Company's subsidiaries and are presented within total equity, separate from the equity of MFC's shareholders. Non-controlling interests in the net income and other comprehensive income ("OCI") of MFC's subsidiaries and consolidated structured entities are included in total net income and total other comprehensive income, respectively. An exception to this occurs where the subsidiary or consolidated structured entity's shares are required to be redeemed for cash on a fixed or determinable date, in which case non-controlling interests in the subsidiary's capital are presented as liabilities of the Company and non-controlling interests in the subsidiary's income and OCI are recorded as expenses of the Company.

The equity method of accounting is used to account for entities over which the Company has significant influence ("associate"), whereby the Company records its share of the associate'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 the sale of associates 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 associates are eliminated to the extent of the Company's interest in the associate. Investments in associates 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, or as available-for-sale ("AFS") financial assets. 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, or if a derivative is embedded in the investment. Invested assets classified as AFS are non-derivative financial assets that do not fall into any of the other categories described above.

Valuation methods for the Company's invested assets are described below. All fair value valuations are performed in accordance with IFRS 13 "Fair Value Measurement". The three levels of the fair value hierarchy and the disclosure of the fair value for financial instruments not carried at fair value on the Consolidated Statements of Financial Position are described in note 11. Fair valuations are performed both internally by the Company and externally by third party service providers. When third party service providers are engaged the Company performs a variety of procedures to corroborate pricing information. These procedures may include, but are not limited to, inquiry and review of valuation techniques, inputs to the valuation and vendor controls reports.

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. Short-term securities are comprised of investments due to mature within one year of the date of purchase. Carrying value of these instruments approximates fair value due to their short-term maturities and they are generally classified as Level 1. Commercial paper and discount notes are classified as Level 2 because these securities are typically not actively traded. Net payments in transit and overdraft bank balances are included in other liabilities.

Debt securities are carried at fair value. Debt securities are generally valued by independent pricing vendors using proprietary pricing models incorporating current market inputs for similar instruments with comparable terms and credit quality (matrix pricing). The significant inputs include, but are not limited to, yield curves, credit risks and spreads, measures of volatility and prepayment rates. These debt securities are classified as Level 2, but can be Level 3 if the significant inputs are unobservable. Realized gains and losses on sale of debt securities and unrealized gains and losses on debt securities designated as FVTPL are recognized in investment income immediately. Unrealized gains and losses on AFS debt securities 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 debt securities are recognized in income when there is objective evidence of impairment. Impairment is considered to have occurred, based on management's judgment, when it is deemed probable that the Company will not be able to collect all amounts due according to contractual terms of the debt security.

Equities are comprised of common and preferred equities and are carried at fair value. Equities are classified as Level 1, as fair values are based on quoted market prices. Realized gains and losses on sale of equities and unrealized gains and losses on equities designated as FVTPL are recognized in investment income immediately. Unrealized gains and losses on AFS equities are recorded in OCI. Impairment losses on AFS equities are recognized in income on an individual security basis when there is objective evidence of impairment. 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 carried at amortized cost less allowance for impairment losses, if any, and are classified as Level 3 due to the observability and significance of valuation inputs. Realized gains and losses are recorded in investment 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 mortgages when there is no longer reasonable assurance as to the timely collection of the full amount of principal and interest and are 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 applicable insurance recoveries. Significant judgment is applied in the determination of impairment including the timing and account of future collections.

The Company accounts for insured mortgage securitizations as secured financing transactions since the criteria for sale accounting are 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 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 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. Significant judgment is applied in the determination of impairment including the timing and amount of future collections.

Policy loans are carried at an amount 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. Impairment losses for AFS equity instruments are not reversed through income. On disposition of an impaired asset, any allowance for impairment is released.

In addition to impairment and provisions for loan losses (recoveries) reported in investment income, the measurement of policy liabilities and the investment return assumptions include expected future assets credit losses on fixed income investments. Refer to note 8(e).

Interest income is recognized on debt securities, mortgages, private placements, policy loans and bank 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 all debt securities as well as mortgages and private placements measured at amortized cost.

The Company records purchases and sales of invested assets on a trade date basis, except for originated loans which are recognized on a settlement 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. Where own use property is included in assets backing insurance contract liabilities the fair value of own use property is used in the valuation of insurance contract liabilities.

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. Fair value is determined using external appraisals that are based on the highest and best use of the property. The valuation techniques used include discounted cash flows, direct capitalization method as well as comparable sales analysis and include both observable and unobservable inputs. Inputs include existing and assumed tenancies, market data from recent comparable transactions, future economic outlook and market risk assumptions, capitalization rates and internal rates of return. Investment property is classified as Level 3.

Other invested assets include private equity and property investments held in power and infrastructure and timber as well as the agriculture and oil and gas sectors. Private equity investments are accounted for as associates using the equity method (as described in note 1(c) above) or are classified as FVTPL or AFS and carried at fair value. Investments in oil and gas exploration and evaluation costs are measured on a "successful efforts" basis. Timber and agriculture properties are measured at fair value with changes in fair value recognized in income. The fair value of other invested assets is determined using a variety of valuation techniques as described in note 11. Other invested assets that are measured at fair value are classified as Level 3.

Other invested assets also include investments in leveraged leases, which are accounted for using the equity method. The carrying value under the equity method reflects the amortized cost of the lease receivable and related non-recourse debt using the effective yield method.

### (e) Goodwill and intangible assets

Goodwill represents the difference between the purchase cost of the business acquisition 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. Goodwill is reduced by the amount of deficiency, if any. 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 CGU. 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 with indefinite useful lives specifically include the John Hancock brand name and certain investment management contracts. This assessment is based on the brand name being protected in the markets where branded products are sold by trademarks, which are renewable indefinitely, and for certain investment management contracts the ability to renew the contract indefinitely. There are no legal, regulatory or contractual provisions that limit the useful lives of these intangible assets. An intangible asset with an indefinite useful life is not amortized but is subject to an annual impairment test which is performed more frequently if there is an indication that it is not recoverable.

Intangible assets with finite useful lives include the Company's distribution networks, certain investment management contracts, capitalized software and other contractual rights. 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, which vary from three to 68 years, in relation to the associated gross margin from the related business. They are 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 (refer to note 1(n)), 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. In some cases, the Company has provided guarantees associated with these funds.

Segregated funds net assets are recorded at fair value and primarily include investments in mutual funds, debt securities, equities, real estate, short-term investments and cash and cash equivalents. In assessing the Company's degree of control over the underlying investments, the Company considers the scope of its decision making rights, the rights held by other parties, its remuneration as an investment manager and its exposure to the variability of returns. The Company has determined that it does not have control over the underlying investments as it acts as an agent on behalf of segregated fund policyholders.

The methodology applied to determine the fair value of the investments held in segregated funds is consistent with that applied to investments held by the general fund, as described above in note 1(d). Segregated funds net liabilities are measured based on the value of the segregated funds net assets. The segregated fund assets and liabilities are presented on separate lines on the Consolidated Statements of Financial Position.

Investment returns on segregated fund assets belong to policyholders and the Company does not bear the risk associated with these assets outside of guarantees offered on certain variable life and annuity products, for which the underlying investment is segregated funds. Accordingly, investment income earned by the segregated funds and expenses incurred by the segregated funds are offset and are not separately presented in the Consolidated Statements of Income. Fee income earned by the Company for managing the segregated funds is included in other revenue. Refer to note 23.

The liabilities related to the guarantees associated with certain funds, as a result of certain variable life and annuity contracts, are recorded within the Company's insurance contract liabilities. The Company holds assets supporting these guarantees which are recognized in invested assets according to their investment type.

### (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 service contracts 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 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. Reinsurance assets are not offset against the related insurance contract liabilities and are presented separately on the Consolidated Statements of Financial Position. Refer to note 8(a).

### (i) 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 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 taxes payable in respect of previous years.

Deferred income taxes are provided for using the liability method and result from temporary differences between the carrying values 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 associates, 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.

### (I) 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 the foreign operation is disposed of or control or significant influence over it is lost.

### (m) Stock-based compensation

The Company provides stock-based compensation to certain employees and directors as described in note 16. 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 market 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 the awards resulting from changes in the market value of the Company's common shares 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 cost is recognized 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"), (refer to note 16(d)), 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 pension plans, both defined benefit and defined contribution, and other post-employment plans for eligible employees and agents. These plans include broad-based pension plans for employees that are typically funded and supplemental non-registered (non-qualified) pension plans for executives, retiree welfare plans and disability welfare plans that are typically not funded.

The Company's obligation in respect of defined benefit pension and other post-employment plans is calculated for each plan as the estimated present value of the future benefits that eligible employees have earned in return for their service up to the reporting date using the projected benefit method. The discount rate used is based on the yield at the reporting date on high quality corporate debt securities that have approximately the same term as the obligations and that are denominated in the same currency in which the benefits are expected to be paid and is updated annually.

To determine the Company's net defined benefit asset or liability, the fair value of plan assets are deducted from the defined benefit obligations. When this calculation results in a surplus, the asset recognized is limited to the present value of future economic benefit available in the form of future refunds from the plan or reductions in future contributions to the plan (the asset limit). Remeasurement of the net defined benefit asset or liability consists of actuarial gains and losses, the change in effect from asset limits, and the return on plan assets, excluding amounts included in net interest on the net defined benefit asset or liability, and is reflected in OCI. Net interest income or expense is determined by applying the discount rate to the net defined benefit asset or liability, and is recognized in income.

Defined benefit assets are included in other assets and defined benefit liabilities are included in other liabilities. The net benefit cost for the year is included in general expenses and is calculated as the sum of the service cost in respect of the fiscal year and the net interest on the net defined benefit asset or liability. Remeasurement effects are recorded in OCI in the period in which they occur and are not reclassified to income in subsequent periods.

The cost of defined contribution plans is the contribution provided by the Company and is recognized in income in the periods during which services are rendered by employees.

The cost of retiree welfare plans is recognized in income over the employees' years of service to their dates of full entitlement.

The current year cost of disability welfare plans is as calculated as the year-over-year change in the defined benefit obligation, including any actuarial gains or losses.

When the benefits under the pension plans and other post-employment plans are improved, the increase in obligation for past service is recognized immediately 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 standalone 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 hedging 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 relationship 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 both prospectively and retrospectively. 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 derivatives 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 OCI are recognized in income during the same periods as the variability in the cash flows hedged or the hedged forecasted transactions are recognized in income. The reclassifications from accumulated other comprehensive income ("AOCI") are made to investment income, with the exception of total return swaps that hedge restricted share units, which are reclassified to general expenses.

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 (refer to 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 Accounting and Reporting Changes

### (a) Changes in accounting policy during the year

### (i) Impact of standards applied retrospectively

Effective January 1, 2013, the Company adopted several new and amended accounting pronouncements. The amendments to IAS 19 "Employee Benefits" and IFRS 10 "Consolidated Financial Statements" were adopted retrospectively. As a result of these adoptions, net income attributed to shareholders for the year ended December 31, 2012 increased by \$74 and total shareholders' equity and non-controlling interests at December 31, 2012 decreased by \$737 and by \$200, respectively.

The following table summarizes the changes.

As at	December 31, 2012						January 1, 2012							
Increase (decrease) in	As reported	Adjustme	nts ifi	Reclass- ications <sup>(1)</sup>		Restated	Δ	s reported	Adiu	ıstments		eclass- tions <sup>(1)</sup>		Restated
Total Invested assets Total Other assets Segregated funds net assets	\$ 229,928 48,143 207,985	\$ (8		(1,190) 290 1,212		227,932 47,869 209,197		226,520 39,524 195,933	\$	(818) (572)		(923) 398 936		224,779 39,350 196,869
Total assets	\$ 486,056	\$ (1,3	70) \$	312	\$	484,998	\$	461,977	\$	(1,390)	\$	411	\$ 4	460,998
Insurance contract liabilities Investment contract liabilities Bank deposits Derivatives Deferred tax liability Other liabilities Long-term debt Liabilities for preferred shares and capital instruments Segregated funds net liabilities	\$ 199,588 2,424 18,857 7,206 694 14,253 5,452 3,501 207,985	2 (3 (3 (4	- \$ (4) - 94 888) 31) 06)	(1,193) - - 297 (4) - - 1,212		198,395 2,420 18,857 7,500 603 13,918 5,046 3,903 209,197	\$	190,366 2,540 18,010 7,627 766 12,341 5,503 4,012 195,933	\$	- (22) - 350 (468) (141) (425) 404 -	\$	(923) - - - 474 (76) - - 936		189,443 2,518 18,010 7,977 772 12,124 5,078 4,416 196,869
Total liabilities	\$ 459,960	\$ (4	33) \$	312	\$	459,839	\$	437,098	\$	(302)	\$	411	\$ 4	437,207
Shareholders' retained earnings Shareholders' accumulated other comprehensive income (loss) Non-controlling interests Accounts not impacted by accounting changes	\$ 3,178 (369 501 22,786	) (8	78 \$ 15) 00)	- - -	\$	3,256 (1,184) 301 22,786	\$	2,501 96 415 21,867	\$	4 (915) (177)	\$	- - -	\$	2,505 (819) 238 21,867
Total equity	\$ 26,096	\$ (9	37) \$	_	\$	25,159	\$	24,879	\$	(1,088)	\$	-	\$	23,791
Total liabilities and equity	\$ 486,056	\$ (1,3	70) \$	312	\$	484,998	\$	461,977	\$	(1,390)	\$	411	\$ 4	460,998
2012 net income attributed to shareholders <sup>(2)</sup>	\$ 1,736	\$	74 \$	_	\$	1,810								

<sup>(1)</sup> Amounts have been reclassified to conform with the current year's presentation. Includes a reclassification as a result of IFRS 10 (see section (ii) below) and tax adjustment (refer to note 6).

### (ii) New standards related to consolidation, joint arrangements and other interests

Effective January 1, 2013, the Company adopted five new related standards issued by the IASB: IFRS 10 "Consolidated Financial Statements", IFRS 11 "Joint Arrangements", IFRS 12 "Disclosure of Interests in Other Entities", IAS 27 "Separate Financial Statements" and IAS 28 "Investments in Associates and Joint Ventures".

**IFRS 10**, applied retrospectively, replaced the consolidation guidance in IAS 27 "Separate Financial Statements" and Standards Interpretation Committee ("SIC") -12 "Consolidation – Special Purpose Entities" and introduced a single control model to be used while assessing control over another entity (the "investee"). Under IFRS 10, control results from an investor having: power over the investee; exposure or rights to variable returns from its involvement with the investee; and the ability to use its power over the investee to affect the amount of its returns from the investee.

The Company applied significant judgment in its assessment of control. The assessment included the effect of its voting rights over decision making and management agreements, if any, with the investees, the significance of returns to which it is exposed as a result of its relationship with the investees and the degree to which the Company can use its power to affect its returns from investees.

The adoption of IFRS 10 resulted in deconsolidation of investments in a timber company, private investment fund and three financing trusts. The adoption did not result in the consolidation of any additional investments.

Deconsolidation of investments in a timber company and a private investment fund

The Company has determined that under IFRS 10, it does not control Hancock Victoria Plantations ("HVP") and Hancock Capital Partners IV, LP ("HCP IV"), as the Company's general fund investment in each is not considered to be significant. These entities are now accounted for using the equity method of accounting. Refer to note 4(d).

<sup>(2)</sup> This amount represents an increase of \$0.04 per share for 2012.

### Deconsolidation of three financing trusts

The Company has determined that under IFRS 10, it does not control Manulife Financial Capital Trust II ("Trust II"), Manulife Finance (Delaware), L.P. ("MFLP"), and John Hancock Global Funding II, Ltd. ("JHGF II"). These financing trusts are described in note 18.

While the Company predetermines the financing trusts' financial and operating policies and obtains returns from the financing trusts in the form of advantageous access to capital markets, the entities are designed to pass the Company's credit risk onto those parties to which the Trust II Notes – Series 1, senior and subordinate debentures and medium term notes were issued. Therefore, under IFRS 10, the Company's exposure to their returns is not considered to be significant in relation to their total returns.

Deconsolidation of Trust II had no significant quantitative impact on the Company's Consolidated Statements of Income or Consolidated Statements of Financial Position. Upon deconsolidation of MFLP, the Company excluded the senior debentures and subordinated debentures issued by MFLP and included the notes and loans issued to Manulife Finance (Delaware), LLC ("MFLLC"), as liabilities of the Company, classified within Long-Term Debt and Liabilities for Preferred Shares and Capital Instruments, respectively. Upon deconsolidation of JHGF II, the Company included the funding agreements issued by John Hancock Life Insurance Company (U.S.A.) ("JHUSA") to JHGF II as liabilities of the Company, classified within Investment Contract Liabilities, and excluded the medium term notes issued by JHGF II. In addition, interest rate swaps between MLI and MFLP and between JHUSA and JHGF II have been included in the Consolidated Statements of Financial Position.

#### Segregated funds

As described in note 1(g), the Company offers segregated fund products, including variable annuities in Asia, Canada and the United States. Under these arrangements, policyholders are provided the opportunity to invest in a variety of funds offered by the Company. Upon adoption of IFRS 10, the Company continues to present segregated funds net assets, which are in the legal name and title of the Company but are held on behalf of policyholders, as a single line item in the Consolidated Statements of Financial Position. The obligation to pay the value of the net assets held under these policies is measured based on the value of the net segregated fund assets. Guarantees that may be offered as part of certain segregated fund contracts are recorded within the Company's insurance contract liabilities. In reviewing the Company's segregated fund arrangements, the Company also corrected the classification of certain funds. This retroactive correction resulted in an increase in both segregated funds net assets and net liabilities and a corresponding decrease in both total invested assets and insurance contract liabilities of \$1,212 as at December 31, 2012 and \$923 as at January 1, 2012.

The following is a summary of the impact of adopting IFRS 10.

As at December 31, 2012					January 1, 2012
Increase (decrease) in	HVP and HCP IV	Financing trusts	Reclass- ification	Total	HVP and Financing Reclass- HCP IV trusts ification Total
Invested assets and accrued interest Segregated funds net assets	\$ (813) -	\$ 5 -	\$ (1,193) 1,212	\$(2,001) 1,212	\$ (820) \$ - \$ (923) \$(1,743) - 936 936
Total assets	\$ (813)	\$ 5	\$ 19	\$ (789)	\$ (820) \$ - \$ 13 \$ (807)
Insurance contract liabilities Investment contract liabilities Derivatives Deferred tax liability Other liabilities Long-term debt Liabilities for preferred shares and capital instruments Segregated funds net liabilities	\$ - - (13) (613) - -	\$ - (4) 294 (109) 5 (406) 402	\$ (1,193) - - - - - - 1,212	\$ (1,193) (4) 294 (122) (608) (406) 402 1,212	- (22) - (22) - 350 - 350 (7) (113) - (120) (644) - (644)
Total liabilities	\$ (626)	\$ 182	\$ 19	\$ (425)	\$ (651) \$ 194 \$ 13 \$ (444)
Shareholders' retained earnings Shareholders' accumulated other comprehensive income (loss) on cash flow hedges Non-controlling interests	\$ - 13 (200)	\$ (3) (174) -	\$ - - -	\$ (3) (161) (200)	. ,
Total equity	\$ (187)	\$ (177)	\$ -	\$ (364)	\$ (169) \$ (194) \$ - \$ (363)
Total liabilities and equity	\$ (813)	\$ 5	\$ 19	\$ (789)	\$ (820) \$ - \$ 13 \$ (807)
2012 net income attributed to shareholders	\$ -	\$ 7	\$ -	\$ 7	

**IFRS 11** introduced new accounting requirements for joint arrangements, replacing IAS 31 "Interests in Joint Ventures". IFRS 11 removes the option to apply the proportionate consolidation method when accounting for joint ventures and instead requires the equity method of accounting be applied in accordance with IAS 28. The adoption of IFRS 11 had no significant effect on the Consolidated Financial Statements as the Company does not have significant interests in joint venture arrangements.

**IFRS 12** integrated and made consistent the disclosure requirements for subsidiaries, joint arrangements, associates and unconsolidated structured entities and presents those requirements in a single standard. IFRS 12 requires that an entity disclose information that enables users of its financial statements to evaluate the nature of, and risks associated with, its interests in other entities and the effects of those interests on its financial position, comprehensive income and cash flows. These disclosures are included in notes 4, 18 and 22.

**IAS 27** was modified to remove principles of control over another entity, as these principles are now presented within IFRS 10. Adoption of the modifications of IAS 27 had no effect on the Company's Consolidated Financial Statements.

**IAS 28** was modified to require that the equity method of accounting be used where joint control over a joint venture is present. The principles used in assessing whether significant influence exists were not significantly altered. Adoption of the modifications of IAS 28 had no material effect on the Company's Consolidated Financial Statements.

### (iii) Amendments to IAS 19 "Employee Benefits" and IAS 1 "Presentation of Financial Statements"

Effective January 1, 2013, the Company adopted amendments to IAS 19 "Employee Benefits" issued by the IASB in June 2011. The amendments require the full funded status of the plan to be reflected as the net defined benefit liability or asset in the Consolidated Statements of Financial Position. Actuarial gains and losses are recognized in full in OCI when they occur and are no longer recognized in net income. Past service costs or credits are immediately recognized in income when a plan is amended. Interest costs and expected return on plan assets under the previous version of IAS 19 have been replaced with a net interest cost or revenue calculated by applying the discount rate to the net defined benefit liability or asset. Further, these amendments include enhanced disclosures about the characteristics of those plans and the risks to which the entity is exposed through participation in those plans. Additional disclosures have been incorporated in note 17 to comply with these requirements.

The following is a summary of the related adjustments made to the Consolidated Financial Statements as a result of the retrospective adoption of the amendments to IAS 19 in respect of all Company pension and other post-employment plans.

As at	D	ecember 31, 2012	January 1, 2012					
Increase (decrease) in	Pension plans	Other post- employment plans Total	Other post- Pension employment plans plans Total					
Total assets <sup>(1)</sup>	\$ (562)	\$ - \$ (562)	\$ (570) \$ - \$ (570)					
Other liabilities Deferred tax liability	\$ 310 (277)	\$ (33) \$ 277 11 (266)	\$ 464 \$ 39 \$ 503 (335) (13) (348)					
Total liabilities	\$ 33	\$ (22) \$ 11	\$ 129 \$ 26 \$ 155					
Shareholders' accumulated other comprehensive income (loss) Shareholders' retained earnings	\$ (669) 74	\$ 15 \$ (654) 7 81	\$ (699) \$ (40) \$ (739) - 14 14					
Total equity	\$ (595)	\$ 22 \$ (573)	\$ (699) \$ (26) \$ (725)					
Total liabilities and equity	\$ (562)	\$ - \$ (562)	\$ (570) \$ - \$ (570)					
2012 net income attributed to shareholders	\$ 74	\$ (7) \$ 67						

<sup>(1)</sup> Decrease reflected in miscellaneous assets.

**Amendments to IAS 1 "Presentation of Financial Statements"** were issued in June 2011 and require items within OCI to be presented separately based on whether or not the item will be subsequently reclassified into net income. The new presentation was adopted in conjunction with the treatment of OCI under IAS 19.

### (iv) IFRS 13 "Fair Value Measurement"

Effective January 1, 2013, the Company adopted IFRS 13 "Fair Value Measurement" issued by the IASB in May 2011. IFRS 13 defines fair value, provides guidance on how to determine fair value but does not change the requirements regarding which items should be measured or disclosed at fair value. The adoption of these amendments did not have a significant impact on the Company's Consolidated Financial Statements.

The standard also requires many new disclosures for both financial and non-financial assets and liabilities measured at, or based on, fair value and for items not measured at fair value but for which fair value is disclosed. While the definition of each level within the fair value hierarchy, as described in note 11, did not change, the additional disclosures now required include a description of the valuation technique used for each of the Company's major categories of assets and liabilities measured or disclosed at fair value. In addition, the standard requires more disclosures around inputs and sensitivities for Level 3 fair values for those items measured at fair value on a recurring basis, along with expanded disclosures around transfers between levels in the fair value hierarchy. These new disclosure requirements are included in notes 1, 5 and 11.

### (v) Amendments to IFRS 7 "Financial Instruments: Disclosure"

Effective January 1, 2013, the Company adopted the amendments to IFRS 7 "Offsetting Financial Assets and Financial Liabilities" issued by the IASB in December 2011. These amendments 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 adoption of these amendments did not have a significant impact on the Company's Consolidated Financial Statements. These new disclosure requirements are included in note 10.

### (vi) Annual Improvements 2009-2011 Cycle

Effective January 1, 2013, the Company adopted minor amendments to five different standards as part of the Annual Improvements process issued by the IASB in May 2012. The adoption of these amendments did not have a significant impact on the classification, measurement or presentation of the Company's Consolidated Financial Statements.

### (b) Future accounting and reporting changes

### (i) IFRS 9 "Financial Instruments"

IFRS 9 "Financial Instruments" was issued in November 2009 and amended in October 2010 and November 2013, and is intended to replace IAS 39 "Financial Instruments: Recognition and Measurement". The project has been divided into three phases: classification and measurement, impairment of financial assets, and hedge accounting. IFRS 9's current classification and measurement methodology 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. Gains or losses caused by changes in an entity's own credit risk on such liabilities are no longer recognized in profit or loss but instead are reflected in OCI.

Revisions to hedge accounting were issued in November 2013 as part of the overall IFRS 9 project. The amendment introduces a new hedge accounting model, together with corresponding disclosures about risk management activity for those applying hedge accounting. The new model represents a substantial overhaul of hedge accounting that will enable entities to better reflect their risk management activities in their financial statements.

In November 2013, the IASB removed the mandatory effective date of January 1, 2015. The IASB has stated that a new effective date will be determined when all three phases of the IFRS 9 project are closer to completion. The Company is still assessing the impact of these changes.

### (ii) Amendments to IAS 32 "Financial Instruments: Presentation"

The amendments to IAS 32 "Offsetting Financial Assets and Financial Liabilities" were issued in December 2011 and are effective for years beginning on or after January 1, 2014. The amendments clarify the basis for offsetting financial instruments presented in the statement of financial position. Adoption of these amendments is not expected to have a significant impact on the Company's Consolidated Financial Statements.

### (iii) Amendments to IFRS 10, IFRS 12 and IAS 27 "Investment Entities"

The amendments to IFRS 10, IFRS 12 and IAS 27 "Investment Entities" were issued in October 2012 and are effective for years beginning on or after January 1, 2014. The amendments establish the definition of an investment entity using principles commonly found in the mutual fund industry. The amendments require investment entities to use fair value accounting for all of their investments, including those which they control or have significant influence over. The amendments constitute a scope change for IFRS 10 and, therefore, Investment Entities, as defined, will be exempt from applying consolidation accounting for their investments. Adoption of these amendments is not expected to have a significant impact on the Company's Consolidated Financial Statements.

### (iv) IFRS Interpretation Committee ("IFRIC") Interpretation 21 "Levies"

IFRIC Interpretation 21 "Levies" was issued in May 2013 and is effective for years beginning on or after January 1, 2014. IFRIC 21 provides guidance on recognizing liabilities for payments to government in accordance with IAS 37 "Provisions, Contingent Liabilities and Contingent Assets". It does not provide guidance on accounting for income taxes, fines and penalties or for acquisition of assets or services from governments. IFRIC 21 establishes that a liability for a levy is recognized when the activity that triggers payment occurs. Adoption of this amendment is not expected to have a significant impact on the Company's Consolidated Financial Statements.

### (v) Amendments to IAS 39 "Financial Instruments: Recognition and Measurement"

The amendments to IAS 39 "Novation of Derivatives and Continuation of Hedge Accounting" were issued in June 2013 and are effective for years beginning on or after January 1, 2014. The amendments address the accounting for derivatives designated as a hedging instrument when there has been a change in counterparty. Under the amendments, for situations in which a law or regulation requires the novation, the Company can continue the current hedge designation despite the change. A novation occurs when the parties of the derivative agree to change counterparties for the purposes of using a central counterparty for clearing. Adoption of these amendments is not expected to have a significant impact on the Company's Consolidated Financial Statements.

### (vi) Annual Improvements 2010-2012 and 2011-2013 Cycles

Annual Improvements 2010-2012 and 2011-2013 Cycles were issued in December 2013, resulting in minor amendments to 10 standards and are effective for the Company starting on January 1, 2015. Adoption of these amendments is not expected to have a significant impact on the Company's Consolidated Financial Statements.

### (vii) Amendments to IAS 19 "Employee Benefits"

The amendments to IAS 19 "Employee Benefits" were issued in November 2013 and are effective for the Company starting on January 1, 2015. The amendments clarify the accounting for contributions by employees or third parties to defined benefit plans. Adoption of these amendments is not expected to have a significant impact on the Company's Consolidated Financial Statements.

# **Note 3 Disposition**

On July 31, 2013, the Company's subsidiary Manulife (International) Limited entered into an agreement with CTBC Life Insurance Co. Ltd. ("CTBC Life") to sell its Taiwan insurance business. The transaction closed on December 31, 2013. Under the agreement, CTBC Life assumed all of the life insurance business-related obligations of Manulife (International) Limited Taiwan Branch. Under the terms of the agreement, Manulife (International) Limited transferred the infrastructure (including information technology systems and workforce) and other assets required to administer and support the life insurance business to CTBC Life. The gain on sale was \$350 (net of taxes of \$129), which has been recorded in other revenue in the Company's Consolidated Statements of Income.

## Note 4 Invested Assets and Investment Income

# (a) Carrying values and fair values of invested assets

As at December 31, 2013	FVTPL	AFS	Other	Total carrying value	Total fair value
Cash and short-term securities <sup>(1)</sup>	\$ 421	\$ 10,617	\$ 2,592	\$ 13,630	\$ 13,630
Debt securities <sup>(2)</sup>					
Canadian government and agency	13,106	2,844	_	15,950	15,950
U.S. government and agency	13,189	8,383	_	21,572	21,572
Other government and agency	10,862	1,962	_	12,824	12,824
Corporate	57,192	4,017	_	61,209	61,209
Mortgage/asset-backed securities	2,774	628	_	3,402	3,402
Public equities	11,011	2,064	_	13,075	13,075
Mortgages	_	_	37,558	37,558	39,176
Private placements	_	_	21,015	21,015	22,008
Policy loans	_	_	7,370	7,370	7,370
Bank loans	_	_	1,901	1,901	1,907
Real estate					
Own use property <sup>(3)</sup>	_	_	804	804	1,476
Investment property	_	_	8,904	8,904	8,904
Other invested assets			•	•	-
Other alternative long-duration assets(4)	5,921	68	4,217	10,206	10,402
Other	108	26	3,155	3,289	3,289
Total invested assets <sup>(5)</sup>	\$ 114,584	\$ 30,609	\$ 87,516	\$ 232,709	\$ 236,194

As at December	31,	2012	(Restated–note	2)
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\$	440	\$	8,362	\$	4,584	\$	13,386	\$	13,386
	12,929		3,014		_		15,943		15,943
	18,361		8,811		-		27,172		27,172
	11,628		1,866		_		13,494		13,494
	54,024		4,778		_		58,802		58,802
	3,219		529		_		3,748		3,748
	9,410		1,625		-		11,035		11,035
	_		_		35,082		35,082		37,468
	-		_		20,275		20,275		22,548
	-		_		6,793		6,793		6,793
	_		-		2,142		2,142		2,148
	_		_		789		789		1,368
	-		_		7,724		7,724		7,724
	4,728		89		3,455		8,272		8,504
	104		27		3,144		3,275		3,286
\$ 1	14,843	\$ :	29,101	\$	83,988	\$	227,932	\$	233,419
_		12,929 18,361 11,628 54,024 3,219 9,410 - - - - - 4,728	12,929 18,361 11,628 54,024 3,219 9,410 - - - - - - 4,728 104	12,929 3,014 18,361 8,811 11,628 1,866 54,024 4,778 3,219 529 9,410 1,625 4,728 89 104 27	12,929 3,014 18,361 8,811 11,628 1,866 54,024 4,778 3,219 529 9,410 1,625	12,929 3,014 - 18,361 8,811 - 11,628 1,866 - 54,024 4,778 - 3,219 529 - 9,410 1,625 -	12,929 3,014 - 18,361 8,811 - 11,628 1,866 - 54,024 4,778 - 3,219 529 - 9,410 1,625 35,082 20,275 - 6,793 2,142 - 789 - 7,724 4,728 89 3,455 104 27 3,144	12,929       3,014       -       15,943         18,361       8,811       -       27,172         11,628       1,866       -       13,494         54,024       4,778       -       58,802         3,219       529       -       3,748         9,410       1,625       -       11,035         -       -       35,082       35,082         -       -       20,275       20,275         -       -       6,793       6,793         -       -       2,142       2,142         -       -       7,724       7,724         4,728       89       3,455       8,272         104       27       3,144       3,275	12,929       3,014       -       15,943         18,361       8,811       -       27,172         11,628       1,866       -       13,494         54,024       4,778       -       58,802         3,219       529       -       3,748         9,410       1,625       -       11,035         -       -       35,082       35,082         -       -       20,275       20,275         -       -       6,793       6,793         -       -       2,142       2,142         -       -       7,724       7,724         4,728       89       3,455       8,272         104       27       3,144       3,275

<sup>(1)</sup> Includes short-term securities with maturities of less than one year at acquisition amounting to \$4,473 (2012 – \$2,026) and cash equivalents with maturities of less than 90 days at acquisition amounting to \$6,565 (2012 – \$6,776) and cash of \$2,592 (2012 – \$4,584).

#### (b) Debt securities and equities 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 change in insurance contract liabilities related to investment return assumptions is reflected in net income rather than in OCI, refer to note 8(e).

<sup>(2)</sup> Total debt securities include securities which were acquired with maturities of less than one year and less than 90 days of \$502 and \$60, respectively (2012 – \$848 and \$132, respectively).

<sup>(3)</sup> Includes accumulated depreciation of \$294 (2012 – \$265).

<sup>(4)</sup> Other alternative long-duration assets include private equity of \$2,181, power and infrastructure of \$3,486, oil and gas of \$1,643, timber and agriculture sectors of \$2,770 and various others of \$126 (2012 – \$1,761, \$2,913, \$1,355, \$2,243 and nil, respectively).

<sup>(5)</sup> The methodologies for determining fair value of the Company's invested assets are described in notes 1 and 11.

#### (c) Debt securities and equities classified as AFS

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).

#### (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,	2013	(Restated-note 2013 2012				
	Carrying value	% of total	Carrying value	% of total		
Leveraged leases	\$ 2,629	73	\$ 2,591	76		
Timber	259	7	239	7		
Affordable housing	252	7	282	8		
Agriculture	99	3	88	3		
Private equity	49	1	66	2		
Other	340	9	158	4		
Total	\$ 3,628	100	\$ 3,424	100		

The Company's share of profit from its investments in associates included in income for the year ended December 31, 2013 was \$132 (2012 – \$55).

During the year ended December 31, 2013, the Company received \$5 of dividends from its investments in associates (2012 – \$4).

#### (e) Mortgages

The following table presents the carrying values and fair values of mortgages by property type.

# Mortgage loans by property type

As at December 31,		13	2012		
	Carrying value	Fair value <sup>(1)</sup>	Carrying value	Fair value <sup>(1)</sup>	
Residential	\$ 20,531	\$ 20,905	\$ 18,540	\$ 18,984	
Office	5,647	6,023	5,169	5,734	
Retail	5,901	6,334	5,689	6,397	
Industrial	2,103	2,258	2,394	2,622	
Other	3,376	3,656	3,290	3,731	
Total	\$ 37,558	\$ 39,176	\$ 35,082	\$ 37,468	

<sup>(1)</sup> See note 11 for a description of the fair value methodology.

The carrying value of government-insured mortgages was 28 per cent of the total mortgage portfolio as at December 31, 2013 (2012 – 31 per cent) and the carrying value of privately-insured mortgages was nil per cent of the total mortgage portfolio as at December 31, 2013 (2012 – 0.4 per cent). The majority of these insured mortgages are residential loans as classified in the table above.

# (f) Investment income

For the year ended December 31, 2013	FVTPL	AFS	Other(2)	Total	Yields (3)
Cash and short-term securities					1.2%
Interest income	\$ 5	\$ 70	\$ -	\$ 75	
Gains <sup>(1)</sup>	5	73	-	78	
Debt securities					(3.0%)
Interest income	3,961	511	_	4,472	3.8%
Losses <sup>(1)</sup>	(7,762)	(308)	_	(8,070)	(6.6%)
Recovery (Impairment loss), net	44	(4)	_	40	
Public equities					16.5%
Dividend income	314	50	_	364	
Gains <sup>(1)</sup>	1,370	131	_	1,501	
Impairment loss	-	(7)	_	(7)	
Mortgages					4.7%
Interest income	_	_	1,625	1,625	
Gains <sup>(1)</sup>	-	_	55	55	
Provision, net	_	_	(3)	(3)	
Private placements					6.0%
Interest income	_	_	1,274	1,274	
Losses <sup>(1)</sup>	_	_	(15)	(15)	
Impairment, net	-	_	(55)	(55)	
Policy loans	_	_	404	404	5.7%
Bank loans					4.2%
Interest income	_	_	85	85	
Provision, net	_	_	(2)	(2)	
Real estate					6.3%
Rental income, net of depreciation	_	_	442	442	
Gains <sup>(1)</sup>	_	_	98	98	
Impairment loss	_	_	(1)	(1)	
Derivatives					n/a
Interest income, net	-	_	688	688	
Losses <sup>(1)</sup>	-	_	(12,006)	(12,006)	
Other investments					10.3%
Interest income	-	_	47	47	
Oil and gas, timber, agriculture and other income	_	_	619	619	
Gains <sup>(1)</sup>	262	2	283	547	
Impairment, net	_	(2)		(2)	
Total investment income (loss)	\$ (1,801)	\$ 516	\$ (6,462)	\$ (7,747)	(3.3%)
Interest income	\$ 3,966	\$ 581	\$ 4,123	\$ 8,670	3.8%
Dividend, rental and other income	314	50	1,061	1,425	0.6%
Impairments and provisions for loan losses (note 10)	44	(13)	(61)	(30)	0.0%
Other	(34)	(119)	(42)	(195)	(0.1%)
	\$ 4,290	\$ 499	\$ 5,081	\$ 9,870	
Realized and unrealized gains (losses) on assets supporting insurance and					
investment contract liabilities and on macro equity hedges					
Debt securities	\$ (7,762)	\$ 3	\$ -	\$ (7,759)	(3.3%)
Public equities	1,339	12	_	1,351	0.6%
Mortgages	-	-	53	53	0.0%
Private placements	_	_	(15)	(15)	0.0%
Real estate	_	_	98	98	0.0%
Other investments	332	2	281	615	0.3%
Derivatives, including macro equity hedging program	-	_	(11,960)	(11,960)	(5.0%)
	\$ (6,091)	\$ 17	\$ (11,543)	\$ (17,617)	(,3)
Total investment income (loss)	\$ (1,801)	\$ 516	\$ (6,462)	\$ (7,747)	(3.3%)
iotal investment income (1033)	⊋ (1,0∪1)	3 210	<b>∌</b> (0,40∠)	ə (/,/4/)	(3.3 %)

For the year ended December 31, 2012 (Restated–note 2)	FVTPL	AFS	Other(2)	Total	Yields <sup>(3)</sup>
Cash and short-term securities					0.7%
Interest income	\$ 10	\$ 78	\$ -	\$ 88	
Gains (losses) <sup>(1)</sup>	13	(19)	_	(6)	
Debt securities					6.3%
Interest income	3,957	572	_	4,529	3.8%
Gains <sup>(1)</sup>	2,860	132	_	2,992	2.5%
Impairment loss, net	(41)	(18)	_	(59)	
Public equities					12.0%
Dividend income	241	52	_	293	
Gains <sup>(1)</sup>	874	47	_	921	
Impairment loss	_	(33)	_	(33)	
Mortgages					5.2%
Interest income	_	_	1,645	1,645	
Gains <sup>(1)</sup>	_	_	127	127	
Provision, net	_	_	(16)	(16)	
Private placements			( /	( /	7.6%
Interest income	_	_	1,364	1,364	, 3
Gains <sup>(1)</sup>	_	_	95	95	
Recovery, net	_	_	2	2	
Policy loans	_	_	394	394	5.8%
Bank loans			334	334	4.2%
Interest income	_	_	93	93	4.2 /0
Provision, net	_	_	(1)	(1)	
Real estate			(1)	(1)	11.2%
Rental income, net of depreciation			424	424	11.2 /0
Gains <sup>(1)</sup>	_	_	430	430	
	_	_	(1)		
Impairment loss Derivatives	_	_	(1)	(1)	n/2
			401	401	n/a
Interest income, net	_	_	491	491	
Losses <sup>(1)</sup>	_	_	(2,952)	(2,952)	7.00/
Other investments			2.5	25	7.8%
Interest income	_	_	25	25	
Oil and gas, timber, agriculture and other income	477	_	463	463	
Gains <sup>(1)</sup>	177	1	139	317	
(Impairment) recovery, net		(1)	3 	2	F 20/
Total investment income	\$ 8,091	\$ 811	\$ 2,725	\$ 11,627	5.3%
Interest income	\$ 3,967	\$ 650	\$ 4,012	\$ 8,629	3.9%
Dividend, rental and other income	241	52	887	1,180	0.5%
Impairments and provisions for loan losses (note 10)	(41)	(52)	(13)	(106)	0.0%
Other	82	145	(128)	99	0.0%
	\$ 4,249	\$ 795	\$ 4,758	\$ 9,802	
Realized and unrealized gains (losses) on assets supporting insurance and investment contract liabilities and on macro equity hedges					
Debt securities	\$ 2,859	\$ 15	\$ -	\$ 2,874	1.3%
Public equities	824	2	_	826	0.4%
Mortgages	-	_	103	103	0.0%
Private placements	_	_	94	94	0.0%
Real estate	_	_	420	420	0.2%
Other investments	159	(1)	149	307	0.2 %
Derivatives, including macro equity hedging program	.55	-	(2,799)	(2,799)	(1.2%)
	\$ 3,842	\$ 16	\$ (2,033)	\$ 1,825	(1.2/0)
Total investment income					E 20/
Total investment income	\$ 8,091	\$ 811	\$ 2,725	\$ 11,627	5.3%

<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, mortgages, private placements, policy loans, bank loans and other invested assets.

# (g) Investment expenses

For the years ended December 31,	2013	(Restated–note 2) 2012
Related to invested assets	\$ 418	\$ 406
Related to segregated, mutual and other funds	754	628
Total investment expenses	\$ 1,172	\$ 1,034

<sup>(2)</sup> Other includes interest income, real estate rental income and derivative income as outlined in note 5 and earnings on other investments.

<sup>(3)</sup> Yields are based on IFRS income and are calculated using the geometric average of assets held at IFRS carrying value during the reporting year.

## (h) 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,	2013	2012
Balance, January 1	\$ 7,724	\$ 6,635
Acquisitions	1,069	891
Disposals	(248)	(74)
Change in fair value	98	399
Impact of changes in foreign exchange rates	261	(127)
Balance, December 31	\$ 8,904	\$ 7,724

The following table identifies the amounts included in investment income relating to investment property.

For the years ended December 31,	2013	2012
Rental income from investment property Direct operating expenses that generated rental income	\$ 839 (461)	\$ 798 (423)
Total	\$ 378	\$ 375

# (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") Mortgage Backed Securities ("MBS") program, as well as through a HELOC securitization program. Benefits received from the transfers include interest spread between the asset and associated liability. 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 program as they are insured by the Canada Mortgage and Housing Corporation ("CMHC") and other third party insurance programs against borrowers' default.

The cash flows received from the underlying securitized assets/mortgages are used to settle the related secured borrowing liability. For CMB transactions receipts of principal are deposited into a trust account for settlement of the liability at the time of maturity. These transferred assets and related cash flows cannot be transferred or used for other purposes. For NHA MBS transactions, principal receipts are remitted to investors on a monthly basis. For the HELOC transactions, investors are entitled to periodic interest payments and the remaining cash receipts of principal are allocated to the Company (the "Seller") during the revolving period of the deal and are accumulated for settlement of the liability based on the terms of the note.

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, 2013	Sec	curitized assets		_
Securitization program	Securitized mortgages	Restricted cash and short-term securities	Total	Secured borrowing liabilities
HELOC securitization <sup>(1),(2)</sup> CMB securitization	\$ 2,000 104	\$ 10 11	\$ 2,010 115	\$ 1,998 115
Total	\$ 2,104	\$ 21	\$ 2,125	\$ 2,113
As at December 31, 2012				
HELOC securitization <sup>(1)</sup> CMB securitization NHA MBS securitization <sup>(3)</sup>	\$ 1,250 200 1	\$ 6 283 8	\$ 1,256 483 9	\$ 1,248 482 9
Total	\$ 1,451	\$ 297	\$ 1,748	\$ 1,739

<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.

The fair value of the securitized assets as at December 31, 2013 was \$2,127 (2012 – \$1,752) and the fair value of the associated liabilities was \$2,124 (2012 – \$1,756).

# **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 the "Risk Management and Risk Factors" section of the Company's 2013 MD&A for an explanation of the Company's dynamic hedging strategy for its variable annuity product guarantees.

#### (a) Hedging relationships

The Company uses derivatives for economic hedging purposes. In certain circumstances, these hedges also meet the requirements for hedge accounting. Risk management strategies eligible for hedge accounting are designated as fair value hedges, cash flow hedges or 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.

<sup>(2)</sup> The secured borrowing liabilities primarily comprise of Series 2010-1 and Series 2011-1 notes with floating rates and are expected to mature on December 15, 2015 and December 15, 2017 respectively.

<sup>(3)</sup> Under the Government of Canada programs for NHA MBS securitization, cash received on the mortgages is held in a restricted cash account for the payment of the liability under the terms of the program.

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 qualifying fair value hedging relationships

Total		\$ (86)	\$ (6)	\$ (92)
Foreign currency swaps	Fixed rate assets	(1)	_	(1)
Interest rate swaps	Fixed rate assets Fixed rate liabilities	\$ (55) (30)	\$ (36) 30	\$ (91) -
For the year ended December 31, 2012 (Restated–note 2)		t (55)	t (25)	
Total		\$ 927	\$ (988)	\$ (61)
Foreign currency swaps	Fixed rate liabilities Fixed rate assets	(16) 13	16 (6)	7
Interest rate swaps	Fixed rate assets	\$ 930	\$ (998)	\$ (68)
For the year ended December 31, 2013	Hedged items in qualifying fair value hedging relationships	Gains (losses) recognized on derivatives	recognized for hedged items	recognized in investment income

#### 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. Total return swaps are used to hedge the variability in cash flows associated with certain stock-based compensation awards. Inflation swaps are used to reduce inflation risk generated from inflation indexed liabilities.

The effects of derivatives in cash flow hedging relationships on the Consolidated Statements of Income and the Consolidated Statements of Other Comprehensive Income are shown in the following table.

# Derivatives in qualifying cash flow hedging relationships

For the constraint of December 24, 2002	Hedged items in qualifying cash	Gains (losses) deferred in AOCI on	Gains (losses) reclassified from AOCI into investment	Ineffectiveness recognized in investment
For the year ended December 31, 2013	flow hedging relationships	derivatives	income	income
Interest rate swaps Foreign currency swaps Foreign currency forwards Total return swaps	Forecasted liabilities Floating rate liabilities Forecasted expenses Stock-based compensation	\$ (10) 132 (10) 33	\$ (12) - - -	\$ - - - -
Total	·	\$ 145	\$ (12)	\$ -
For the year ended December 31, 2012 (Restated–note 2)				
Interest rate swaps	Forecasted liabilities	\$ 14	\$ (12)	\$ -
Foreign currency swaps	Fixed rate assets	1	_	_
	Floating rate liabilities	19	_	_
Foreign currency forwards	Forecasted expenses	4	_	_
Total return swaps	Stock-based compensation	34	_	_
Total		\$ 72	\$ (12)	\$ -

The Company anticipates that net losses of approximately \$24 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 30 years.

#### Hedges of net investments in 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 foreign operations.

Cains (losses) Inoffectiveness

The effects of derivatives in net investment hedging relationships on the Consolidated Statements of Income and the Consolidated Statements of Other Comprehensive Income are shown in the following table.

Gains (losses) Ineffectiveness

# Hedging instruments in net investment hedging relationships

For the year ended December 31, 2013	Gains (losses) deferred in AOCI on derivatives	reclassified from AOCI into investment income	recognized in investment income
Currency swaps and interest rate swaps Non-functional currency denominated debt	\$ 23 (76)	\$ - -	\$ - -
Total	\$ (53)	\$ -	\$ -
For the year ended December 31, 2012 (Restated–note 2)			
Currency swaps and interest rate swaps Non-functional currency denominated debt	\$ 29 24	\$ - -	\$ - -
Total	\$ 53	\$ -	\$ -

#### (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 market 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 and are classified as Level 2. 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 and these derivatives are classified as Level 3. 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. Refer to note 10.

	Term to maturity										
	Less than 1	1 to 3	3 to 5	Over 5							
As at December 31, 2013	year	years	years	years	Total						
Derivative assets	\$ 103	\$ 442	\$ 316	\$ 8,812	\$ 9,673						
Derivative liabilities	484	357	328	7,760	8,929						
As at December 31, 2012 (Restated–note 2)											
Derivative assets	\$ 69	\$ 215	\$ 396	\$ 14,027	\$ 14,707						
Derivative liabilities	75	290	442	6,693	7,500						

	Remainir	ng term to ma	aturity (notiona	al amounts)			Fair value				
	Under 1	1 to 5	Over						Credit risk	Risk-we	-
As at December 31, 2013	year	years	5 years	Total		Positive	Negative	Net	equivalent <sup>(1)</sup>	am	ount <sup>(2)</sup>
Interest rate contracts											
OTC Swap contracts	\$ 8,872		\$ 144,352		\$	-	\$ (8,049) \$		\$ 3,866	\$	463
Cleared swap contracts	_	3,712	8,815	12,527		196	(101)	95	_		_
Forward contracts	4,563	1,622	_	6,185		11	(410)	(399)	16		2
Futures	4,836	-		4,836		_	-	_	_		_
Options purchased			2,854	2,854		23		23	82		10
Subtotal	\$ 18,271	\$ 37,651	\$ 156,021	\$ 211,943	\$	9,557	\$ (8,560) \$	997	\$ 3,964	\$	475
Foreign exchange											
Swap contracts	479	2,018	5,025	7,522		131	(593)	(462)	449		52
Forward contracts	868	_	_	868		3	(9)	(6)	7		1
Futures	3,760	_	_	3,760		-	_	_	-		_
Credit derivatives	_	335	_	335		9	_	9	-		_
Equity contracts											
Swap contracts	1,240	124	4	1,368		54	-	54	58		6
Futures	9,894	_	-	9,894		-	-	_	-		_
Options purchased	653	2,840	_	3,493		267	_	267	504		62
Subtotal including accrued interest Less accrued interest	\$ 35,165 -	\$ 42,968 -	\$ 161,050 -	\$ 239,183 -	\$	10,021 348	\$ (9,162) \$ (233)	859 115	\$ 4,982 -	\$	596 -
Total	\$ 35 165	\$ 42 968	\$ 161,050	\$ 239 183	-	9 673	\$ (8,929) \$	744	\$ 4,982	<u> </u>	596
	+,	+ 1-,000	+ 101,000		_	-,	+ (0,0=0, +				
As at December 31, 2012 (Restated-note	e 2)										
Interest rate contracts											
OTC swap contracts	\$ 5,794	\$ 28,623	\$ 123,116		\$	14,791	\$ (7,212) \$	7,579	\$ 8,803	\$	995
Cleared swap contracts	_	_	10	10		-	(1)	(1)	-		_
Futures	6,079	_	_	6,079		-	_	_	-		_
Options purchased	105	-	1,211	1,316		43	_	43	87		10
Subtotal	\$ 11,978	\$ 28,623	\$ 124,337	\$ 164,938	\$	14,834	\$ (7,213) \$	7,621	\$ 8,890	\$	1,005
Foreign exchange											
Swap contracts	699	1,617	5,372	7,688		351	(650)	(299)	1,249		134
Forward contracts	762	36	_	798		10	(13)	(3)	33		3
Futures	5,310	_	_	5,310		_	_	_	_		_
Credit derivatives	_	264	_	264		7	_	7	_		_
Equity contracts											
Swap contracts	163	97	4	264		9	(9)	-	73		7
Futures	17,482	_	_	17,482		-	_	-	_		_
Options purchased	76	1		77		5		5	22		3
Subtotal including accrued interest	\$ 36,470	\$ 30,638	\$ 129,713	\$ 196,821	\$	15,216	\$ (7,885) \$	7,331	\$10,267	\$	1,152
Less accrued interest	. –	_	. –	. –		509	(385)	124	· –		_
Total	\$ 36 470	\$ 30.638	\$ 129,713	\$ 196 821	<u></u> \$	14.707	\$ (7,500) \$	7.207	\$10,267	<u> </u>	1,152
	\$ 50,770	¥ 30,030	4 125,715	¥ 130,021		. 1,7 57	\$ (1,500) \$	.,207	¥10,207		.,.52

<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 qualifying hedging and non-qualifying hedging relationships are summarized in the following table.

As at December 31,				20	013				(Re		ed–note 2 2012	)
				Fair value							Fair v	alue
	Instrument type		Notional						Notional			
Type of hedge			amount	Assets		Liabilities		_	amount		Assets	Liabilities
Qualifying hedge accounting relationships												
Fair value hedges	Interest rate swaps	\$	5,768	\$	185	\$	395	\$	6,726	\$	54	\$ 1,352
	Foreign currency swaps		73		_		16		69		_	28
Cash flow hedges	Interest rate swaps		64		-		-		80		4	_
	Foreign currency swaps	vaps <b>785</b>			_		59		776		_	147
	Forward contracts		132		_		1		182		9	_
	Equity contracts		101		21		-		77		4	3
Net investment hedges	Foreign currency swaps		-		-		-		160		_	23
Total derivatives in qualifying hedge accounting relation	onships	\$	6,923	\$	206	\$	471	\$	8,070	\$	71	\$ 1,553
Non-qualifying hedge accounting relationships												
	Interest rate swaps	\$	192,236	\$	8,989	\$	7,535	\$	150,738	\$	14,226	\$ 5,489
	Interest rate futures		4,836		_		-		6,079		-	_
	Interest rate options		2,854		23		-		1,316		43	_
	Foreign currency swaps		6,663		130		506		6,681		348	439
	Currency rate futures		3,760		_		-		5,310		-	_
	Forward contracts		6,921		14		417		617		1	13
	Equity contracts		4,761		302		-		264		11	6
	Credit default swaps		335		9		-		264		7	_
	Equity futures		9,894		_		-		17,482		_	_
Total derivatives in non-qualifying hedge accounting r	elationships	\$	232,260	\$	9,467	\$	8,458	\$	188,751	\$	14,636	\$ 5,947
Total derivatives		\$	239,183	\$	9,673	\$	8,929	\$	196,821	\$	14,707	\$ 7,500

# (c) Derivatives not designated in qualifying hedge accounting relationships

Derivatives used in portfolios supporting insurance contract liabilities are generally not designated in qualifying hedge accounting relationships because the change in the value of the insurance contract liabilities economically hedged by these derivatives is also recorded through net income. Given the changes in fair value of these derivatives and related hedged risks are recognized in investment income as they occur, they generally offset the change in hedged risk to the extent the hedges are economically 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-qualifying hedge accounting relationships on the Consolidated Statements of Income are shown in the following table.

# Non-qualifying hedge accounting relationships

	(	(Restated–note 2)
For the years ended December 31,	2013	2012
Investment income (loss)		
Interest rate swaps	\$ (7,296)	\$ 71
Treasury locks	(399)	_
Credit default swaps	_	2
Stock futures	(3,867)	(2,606)
Currency futures	(226)	(135)
Interest rate futures	152	(100)
Interest rate options	(20)	(8)
Equity options	(64)	_
Total return swaps	126	6
Foreign currency swaps	(296)	(57)
Foreign currency forwards	(69)	(34)
Bond forwards	11	_
Total investment loss from derivatives in non-qualifying hedge accounting relationships	\$ (11,948)	\$ (2,861)

#### (d) Embedded derivatives

Certain insurance contracts contain features that are classified as embedded derivatives and are measured separately at FVTPL 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 FVTPL as the financial component contained in the reinsurance contracts does not contain significant insurance risk. As at December 31, 2013, reinsurance ceded guaranteed minimum income benefits had a fair value of \$992 (2012 – \$1,460) and reinsurance assumed guaranteed minimum income benefits had a fair value of \$88 (2012 – \$121). Claims recovered under reinsurance ceded contracts offset the claims 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. As at December 31, 2013, these embedded derivatives had a fair value of \$92 (2012 – \$146).

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 contain insurance risk and/or are closely related to the insurance host contract.

#### Note 6 Income Taxes

# (a) Components of the income tax expense (recovery)

Income tax recognized in Consolidated Statements of Income:

		(Restated–note 2)
For the years ended December 31,	2013	2012
Current tax		
Current year <sup>(1)</sup>	\$ 45	\$ 1,144
Adjustments to prior year <sup>(1)</sup>	61	(110)
	\$ 106	\$ 1,034
Deferred tax		
Reversal of temporary differences <sup>(1)</sup>	496	(1,458)
Effects of changes in tax rates	(21)	(68)
Income tax expense (recovery)	\$ 581	\$ (492)

<sup>(1)</sup> Amounts reclassified between current tax and deferred tax to conform with the current year's presentation.

Income tax recognized in Other Comprehensive Income ("OCI"):

		(Restated-r	note 2)	
For the years ended December 31,	2013		2012	
Current income tax expense (recovery) Deferred income tax expense	\$ (14) 146	\$	38 170	
Income tax expense	\$ 132	\$	208	
Income tax recognized directly in Equity:				

For the years ended December 31,	2013	201		
Current income tax expense Deferred income tax recovery	\$ 70 (33)	\$	44 (52)	
Income tax expense (recovery)	\$ 37	\$	(8)	

The effective income tax rate reported in the Consolidated Statements of Income varies from the Canadian tax rate of 26.5 per cent for the year ended December 31, 2013 (2012 – 26 per cent) and the reasons are shown below.

# Reconciliation of income tax (recovery) expense

	(R	estated–note 2)
For the years ended December 31,	2013	2012
Income before income taxes	\$ 3,747	\$ 1,243
Income tax expense at Canadian statutory tax rate	\$ 993	\$ 323
Increase (decrease) in income taxes due to:		
Tax-exempt investment income	(170)	(188)
Differences in tax rate on income not subject to tax in Canada	(176)	(399)
General business tax credits net of tax credits not recognized	14	(46)
Goodwill impairment	_	52
Adjustments to current tax related to prior years	61	(110)
Unused tax losses not recognized as deferred tax assets	6	47
Recovery of unrecognized tax losses of prior periods	(55)	_
Other differences	(92)	(171)
Income tax expense (recovery)	\$ 581	\$ (492)

As at December 31, 2013, the Company has approximately \$617 of current tax payable included in other liabilities (2012 – \$1,534) and a current tax recoverable of \$254 included in other assets (2012 – \$277).

# (b) 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.

		(Restated-note 2)
As at December 31,	2013	2012
Deferred tax assets		
Loss carryforwards	\$ 807	\$ 455
Actuarial liabilities	3,249	7,723
Pension and post-retirement benefits	283	390
Tax credits	585	309
Accrued interest	167	416
Deferred tax assets	\$ 5,091	\$ 9,293
Deferred tax liabilities		
Real estate	\$ (1,397)	\$ (974)
Securities and other investments	(260)	(4,633)
Sale of invested assets	(250)	(285)
Goodwill and intangible assets	(743)	(701)
Other	(295)	(126)
Deferred tax liabilities	\$ (2,945)	\$ (6,719)
Net deferred tax assets	\$ 2,146	\$ 2,574

#### (ii) The movement in the net deferred tax assets (liabilities) was as follows.

#### Deferred tax assets and liabilities

							Good	lliwb			Pension										
			Sec	urities		Sale of		and			Lo	OSS				and post-					
For the year ended		Real	and	other	in	vested	intang	gible	Ac	tuarial	ca	irry-	Accrued		Tax	retir	ement				
December 31, 2013		estate	invest	ments		assets	as	ssets	lia	bilities	forwa	rds	interest		credits	b	enefits		Other	Tota	1
Balance, January 1	\$	(974)	\$ (4	1,633)	\$	(285)	\$ (	701)	\$	7,723	\$ 4	55	\$ 416	\$	309	\$	390	\$	(126)	\$ 2,574	1
Acquired in business combinations		_		_		_		(18)		_		_	_		_		-		_	(18	3)
Recognized in net		(2.57)						(2)	,	4 005)	_		(07.4		250		_		(426)		- \
income		(367)		1,607		35		(3)	(-	4,935)	34	42	(274	)	250		6		(136)	(475	•
Recognized in OCI		_		(26)		_		-		_		-	_		_		(108	)	(12)	(146	-
Recognized in equity		_		_		_		_		38		-	_		_		-		(5)	33	
Translation and other		(56)		(208)				(21)		423		10	25		26		(5	)	(16)	178	<u> </u>
Balance, December 31	\$	(1,397)	\$	(260)	\$	(250)	\$ (	743)	\$	3,249	\$ 8	07	\$ 167	\$	585	\$	283	\$	(295)	\$ 2,146	j
For the year ended December 31, 2012 (Restated—note 2)																					
Balance, January 1 Acquired in business	\$	(439)	\$ (3	3,865)	\$	(323)	\$ (	760)	\$	4,175	\$ 7.	33	\$ 446	\$	497	\$	440	\$	235	\$ 1,139	)
combinations Recognized in net		_		-		_		(2)		_		-	-		-		-		-	(2	<u>'</u> )
income		(538)		(754)		38		35		3,501	(2	39)	(20	)	(176)		2		(323)	1,526	5
Recognized in OCI		-		(69)		_		_		_	,	18)	(20	,	-		(52		(31)	(170	
Recognized in equity		_		(05)		_		_		45	`	_	_		_		(32		7	52	
Translation and other		3		55		-		26		2	(2	21)	(10	)	(12)		_		(14)	29	
Balance, December 31	\$	(974)	\$ (4		\$	(285)		701)		7,723	\$ 4		\$ 416		309	\$	390		(126)	\$ 2,574	_

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 \$2,724 as at December 31, 2013 (2012 – \$2,212). The Company's continuing recognition of these deferred tax assets is based on future taxable profits in the relevant jurisdictions.

As at December 31, 2013, the Company has approximately \$2,991 (2012 – \$2,232) of tax loss carryforwards available, of which \$2,962 expire between the years 2014 and 2033 while \$29 have no expiry date. Capital loss carryforwards in the amount of \$8 (2012 – \$18) have no expiry date. A tax benefit related to these tax loss carryforwards in the amount of \$807 (2012 – \$455), has been recognized as a deferred tax asset at December 31, 2013, and a benefit of \$117 (2012 – \$166) has not been recognized.

As at December 31, 2013, the Company has approximately \$638 (2012 – \$309) of tax credit carryforwards which will expire between the years 2022 and 2033, and a benefit of \$53 (2012 – nil) has not been recognized.

As at December 31, 2013, the aggregate amount of taxable temporary differences associated with investments in subsidiaries for which deferred tax liabilities have not been recognized amounted to \$7,195 (2012 – \$4,583).

# (c) Tax related contingencies

The Company is an investor in a number of leasing transactions and had established provisions for disallowance of the tax treatment and for interest on past due taxes. On August 5, 2013, the U.S. Tax Court issued an opinion effectively ruling in the government's favour in the litigation between John Hancock and the Internal Revenue Service involving the tax treatment of leveraged leases. The Company was fully reserved for this result, and the case had no material impact on the Company's 2013 financial results.

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

## (a) Carrying amounts of goodwill and intangible assets

As at December 31, 2013	Gross carrying amount	Accumulated amortization	Net carrying amount
Goodwill	\$ 3,110	\$ -	\$ 3,110
Indefinite life intangible assets			
Brand	\$ 638	\$ -	\$ 638
Fund management contracts and other <sup>(1)</sup>	505	_	505
	\$ 1,143	\$ -	\$ 1,143
Finite life intangible assets <sup>(2)</sup>			
Distribution network	\$ 764	\$ 157	\$ 607
Software	1,181	869	312
Other	230	104	126
	\$ 2,175	\$ 1,130	\$ 1,045
Total intangible assets	\$ 3,318	\$ 1,130	\$ 2,188
Total goodwill and intangible assets	\$ 6,428	\$ 1,130	\$ 5,298
As at December 31, 2012			
Coodwill	¢ 2 100	¢	¢ 2.100
Goodwill	\$ 3,100	\$ -	\$ 3,100
Indefinite life intangible assets	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·
Indefinite life intangible assets Brand	\$ 597	\$ - \$ -	\$ 597
Indefinite life intangible assets	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·
Indefinite life intangible assets Brand	\$ 597		\$ 597
Indefinite life intangible assets Brand	\$ 597 458	\$ - -	\$ 597 458
Indefinite life intangible assets  Brand  Fund management contracts and other(1)	\$ 597 458	\$ - -	\$ 597 458
Indefinite life intangible assets  Brand Fund management contracts and other(1)  Finite life intangible assets(2)  Distribution network Software	\$ 597 458 \$ 1,055 \$ 638 1,058	\$ - - \$ - \$ 119 755	\$ 597 458 \$ 1,055 \$ 519 303
Indefinite life intangible assets  Brand Fund management contracts and other(1)  Finite life intangible assets(2)  Distribution network	\$ 597 458 \$ 1,055 \$ 638	\$ - - \$ - \$ 119	\$ 597 458 \$ 1,055
Indefinite life intangible assets  Brand Fund management contracts and other(1)  Finite life intangible assets(2)  Distribution network Software	\$ 597 458 \$ 1,055 \$ 638 1,058	\$ - - \$ - \$ 119 755	\$ 597 458 \$ 1,055 \$ 519 303
Indefinite life intangible assets  Brand Fund management contracts and other(1)  Finite life intangible assets(2)  Distribution network Software	\$ 597 458 \$ 1,055 \$ 638 1,058 229	\$ - - \$ - \$ 119 755 93	\$ 597 458 \$ 1,055 \$ 519 303 136

<sup>(1)</sup> For the fund management contracts, the significant CGUs to which these were allocated and their carrying values were U.S Mutual Funds and Retirement Plan Services with \$312 (2012 – \$291) and Canadian Wealth (excluding Manulife Bank) with \$150 (2012 – \$150).

## (b) Impairment testing of goodwill

In the fourth quarter of 2013, the Company updated its 2014 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 Company has determined there is no impairment of goodwill in 2013. In 2012, the Company determined that the goodwill of Canadian Individual Life CGU was impaired and recognized an impairment charge of \$200 in the Corporate and Other segment (refer to note 20) which did not affect the Company's ongoing operations.

<sup>(2)</sup> Amortization expense was \$158 for the year ended December 31, 2013 (2012 – \$142).

The Company has 15 CGUs or groups of CGUs. Factors considered when identifying the Company's CGUs include how the Company is organized to interact with customers, how products are presented and sold, and where interdependencies exist. The carrying value of goodwill for all CGUs with goodwill balances is shown in the table below.

#### As at December 31, 2013

CGU or Group of CGUs	Balance January	impairı , addi	nent/ tions/ oosals	Effect of changes in foreign exchange rates	Balance December 3
Asia (excluding Hong Kong and Japan) Japan Insurance and Wealth Canadian Individual Life Canadian Affinity Markets Canadian Wealth (excluding Manulife Bank) Canadian Group Benefits and Group Retirement Savings International Group Program U.S. Life U.S. Long-Term Care U.S. Mutual Funds and Retirement Plan Services	\$ 13. 40: 15: 8: 75: 82: 6: 26: 36:	3 5 3 3 5 7 7	(5) - - - - - - 4	\$ 7 (48) - - - 4 - 18 25	\$ 134 355 155 83 750 826 77 2
Corporate and Other	50	-		5	61
Total	\$ 3,100	) \$	(1)	\$ 11	\$ 3,110

As at December	31,	2012
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Asia (excluding Hong Kong and Japan)	\$ 132	\$ -	\$ -	\$ 132
Japan Insurance and Wealth	463	_	(60)	403
Canadian Individual Life	355	(200)	-	155
Canadian Affinity Markets	83	_	_	83
Canadian Wealth (excluding Manulife Bank)	750	_	_	750
Canadian Group Benefits and Group Retirement Savings	826	_	_	826
International Group Program	68	_	(1)	67
U.S. Long-Term Care	274	_	(6)	268
U.S. Mutual Funds and Retirement Plan Services	368	_	(8)	360
Corporate and Other	85	_	(29)	56
Total	\$ 3,404	\$ (200)	\$ (104)	\$ 3,100

The valuation techniques, significant assumptions and sensitivities applied in the goodwill impairment testing are described below.

#### (c) Valuation techniques

The recoverable value of each CGU or group of CGUs ("CGUs") at December 31, 2013 was based on value-in-use ("VIU") for all of the U.S. based CGUs and the Japan CGU and fair value less costs to sell ("FVLCS") for all other CGUs. The recoverable values at December 31, 2012 were based on VIU for all the U.S. based CGUs and the Canadian Individual Life CGU and FVLCS for all other CGUs. When determining whether a CGU is impaired, the Company compares its recoverable amount to the allocated capital for that unit, which is aligned with the Company's internal reporting practices.

#### (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's 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 10 years of new business growing at expected plan levels, consistent with the periods used for forecasting long-term businesses such as insurance. 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 12 per cent (2012 – zero per cent to 11 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 26.5 per cent and 35 per cent (2012 – 26 per cent and 35 per cent) for the Canadian and U.S. jurisdictions, respectively. 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 for the Japan and U.S. jurisdictions, ranged from seven per cent to 10 per cent on an after-tax basis or 12 per cent to 15 per cent on a pre-tax basis (2012 – 10 per cent on an after-tax basis and 14 per cent on a pre-tax basis for the Canadian and U.S. jurisdictions).

#### (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 22.2 (2012 – 10 to 16).

The key assumptions described above may change as economic and market conditions change, which may lead to impairment charges in the future. Changes in the discount rates and cash flow projections used in the determination of embedded values or reductions in market-based earnings multiples may result in impairment charges in the future which could be material.

#### **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.

	(	Restated-note 2)
As at December 31,	2013	2012
Gross actuarial liabilities	\$ 184,336	\$ 189,396
Gross benefits payable and provision for unreported claims	2,072	2,412
Gross policyholder amounts on deposit	6,834	6,587
Gross insurance contract liabilities	\$ 193,242	\$ 198,395
Reinsurance assets	(17,443)	(18,681)
Net insurance contract liabilities	\$ 175,799	\$ 179,714

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 of reinsurance premiums and recoveries.

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 assumptions for each material cash flow item. Investment returns are projected using the current asset portfolios and projected reinvestment strategies.

Each assumption is based on a best estimate 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 all 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 Statements 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, with the contract generally ending at the earlier of the first renewal date at or after the balance sheet date where the Company can exercise discretion in renewing its contractual obligations or terms of those obligations and the renewal or adjustment date that maximizes the insurance contract liabilities. For segregated fund products with

guarantees the projection period is generally set as the period that leads to the largest insurance contract liability. 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**

	Individua	insurance					
As at December 31, 2013	Participating	Non- participating	Annuities and pensions	Other insurance contract liabilities <sup>(1)</sup>	Total, net of reinsurance ceded	Total reinsurance ceded	Total, gross of reinsurance ceded
Asia division Canadian division U.S. division Corporate and Other	\$ 18,577 9,558 19,808 -	\$ 5,155 17,923 32,163 (505)	\$ 2,308 13,026 21,209 140	\$ 1,407 8,596 26,162 272	\$ 27,447 49,103 99,342 (93)	\$ 568 1,711 14,683 481	\$ 28,015 50,814 114,025 388
Total, net of reinsurance ceded	\$ 47,943	\$ 54,736	\$ 36,683	\$ 36,437	\$ 175,799	\$ 17,443	\$ 193,242
Total reinsurance ceded	493	7,995	7,911	1,044	17,443		
Total, gross of reinsurance ceded	\$ 48,436	\$ 62,731	\$ 44,594	\$ 37,481	\$ 193,242		
As at December 31, 2012 (Restated–note 2)							
Asia division Canadian division U.S. division Corporate and Other	\$ 17,433 9,246 19,536	\$ 5,309 17,549 31,070 5	\$ 3,608 15,327 24,972 88	\$ 1,621 8,487 25,722 (259)	\$ 27,971 50,609 101,300 (166)	\$ 325 1,697 15,344 1,315	\$ 28,296 52,306 116,644 1,149
Total, net of reinsurance ceded	\$ 46,215	\$ 53,933	\$ 43,995	\$ 35,571	\$ 179,714	\$ 18,681	\$ 198,395
Total reinsurance ceded	386	8,555	8,653	1,087	18,681		
Total, gross of reinsurance ceded	\$ 46,601	\$ 62,488	\$ 52,648	\$ 36,658	\$ 198,395		

<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, 2013, \$29,048 (2012 – \$27,950) of both assets and insurance contract liabilities related to these closed blocks of participating policies.

# (c) Fixed deferred annuity coinsurance transactions

In 2012, the Company entered into a coinsurance agreement, effective April 1, 2012, to reinsure 89 per cent of its book value fixed deferred annuity business from JHUSA and a separate agreement, effective July 1, 2012, to reinsure 90 per cent of its book value fixed deferred annuity business from John Hancock Life Insurance Company of New York. Under the terms of both of these agreements, the Company maintains the responsibility for servicing of the policies.

The transactions were structured such that the Company ceded the actuarial liabilities and transferred related invested assets which included US\$7,178 in cash and other invested assets backing the actuarial liabilities as premiums paid to the reinsurers in exchange for assuming these liabilities. Due to the significant size of these transactions, the premiums ceded are shown separately in the Consolidated Statements of Income.

#### (d) 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 alternative long-duration 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, 2013, excluding reinsurance assets, was estimated at \$178,232 (2012 – \$183,750).

The fair value of assets backing capital and other liabilities as at December 31, 2013 was estimated at \$338,881 (2012 – \$306,696).

The carrying value of total assets backing net insurance contract liabilities, other liabilities and capital was as follows.

	Individua	i insurance		041			
As at December 31, 2013	Participating	Non- participating	Annuities and pensions	Other insurance contract liabilities <sup>(1)</sup>	Other liabilities <sup>(2)</sup>	Capital <sup>(3)</sup>	Total
Assets							
Debt securities	\$ 25,963	\$ 28,058	\$ 20,538	\$ 16,574	\$ 7,664	\$ 16,160	\$ 114,957
Public equities	6,295	3,010	144	119	534	2,973	13,075
Mortgages	3,865	4,859	6,324	4,248	18,059	203	37,558
Private placements	3,464	6,166	5,768	4,142	1,012	463	21,015
Real estate	2,013	4,237	817	2,305	336	_	9,708
Other	6,343	8,406	3,092	9,049	276,722	13,703	317,315
Total	\$ 47,943	\$ 54,736	\$ 36,683	\$ 36,437	\$ 304,327	\$ 33,502	\$ 513,628
As at December 31, 2012 (Restated–note 2)							
Assets							
Debt securities	\$ 25,671	\$ 29,127	\$ 24,205	\$ 17,344	\$ 5,774	\$ 17,038	\$ 119,159
Public equities	5,278	2,585	159	289	432	2,292	11,035
Mortgages	4,107	4,566	6,354	3,642	16,051	362	35,082
Private placements	3,133	6,022	6,203	3,656	809	452	20,275
Real estate	2,166	3,321	775	1,880	229	142	8,513
Other	5,860	8,312	6,299	8,760	252,742	8,961	290,934
Total	\$ 46,215	\$ 53,933	\$ 43,995	\$ 35,571	\$ 276,037	\$ 29,247	\$ 484,998

<sup>(1)</sup> Other insurance contract liabilities include group insurance and individual and group health including long-term care insurance.

# (e) 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.

<sup>(2)</sup> Other liabilities are non-insurance contract liabilities which include segregated funds, 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.

#### 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 Mortality Mortality relates to the occurrence of death. Mortality is a key The Company maintains underwriting standards to determine assumption for life insurance and certain forms of annuities. the insurability of applicants. Claim trends are monitored on and morbidity Mortality assumptions are based on the Company's internal an ongoing basis. Exposure to large claims is managed by experience as well as past and emerging industry experience. establishing policy retention limits, which vary by market and Assumptions are differentiated by sex, underwriting class, geographic location. Policies in excess of the limits are policy type and geographic market. Assumptions are made for reinsured with other companies. future mortality improvements. Mortality is monitored monthly and the overall 2013 Morbidity relates to the occurrence of accidents and sickness experience was favourable (2012 - favourable) when for insured risks. Morbidity is a key assumption for long-term compared to the Company's assumptions. Morbidity is also care insurance, disability insurance, critical illness and other monitored monthly and the overall 2013 experience was unfavourable (2012 – unfavourable) when compared to the forms of individual and group health benefits. Morbidity assumptions are based on the Company's internal experience Company's assumptions, primarily related to poor experience as well as industry past and emerging experience and are for Long-Term Care. established for each type of morbidity risk and geographic market. Assumptions are made for future morbidity improvements. The Company segments assets to support liabilities by The Company's policy of closely matching the cash flows of Investment returns business segment and geographic market and establishes assets with those of the corresponding liabilities is designed to investment strategies for each liability segment. The projected mitigate the Company's exposure to future changes in interest cash flows from these assets are combined with projected rates. The interest rate risk positions in business segments are cash flows from future asset purchases/sales to determine monitored on an ongoing basis. Under CALM, the expected rates of return on these assets for future years. The reinvestment rate is developed using interest rate scenario investment strategies are based on the target investment testing and reflects the interest rate risk positions. policies for each segment and the reinvestment returns are In 2013, the movement in interest rates adversely (2012 derived from current and projected market rates for fixed adversely) impacted the Company's net income. This negative income investments and a projected outlook for other impact was driven by increases in swap spreads and alternative long-duration assets. reductions in corporate spreads partially offset by increases in Investment return assumptions include expected future asset risk free rates. credit losses on fixed income investments. Credit losses are The exposure to credit losses is managed against policies that projected based on past Company and industry experience as limit concentrations by issuer, corporate connections, ratings, well as specific reviews of the current investment portfolio. sectors and geographic regions. On participating policies and Investment return assumptions for each asset class and some non-participating policies, credit loss experience is geographic market also incorporate expected investment passed back to policyholders through the investment return management expenses that are derived from internal cost crediting formula. For other policies, the premiums and studies. The costs are attributed to each asset class to develop benefits reflect the Company's assumed level of future credit losses at contract inception or most recent contract unitized assumptions per dollar of asset for each asset class and geographic market. adjustment date. The Company holds explicit provisions in actuarial liabilities for credit risk including provisions for adverse deviation. In 2013, credit loss experience on debt securities and

mortgages was favourable (2012 - favourable) when

compared to the Company's assumptions.

Nature of fact	or and assumption methodology	Risk management
Investment returns (continued)		Equities, real estate and other alternative long-duration assets are used to support liabilities where investment return experience is passed back to policyholders through dividends or credited investment return adjustments. Equities, real estate, oil and gas and other alternative long-duration 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.
		In 2013, investment experience on alternative long-duration assets backing policyholder liabilities was unfavourable (2012 – unfavourable) due to losses on real estate, oil and gas properties and private equities, partially offset by gains from timber and agriculture properties. In 2013, asset returns including origination exceeded valuation requirements.
		In 2013, investment experience for segregated fund businesses from changes in the market value of funds under management was favourable (2012 – favourable) with all markets showing increases in 2013.
		In 2013, investment expense experience was favourable (2012 – favourable) when compared to the Company's assumptions.
Policyholder behaviour	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	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.  In aggregate, 2013 policyholder behaviour experience was
	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.	unfavourable (2012 – unfavourable) when compared to the Company's assumptions used in the computation of actuarial liabilities.
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 projected into the future with an allowance for inflation. For some developing businesses, there is an expectation that unit costs will decline as these	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.  Maintenance expenses for 2013 were unfavourable (2012 –
	businesses grow.  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	unfavourable) when compared to the Company's assumptions used in the computation of actuarial liabilities.  The Company prices its products to cover the expected cost of
	rate differences on the cash flows available to satisfy policy obligations.	taxes.
Policyholder dividends, experience	The best estimate projections for policyholder dividends and experience rating refunds, and other adjustable elements of policy benefits are determined to be consistent with	The Company monitors policy experience and adjusts policy benefits and other adjustable elements to reflect this experience.
rating refunds, and other adjustable policy elements	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.	Policyholder dividends are reviewed annually for all businesses under a framework of Board-approved policyholder dividend policies.
Foreign currency	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.	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 movements in currency exchange rates.

The Company's practice is to review actuarial assumptions on an annual basis as part of its review of methods and assumptions. Where changes are made to assumptions (refer to note 8(i)), the full impact is recognized in income immediately.

#### (f) Sensitivity of insurance contract liabilities to changes in non-economic assumptions

The sensitivity of net income attributed to shareholders 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.

The participating policy funds are largely self-supporting and generate no material impact on net income attributed to shareholders as a result of changes in non-economic assumptions. Experience gains or losses would generally result in changes to future dividends, with no direct impact to shareholders.

## Potential impact on net income attributed to shareholders arising from changes to non-economic assumptions

	Decrease in ne attributable to sha	
As at December 31,	2013	2012
Policy related assumptions  2% adverse change in future mortality rates <sup>(1),(3)</sup> Products where an increase in rates increases insurance contract liabilities Products where a decrease in rates increases insurance contract liabilities  5% adverse change in future morbidity rates <sup>(2),(3),(4)</sup> 10% adverse change in future termination rates <sup>(3)</sup> 5% increase in future expense levels	\$ (300) (300) (2,000) (1,300) (300)	\$ (200) (300) (1,400) (1,400) (400)

<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.

#### (g) 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 using assumptions which include a margin for adverse deviation. The margins held for each assumption decrease the income that would be recognized at inception of the policy and are released 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. This additional margin would be released if the specific circumstances which led to it being established were to change.

Each margin is reviewed annually for continued appropriateness.

<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.

<sup>(4)</sup> The morbidity sensitivity for 2013 reflects the changes to assumptions made as part of the 2013 review of actuarial assumptions and methods. This includes a change to the margin for adverse deviation on assumed future premium rate increases. In addition, the Company refined its models to better reflect the extent to which it can raise premium rates should experience deteriorate as indicated above. These changes resulted in an increase in the sensitivity.

## (h) Change in insurance contract liabilities

The change in insurance contract liabilities was a result of the following business activities and changes in actuarial estimates.

For the year ended December 31, 2013	Net actuarial liabilities	Other insurance contract liabilities <sup>(1)</sup>	Net insurance contract liabilities	Reinsurance assets	Gross insurance contract liabilities
Balance, January 1 New policies Normal in-force movement Impact of sale of Taiwan insurance business (note 3) Changes in methods and assumptions Impact of changes in foreign exchange rates	\$ 171,364 1,181 (10,965) (1,527) 1,036 6,209	\$ 8,350 - (49) (8) (85) 293	\$ 179,714 1,181 (11,014) (1,535) 951 6,502	\$ 18,681 286 (2,986) (75) 470 1,067	\$ 198,395 1,467 (14,000) (1,610) 1,421 7,569
Balance, December 31	\$ 167,298	\$ 8,501	\$ 175,799	\$ 17,443	\$ 193,242
For the year ended December 31, 2012 (Restated–note 2)					
Balance, January 1	\$ 170,849	\$ 8,789	\$ 179,638	\$ 10,728	\$ 190,366
Adjustment due to reclassification of policy liabilities to segregated fund liability (note 2)  New policies  Normal in-force movement  Changes in methods and assumptions  Impact of changes in foreign exchange rates	(1,193) 2,550 97 2,653 (3,592)	(230) 33 (242)	(1,193) 2,550 (133) 2,686 (3,834)	- 322 7,509 365 (243)	(1,193) 2,872 7,376 3,051 (4,077)
Balance, December 31	\$ 171,364	\$ 8,350	\$ 179,714	\$ 18,681	\$ 198,395

<sup>(1)</sup> Other insurance contract liabilities are comprised of benefits payable and provision for unreported claims and policyholder amounts on deposit.

# (i) Actuarial methods and assumptions

A comprehensive review of valuation assumptions and methods is performed annually and is designed to minimize the Company's exposure to uncertainty by managing both asset related and liability related risks. This is accomplished by monitoring experience and updating assumptions which represent a best estimate view of future experience, and margins that are appropriate for the risks assumed. While the assumptions selected represent the Company's current best estimates and assessment of risk, the ongoing monitoring of experience and the economic environment is likely to result in future changes to the valuation assumptions, which could be material.

#### 2013 review

In 2013, the review of actuarial assumptions and methods resulted in an increase in policy liabilities of \$948, net of reinsurance. The impact of the changes in actuarial assumptions and methods increased reinsurance assets by \$447. Net of the impacts on participating surplus and non-controlling interests, net income attributable to shareholders decreased by \$489.

The following table represents the impact of the 2013 changes in actuarial assumptions and models on policy liabilities and net income attributed to shareholders.

For the year ended December 31, 2013	To pre-tax policy liabilities	To net income attributed to shareholders
Assumption	Increase (decrease)	Increase (decrease)
Lapses and policyholder behaviour		
U.S. Insurance premium persistency update	\$ 320	\$ (208)
Insurance lapse updates	472	(233)
Variable annuity lapse update	101	(80)
U.S. Long-Term Care triennial review	18	(12)
Segregated fund parameters update	(220)	203
Other updates	257	(159)
Net impact	\$ 948	\$ (489)

#### Lapses and policyholder behaviour

Premium persistency assumptions were adjusted in the U.S. for universal life and variable universal life products to reflect recent and expected future experience which led to a \$208 charge to net income.

Lapse rates across several insurance business units were updated to reflect recent and expected future policyholder lapse experience. This included a review of the lapse experience for the Canadian individual insurance whole life and term products and certain whole life insurance products in Japan. Net of the impact on participating surplus, updates to lapse rates for insurance products resulted in a \$233 charge to net income.

Lapse rate assumptions were updated for a number of Variable Annuity contracts to reflect updated experience results, including reducing base lapse rates in Japan as contracts get closer to maturity. This resulted in a charge of \$80 to net income.

#### **U.S. Long-Term Care triennial review**

U.S. Insurance completed a comprehensive long-term care experience study. This included a review of mortality and morbidity experience, lapse experience, and of the policy liabilities for in-force rate increases filed for as a result of the 2010 review. The net impact of the review was a \$12 charge to net income. This included several offsetting items as outlined below.

Expected claims costs increased primarily due to lower mortality, higher incidence rates, and claims periods longer than expected in policy liabilities. This increase in expected cost was offset by a number of items, including: (i) the expected future premium increases resulting from this year's review, (ii) actual experience on previously filed rate increases as the actual approval rate is higher than what was reflected in policy liabilities, (iii) method and modeling refinements largely related to the modeling of future tax cash flows, and (iv) updated lapse assumptions.

The expected future premium increases assumed in the policy liabilities resulted in a benefit of \$1.0 billion to net income; this includes a total of \$0.5 billion from future premium increases that are related to revised morbidity, mortality and lapse assumptions, while the remainder is a carryover from outstanding amounts from 2010 filings. Premium increases averaging approximately 25 per cent will be sought on about one half of the in-force business, excluding the carryover of 2010 amounts requested. U.S. Insurance has factored into its assumptions the estimated timing and amount of state approved premium increases. The actual experience in obtaining price increases could be materially different than was assumed, resulting in further policy liability increases or releases which could be material.

#### Segregated fund parameters update

Certain parameters used in the stochastic valuation of the segregated fund valuation were updated and resulted in a \$203 benefit to net income. The primary updates were to the foreign exchange and bond fund parameters both of which were favourable. The bond parameter reviews included updates to interest rate and volatility assumptions. The impact of interest rate movements in the period between the last review effective March 31, 2012 and March 31, 2013 led to a charge, which was more than offset by the impact of the increase in interest rates in the second guarter of 2013.

#### Other updates

The Company made a number of model refinements related to the projection of both asset and liability cash flows which led to a \$109 charge to net income. This includes several offsetting items: a charge due to a refinement in the modeling of reinsurance contracts for Canadian individual insurance; and a charge due to aligning the modeling of swaps across all segments partially offset by a benefit due to a refinement in the modeling of guaranteed minimum withdrawal benefit products in U.S. Annuities; and a benefit due to further clarity on the treatment of Canadian investment income tax.

Mortality and morbidity charges of \$77 to net income were the result of the review of assumptions for multiple product lines.

The net impact of all other updates was a \$27 benefit to net income, which included updates to investment return and future expense assumptions.

#### 2012 review

In 2012, the review of actuarial assumptions and methods resulted in an increase in policy liabilities of \$2,686, net of reinsurance. The impact of the changes in actuarial assumptions and methods increased reinsurance assets by \$365. Net of the impacts on participating surplus and non-controlling interests, net income attributable to shareholders decreased by \$1,758. The impact on net income included a \$677 charge related to updates to the ultimate reinvestment rate.

The following table represents the impact of the 2012 changes in actuarial assumptions and models on policy liabilities and net income attributed to shareholders by the three main drivers.

For the year ended December 31, 2012

Net impact	\$ 2,686	\$ (1,758)
Other annual updates	(485)	283
Largely related to macro-economic environment <sup>(1)</sup>	2,854	(1,797)
Related to updates to actuarial standards	\$ 317	\$ (244)
Assumption	Increase (decrease)	Increase (decrease)
	policy liabilities	shareholders

<sup>(1)</sup> Beginning in first quarter of 2013, the URR is calculated on a quarterly basis, whereas in 2012 it was included in the annual review of actuarial methods and assumptions, and amounted to a \$677 post-tax charge.

## (j) Insurance contracts contractual obligations

Insurance contracts give rise to obligations fixed by agreement. As at December 31, 2013, the Company's contractual obligations and commitments relating to insurance contracts are as follows.

Insurance contract liabilities <sup>(1)</sup>	\$ 7,800	\$ 8,295	\$ 10,324	\$ 491,811	\$ 518,230	_
Payments due by period	year	years	years	Over 5 years	Total	
	Less than 1	1 to 3	3 to 5			

<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.

#### (a) 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 is reflected below.

As at December 31,	2013	2012
Asia	\$ 671	\$ 649
Investment Contract Liabilities	\$ 671	\$ 649

The change in investment contract liabilities measured at fair value was a result of the following.

For the years ended December 31,	2013	2012
Balance, January 1	\$ 649	\$ 748
New policies	1	4
Changes in market conditions	1	-
Changes in methods and assumptions	-	_
Redemptions, surrenders and maturities	(23)	(87)
Impact of changes in foreign exchange rates	43	(16)
Balance, December 31	\$ 671	\$ 649

For the year ended December 31, 2013, the net loss relating to investment contract liabilities at fair value was \$1 (2012 – nil).

#### (b) Investment contract liabilities measured at amortized cost

Investment contract liabilities measured at amortized cost comprise funding agreements issued by JHUSA to JHGF II (refer to note 2(a)(ii)) 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.

	20	(Restated–note 2) 2012		
As at December 31,	Amortized cost	Fair value	Amortized cost	Fair value
Funding agreements issued by JHUSA to JHGF II U.S. annuity certain products Canadian annuity certain products	\$ 355 1,210 288	\$ 355 1,234 307	\$ 382 1,140 249	\$ 381 1,218 276
Investment contract liabilities	\$ 1,853	\$ 1,896	\$ 1,771	\$ 1,875

The change in investment contract liabilities measured at amortized cost was a result of the following business activities.

	(R	estated–note 2)
For the years ended December 31,	2013	2012
Balance, January 1	\$ 1,771	\$ 1,792
New policy deposits	96	155
Interest	69	84
Withdrawals	(197)	(225)
Fees	_	1
Other	10	(3)
Impact of changes in foreign exchange rates	104	(33)
Balance, December 31	\$ 1,853	\$ 1,771

For the year ended December 31, 2013, the net loss relating to investment contracts measured at amortized cost was \$79 (2012 – \$82).

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.

			(Re	stated–note 2)	
			2013	2012	
As at December 31,	Issue date	Maturity date	Carrying value		
5.000% USD Funding agreement issued by JHUSA to JHGF II 4.670% HKD Funding agreement issued by JHUSA to	September 24, 2003	September 30, 2013	\$ -	\$ 50	
JHGF II 5.250% USD Funding agreement issued by JHUSA to	March 16, 2004	March 17, 2014	34	32	
JHGF II	February 18, 2003	February 25, 2015	321	300	
Total carrying value			\$ 355	\$ 382	
Fair value			\$ 355	\$ 381	

The carrying value of the funding agreements issued by JHUSA to JHGF II 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 funding agreements issued by JHUSA to JHGF II is determined using a discounted 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.

# (c) Investment contracts contractual obligations

Investment contracts give rise to obligations fixed by agreement. As at December 31, 2013, the Company's contractual obligations and commitments relating to investment contracts are as follows.

Investment contract liabilities(1)	\$246	\$695	,	\$2,689		-
Payments due by period	vear	vears	vears	vears	Total	
	Less than 1	1 to 3	3 to 5	Over 5		

<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

The Company's policies and procedures for managing risk related to financial instruments can be found in the "Risk Management and Risk Factors" section of the Company's 2013 MD&A for the year ended December 31, 2013. Specifically, these disclosures are included in "Market Risk" and "Liquidity Risk" in this section. These disclosures are in accordance with IFRS 7 "Financial Instruments: Disclosures" and therefore, the shaded text and tables form an integral part of these Consolidated Financial Statements.

#### (a) 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. 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, derivative financial instruments and reinsurance and an increase in provisions for future credit impairments to be included in actuarial liabilities.

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, credit rating, industry and geographic region. The Company measures 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. Reinsurance counterparty exposure is measured reflecting the level of ceded liabilities.

The Company also ensures where warranted, that mortgages, private placements 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, policy 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. The allowance for loss is based on current recoverable amounts and ceded policy liabilities.

Credit risk associated with derivative counterparties is discussed in note 10(d) and credit risk associated with reinsurance counterparties is discussed in note 10(i).

# **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.

	(F	Restated–note 2)
As at December 31,	2013	2012
Debt securities		
FVTPL	\$ 97,123	\$ 100,161
AFS	17,834	18,998
Mortgages	37,558	35,082
Private placements	21,015	20,275
Policy loans	7,370	6,793
Bank loans	1,901	2,142
Derivative assets	9,673	14,707
Accrued investment income	1,813	1,792
Reinsurance assets	17,443	18,681
Other financial assets	2,916	3,464
Total	\$ 214,646	\$ 222,095

#### Credit quality

The credit quality of mortgages (excluding mortgages held by Manulife Bank of Canada) and private placements is assessed at least annually by using an internal rating based on, the regular monitoring of credit related exposures, considering both qualitative and quantitative factors.

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 carring value of mortgages and private placements by internally generated credit quality indicator.

As at December 31, 2013	AAA	AA	А	BBB	BB	B & lower	Total
Private placements Mortgages (excluding Manulife Bank of Canada)	\$ 791 2,020	\$ 3,200 2,562	\$ 5,845 7,019	\$ 8,949 8,264	\$ 1,112 500	\$ 1,118 165	\$ 21,015 20,530
Total	\$ 2,811	\$ 5,762	\$ 12,864	\$ 17,213	\$ 1,612	\$ 1,283	\$ 41,545
As at December 31, 2012							
Drivata placaments	\$ 697	\$ 2.633	\$ 5.709	\$ 9.116	\$ 835	\$ 1,285	
Private placements Mortgages (excluding Manulife Bank of Canada)	2,301	2,024	3,781	10,749	631	357	\$ 20,275 19,843

For bank 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 mortgages and bank loans recorded by Manulife Bank of Canada by credit quality indicator.

As at December 31, 2013	1	2	3	4 & lower Total
Mortgages Bank loans	\$ - -	\$ 9,439 389	\$ 7,488 1,485	\$ 101  \$ 17,028 27     1,901
Total	\$ -	\$ 9,828	\$ 8,973	\$ 128 \$ 18,929
As at December 31, 2012				
Mortgages Bank loans	\$ -	\$ 9,425 398	\$ 5,718 1,714	\$ 96 \$ 15,239 30 2,142
Total	\$ -	\$ 9,823	\$ 7,432	\$ 126 \$ 17,381

# 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 debt securities. In addition, the Company reports as an impairment certain declines in the fair value of debt securities designated as FVTPL which it deems represent an impairment.

The following table summarizes the carrying value or impaired value in the case of impaired debt securities, of the Company's financial assets that are considered past due or impaired.

	Past	due but not impair		
As at December 31, 2013	Less than 90 days	90 days and greater	Total	Total impaired
Debt securities FVTPL AFS Private placements Mortgages and bank loans Other financial assets	\$ - - 53 55 7	\$ - - - 31 31	\$ - - 53 86 38	\$ 127 12 115 53
Total	\$ 115	\$ 62	\$ 177	\$ 307
As at December 31, 2012				
Debt securities FVTPL AFS Private placements Mortgages and bank loans Other financial assets	\$ 69 4 102 79 67	\$ - - 12 27 43	\$ 69 4 114 106 110	\$ 156 15 83 81 2
Total	\$ 321	\$ 82	\$ 403	\$ 337

The following table summarizes the Company's loans that are considered impaired.

Gross carrying value	Allowances for losses	Net carrying value
\$ 196 78	\$ 81 25	\$ 115 53
\$ 274	\$ 106	\$ 168
\$ 118	\$ 35	\$ 83
135	54	81
\$ 253	\$ 89	\$ 164
	carrying value \$ 196 78 \$ 274 \$ 118 135	carrying value       Allowances for losses         \$ 196       \$ 81         78       25         \$ 274       \$ 106         \$ 118       \$ 35         135       54

For the years ended December 31,		2013								
	Private placements	Mortgages and bank loans		Total	Pr placem	ivate nents	Mortg and			Total
Balance, January 1	\$ 35	\$ 54	\$	89	\$	41	\$	53	\$	94
Provisions	55	22		77		6		29		35
Recoveries	_	(17)		(17)		(8)		(12)		(20)
Write-offs <sup>(1)</sup>	(9)	(34)		(43)		(4)		(16)		(20)
Balance, December 31	\$ 81	\$ 25	\$	106	\$	35	\$	54	\$	89

<sup>(1)</sup> Includes disposals and impact of changes in foreign exchange rates.

# (b) 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, 2013, the Company had loaned securities (which are included in invested assets) with a market value of \$1,422 (2012 – \$1,456). The Company holds collateral with a current market value that exceeds the value of securities lent in all cases.

The Company engages in reverse repurchase transactions to generate fee income and to take possession of securities to cover short positions in similar instruments and undertake repurchase transactions for short term funding purposes. As at December 31, 2013, the Company had engaged in reverse repurchase transactions of \$6 (2012 – \$577) which are recorded as short-term receivables. There were outstanding repurchase agreements of \$200 as at December 31, 2013 (2012 – \$641) which are recorded as payables.

## (c) 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 debt securities investing. The Company will not write CDS protection in excess of its government debt securities 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.

	Notional			Weighted average maturity
As at December 31, 2013	amount <sup>(2)</sup>	Fair value	e	(in years) <sup>(3)</sup>
Single name CDSs <sup>(1)</sup>				
Corporate debt				
AAA	\$ 37	\$ 1		3
AA	101	3	3	3
A	197	į	5	3
Total single name CDSs	\$ 335	\$ 9	9	3
Total CDS protection sold	\$ 335	\$ 9	9	3
As at December 31, 2012				
Single name CDSs <sup>(1)</sup>				
Corporate debt				
AAA	\$ 25	\$ '	1	4
AA	85	3	3	4
A	144	3	3	4
BBB	10	-	-	5
Total single name CDSs	\$ 264	\$ 7	7	4
Total CDS protection sold	\$ 264	\$ 7	7	4

<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 CDS is weighted based on notional amounts.

The Company holds no purchased credit protection at December 31, 2013 (2012 – nil).

# (d) Derivatives

The Company's point-in-time exposure to losses related to the credit risk of the counterparty of derivatives transactions 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 a loss position 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, 2013, the percentage of the Company's derivative exposure which was with counterparties rated AA- or higher amounted to 12 per cent (2012 – 19 per cent). The Company's exposure to credit risk was mitigated by \$3,656 fair value of collateral held as security as at December 31, 2013 (2012 – \$9,249).

As at December 31, 2013, the largest single counterparty exposure, without taking into account the impact of master netting agreements or the benefit of collateral held, was \$2,138 (2012 – \$2,922). The net exposure to this counterparty, after taking into account master netting agreements and the fair value of collateral held, was nil (2012 – nil). As at December 31, 2013, 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 \$10,021 (2012 – \$15,216).

## (e) Offsetting financial assets and financial liabilities

Certain derivatives, securities lending and purchase agreement have conditional offset rights. The Company does not offset these financial instruments in the Consolidated Statements of Financial Position, as the rights of offset are conditional.

In the case of derivatives, collateral is collected from and pledged to counterparties and clearinghouses to manage credit risk exposure in accordance with Credit Support Annexes to swap agreements and clearing agreements. Under master netting agreements, the Company has a right of offset in the event of default, insolvency, bankruptcy or other early termination.

In the case of reverse repurchase and repurchase transactions, additional collateral may be collected from or pledged to counterparties to manage credit exposure according to bilateral reverse repurchase or repurchase agreements. In the event of default by a counterparty, the Company is entitled to liquidate the assets the Company holds as collateral to offset against obligations to the same counterparty.

The following table presents the effect of conditional master netting and similar arrangements. Similar arrangements may include global master repurchase agreements, global master securities lending agreements, and any related rights to financial collateral.

Related amounts not set off in the

Consolidated Statements of Financial Position Gross amounts of financial instruments Amounts subject to an Net amounts presented in the Financial and Consolidated enforceable master cash collateral Net amount excluding Statements of including netting arrangement or pledged financing As at December 31, 2013 Financial Position(1) similar agreements (received)(2) financing trusts(3) trusts **Financial assets** \$ 10,021 \$ (6,734) \$ (3,267) 20 \$ 20 Derivative assets \$ Securities lending 1,422 (1,422)Reverse repurchase agreements (6)**Total financial assets** \$ 11,449 \$ (4,695) \$ (6,734) \$ 20 \$ 20 Financial liabilities Derivative liabilities \$ (9,162) \$ 6,734 \$ 2,250 \$ (178) \$ (39) Repurchase agreements (200)200 Total financial liabilities \$ (9,362) \$ 2,450 \$ (178) \$ (39) \$ 6,734 As at December 31, 2012 **Financial assets** Derivative assets \$ 15,216 \$ (6,648) \$ (8,545) 23 23 Securities lending 1.456 (1,456)Reverse repurchase agreements 577 (168)(409)**Total financial assets** \$ 17,249 \$ (6,816) \$(10,410) \$ 23 \$ 23 **Financial liabilities** Derivative liabilities (7,885)\$ 6.648 925 \$ (312) \$ (12) Repurchase agreements (641)473 168 Total financial liabilities \$ (8,526) \$ 6,816 \$ 1,398 \$ (312) \$ (12)

#### (f) 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,	2013	2012
Debt securities and private placements rated as investment grade BBB or higher <sup>(1)</sup>	96%	95%
Government debt securities as a per cent of total debt securities	44%	48%
Government private placements as a per cent of total private placements	10%	10%
Highest exposure to a single non-government debt security and private placement issuer	\$ 643	\$ 777
Largest single issuer as a per cent of the total equity portfolio	2%	2%
Income producing commercial office properties (2013 – 74% of real estate, 2012 – 82%)	\$ 7,149	\$ 6,957
Largest concentration of mortgages and real estate <sup>(2)</sup> – Ontario, Canada (2013 – 26%, 2012 – 28%)	\$ 12,324	\$ 12,070

<sup>(1)</sup> Investment grade debt securities and private placements include 31% rated A, 18% rated AA and 26% rated AAA (2012 – 29%, 18% and 29%) based on external ratings where available.

<sup>(1)</sup> The Company does not offset financial instruments. Financial assets and liabilities in the table above include accrued interest of \$352 and \$233, respectively (2012 – \$513 and \$385, respectively).

<sup>(2)</sup> Financial and cash collateral excludes over-collateralization. As at December 31, 2013, the Company was over-collateralized on OTC derivative assets, OTC derivative liabilities, securities lending and reverse purchase agreements and repurchase agreements in the amounts of \$390, \$297, \$75 and nil, respectively (2012 – \$704, \$312, \$75 and \$5, respectively). As at December 31, 2013, collateral pledged (received) does not include collateral in transit on OTC instruments or include initial margin on exchange traded contracts or cleared contracts.

<sup>(3)</sup> The net amount includes derivative contracts entered into between the Company and its financing trusts which it does not consolidate. The Company does not exchange collateral on derivative contracts entered into with these trusts.

<sup>(2)</sup> Mortgages and real estate are diversified geographically and by property type.

The following table shows the distribution of the debt securities and private placement portfolio by sector and industry.

#### Debt securities and private placements

	201	3		ed–note 2) 012
As at December 31,	Carrying value	% of total	Carrying value	% of total
Government and agency	\$ 52,510	39	\$ 58,658	42
Utilities	22,612	17	21,412	15
Financial	20,150	15	20,505	15
Energy	10,142	7	9,644	7
Consumer (non-cyclical)	7,695	6	7,281	5
Industrial	7,239	5	7,085	5
Securitized	3,441	3	3,801	3
Basic materials	3,704	3	3,369	2
Consumer (cyclical)	3,181	2	2,712	2
Telecommunications	2,411	2	2,196	2
Technology	1,493	1	1,070	1
Media and internet	1,075	_	1,351	1
Diversified and miscellaneous	319		350	_
Total	\$ 135,972	100	\$ 139,434	100

## (g) 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 mortality and morbidity 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 policy liabilities. Assumptions for future claims are generally based on Company and industry experience and assumptions for policyholder behaviours are generally based on Company experience. 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 man-made 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.

The Company manages insurance risk through global policies, standards and best practices with respect to product design, pricing, underwriting and claim adjudication, and a global life underwriting manual. Each business unit has underwriting procedures, including criteria for approval of risks and claims adjudication procedures. The Company has a global retention limit of US\$30 and US\$35, respectively, for individual and survivorship life insurance. Lower limits are applied in some markets and jurisdictions. The Company further reduces exposure to claims concentrations by applying geographical aggregate retention limits for certain covers.

#### (h) 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.

As at December 31, 2013	Gross liabilities	Reinsurance assets	Net liabilities
U.S. and Canada Asia and Other	\$ 164,352 31,594	\$ (17,344) (99)	\$ 147,008 31,495
Total insurance and investment contract liabilities, including embedded derivatives	\$ 195,946	\$ (17,443)	\$ 178,503
As at December 31, 2012 (Restated - note 2)			
U.S. and Canada	\$ 169,945	\$ (18,585)	\$ 151.360
Asia and Other	31,137	(96)	31,041

#### (i) 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.

(Destated sets 2)

As at December 31, 2013, the Company had \$17,443 (2012 – \$18,681) of reinsurance assets. Of this, 90 per cent (2012 – 91 per cent) were ceded to reinsurers with Standard and Poor's ratings of A- or above. The Company's exposure to credit risk was mitigated by \$8,078 fair value of collateral held as security as at December 31, 2013 (2012 – \$9,123). Net exposure after taking into account offsetting agreements and the benefit of the fair value of collateral held was \$9,365 (2012–\$9,558).

#### Note 11 Fair Value Measurement

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction (not a forced liquidation or distress sale) between market participants at the measurement date; that is, an exit value.

When available, quoted market prices are used to determine fair value. If quoted market prices are not available, fair value is typically based upon alternative valuation techniques such as discounted cash flows, matrix pricing, consensus pricing services and other techniques. Broker quotes are generally used when external public vendor prices are not available.

The Company's quality assurance process also includes a review of price movements relative to the market, a comparison of prices between vendors, and a comparison to internal matrix pricing which predominately uses external observable data. Judgment is applied in adjusting external observable data for items including liquidity and credit factors.

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. 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 debt securities 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 as well as real estate classified as investment property are also included in Level 3.

The following table presents fair value of the Company's assets and liabilities measured at fair value in the Consolidated Statements of Financial Position, categorized by level under the fair value hierarchy.

As at December 31, 2013	value	Level 1	1 1 2	
		Level I	Level 2	Level 3
ASSETS				
Cash and short-term securities				
FVTPL	\$ 421	\$ -	\$ 421	\$ -
AFS	10,617	_	10,617	_
Other	2,592	2,592	_	_
Debt securities(1)				
FVTPL				
Canadian government and agency	13,106	_	12,377	729
U.S. government and agency	13,189	_	13,029	160
Other government and agency	10,862	_	10,542	320
Corporate	57,192	_	55,196	1,996
Residential mortgage/asset-backed securities	159	_	12	147
Commercial mortgage/asset-backed securities	827	_	564	263
Other securitized assets	1.788	_	1,711	77
AFS	.,,		.,,	
Canadian government and agency	2.844	_	2.306	538
U.S. government and agency	8,383	_	8,380	3
Other government and agency	1,962	_	1,904	58
Corporate	4,017	_	3,889	128
Residential mortgage/asset-backed securities	368		337	31
Commercial mortgage/asset-backed securities	90	_	36	54
Other securitized assets	170	_	139	31
Equities	170		133	31
FVTPL	11,011	11,005	6	_
AFS	2,064	2,064	_	_
Real estate – investment property <sup>(2)</sup>	8,904	2,004	_	8,904
Other invested assets(3)	8,508	_	_	8,508
Derivative assets	6,506	_	_	6,506
Interest rate contracts	0.200	_	9,177	31
	9,208 133	_	132	1
Foreign exchange contracts	323		30	293
Equity contracts	323 9	_	9	293
Credit default swaps	-	240 520	_	2 264
Segregated funds net assets <sup>(4)</sup>	239,871	219,538	17,972	2,361
Total assets carried at fair value	\$ 408,618	\$ 235,199	\$ 148,786	\$ 24,633
LIABILITIES		<u> </u>		
Derivative liabilities				
Interest rate contracts	\$ 8,340	\$ -	\$ 7,888	\$ 452
Foreign exchange contracts	589	_	569	20
Investment contract liabilities	671	_	671	_
Segregated funds net liabilities(4)	239,871	219,538	17,972	2,361
Total liabilities carried at fair value	\$ 249,471	\$ 219,538	\$ 27,100	\$ 2,833

<sup>(1)</sup> The assets included in Level 3 consist primarily of debt securities with maturities greater than 30 years for which the yield is not observable, as well as debt securities where prices are only single quoted broker prices that are not provided publicly and therefore are not observable. Spread inputs are not applicable since public debt securities are priced externally. These debt securities are considered Level 3 as an extrapolated Treasury rate is used to determine price.

<sup>(2)</sup> For investment property, the significant unobservable inputs are capitalization rate (ranging from 4.5% to 8.5% during the year) and terminal capitalization rate (ranging from 5.1% to 9% during the year). Holding other factors constant, a lower capitalization or terminal capitalization rate will tend to increase the fair value of investment property. Changes in fair value based on variations in unobservable input generally cannot be extrapolated because the relationship between the directional changes of each input is not usually linear.

<sup>(3)</sup> Other invested assets measured at fair value held primarily in power and infrastructure and timber sectors. The significant inputs used in the valuation of the Company's power and infrastructure investments are primarily future distributable cash flows, terminal values and discount rates. Holding other factors constant, an increase to future distributable cash flows or terminal values would tend to increase the fair value of a power and infrastructure investment, while an increase in the discount rate would have the opposite effect. Discount rates during the year ranged from 10% to 18%. Disclosure of distributable cash flow and terminal value ranges are not meaningful given the disparity in estimates by project. The significant inputs used in the valuation of the Company's investments in timberland are timber prices and discount rates. Holding other factors constant, an increase to timber prices would tend to increase the fair value of a timberland investment, while an increase in the discount rates would have the opposite effect. Discount rates during the year ranged from 5.25% to 6%. A range of prices for timber is not meaningful given the disparity in estimates by property.

<sup>(4)</sup> Segregated funds net assets are recorded at fair value. The Company's Level 3 segregated funds assets are predominantly invested in timberland properties valued as described above.

For assets and liabilities not measured at fair value in the Consolidated Statements of Financial Position, the following table discloses summarized fair value information categorized by level in the preceding hierarchy, together with the related carrying values.

As at December 31, 2013	Carrying value	Total fair value	Level 1	Level 2	Level 3
ASSETS					
Mortgages <sup>(1)</sup>	\$ 37,558	\$ 39,176	\$ -	\$ -	\$ 39,176
Private placements <sup>(2)</sup>	21,015	22,008	-	18,619	3,389
Policy loans <sup>(3)</sup>	7,370	7,370	_	7,370	-
Bank loans <sup>(4)</sup>	1,901	1,907	_	1,907	_
Real estate - own use property <sup>(5)</sup>	804	1,476	_	_	1,476
Other invested assets <sup>(6)</sup>	4,987	5,183	_	-	5,183
Total assets disclosed at fair value	\$ 73,635	\$ 77,120	\$ -	\$ 27,896	\$ 49,224
LIABILITIES					
Investment contract liabilities <sup>(7)</sup>	\$ 1,853	\$ 1,896	\$ -	\$ 1,896	\$ -
Long-term debt <sup>(8)</sup>	4,775	5,105	_	5,105	_
Liabilities for preferred shares and capital instruments(8)	4,385	4,725	358	4,367	_
Bank deposits <sup>(9)</sup>	19,869	19,953	-	19,953	-
Total liabilities disclosed at fair value	\$ 30,882	\$ 31,679	\$ 358	\$ 31,321	\$ -

<sup>(1)</sup> Fair value of mortgages is derived through matrix pricing using both observable and unobservable inputs. Unobservable inputs including credit assumptions have a significant impact on the valuation.

#### Transfers of Level 1 and Level 2 assets and liabilities

The Company's policy is to record transfers of assets and liabilities between Level 1 and Level 2 at their fair values as at the end of each reporting period, consistent with the date of the determination of fair value. Assets are transferred out of Level 1 when they are no longer transacted with sufficient frequency and volume in an active market. During the year ended December 31, 2013, the Company transferred \$7 of assets measured at fair value from Level 1 to Level 2 during the year. Conversely, assets are transferred from Level 2 to Level 1 when transaction volume and frequency are indicative of an active market. The Company transferred \$28 of assets from Level 2 to Level 1 during the year ended December 31, 2013.

<sup>(2)</sup> Fair value of private placements is based on techniques and assumptions which reflect changes since origination of both interest rates and creditworthiness of the individual borrower and also include an unobservable liquidity adjustment and any applicable provision for credit loan losses. Private placements are classified within Level 2 unless the liquidity adjustment constitutes a significant price impact, in which case the security may be classified as Level 3.

<sup>(3)</sup> The fair value of policy loans is equal to their unpaid principal balances (Level 2).

<sup>(4)</sup> The fair value of fixed-rate bank loans is determined by discounting expected future cash flows at market interest rates for instruments with similar remaining terms and credit risks (Level 2). Fair value for variable-rate bank loans is assumed to be their carrying values since there are no fixed spreads (Level 2).

<sup>(5)</sup> Fair value of own use real estate and the level of the fair value hierarchy is calculated in accordance with the methodologies described for real estate – investment property in note 1.

<sup>(6)</sup> Other invested assets disclosed at fair value include \$2,629 of leveraged leases which are shown at their carrying values as fair value is not routinely calculated on these investments.

<sup>(7)</sup> The fair value of the medium term notes and annuity certain products is determined using a discounted cash flow approach based on current market interest rates adjusted for the Company's own credit standing. All investment contract liabilities are classified in Level 2 as their valuations use observable market data.

<sup>(8)</sup> The fair value of the long-term debt and liabilities for preferred shares and capital instruments is determined using quoted market prices where available (Level 1). When quoted market prices are not available the fair value is determined with reference to quoted prices of a debt instrument with similar characteristics or estimated using discounted cash flows using observable market rates (Level 2).

<sup>(9)</sup> The fair value of bank deposits is determined by discounting the contractual cash flows, using market interest rates currently offered for deposits with similar terms and conditions (Level 2).

# 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 for the assets and liabilities measured at fair value for which significant unobservable inputs (Level 3) are used in the fair value measurement for the year ended December 31, 2013. The Company classifies the fair values of assets and liabilities as 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 table below include changes in fair value due partly to observable and unobservable factors.

	_(	unre	et realiz ealized s) inclu	gair	าร						_	Tran	sfers						nge in alized
	Balance as at nuary 1, 2013	inco	Net ome <sup>(1)</sup>	00	CI <sup>(2)</sup> Pu	rchases	Issuar	nces	Sales S	ettler	ments L	Into evel 3 <sup>(3)</sup>	Out of Level 3 <sup>(3)</sup>			Baland Decem	ce as at ber 31, 2013	instru	
Debt securities FVTPL																			
Canadian government & agency U.S. government & agency Other government & agency	\$ 396 180 800	\$	(39) (30) (48)	\$	- \$ - -	742 - 148	\$	- \$ -	(94) - (611)	\$	- - (9)	\$ - - 5	\$ (276 - -		- 10 35	\$	729 160 320	\$	(41) (30) (55)
Corporate	2,094		(120)		-	569		-	(123)		(80)	30	(378		4		1,996		(138)
Residential mortgage/asset- backed securities	194		32		-	_		-	(41)		(52)	_	_		14		147		21
Commercial mortgage/asset- backed securities	203		17		_	73		_	(11)		(37)	3	(1	)	16		263		32
Other securitized assets	 135	_	30	_		-		_	(29)	_	(68)	-			9		77		(12)
	\$ 4,002	\$	(158)	>	- \$	1,532	- \$	- \$	(909)	\$	(246)	\$ 38	\$ (655	) \$	88	\$	3,692	\$	(223)
AFS Canadian government & agency	\$ 210	\$	(10)	\$ (	(61) \$	597	\$	- \$	(198)	\$	_	\$ -	\$ -	\$	_	\$	538	\$	_
U.S. government & agency Other government & agency	3 69		- 1		- (4)	- 34		_	- (40)		_ (2)	- 1	_		(1)	`	3 58		_
Corporate Residential mortgage/asset-	151		-	(	(20)	28		_	(33)		(38)	49	(4		(5)		128		_
backed securities Commercial mortgage/asset-	49		11		6	-		-	(16)		(23)	-	-		4		31		-
backed securities	40		(7)		7	16		_	(2)		(3)	1	(1	)	3		54		_
Other securitized assets	41		2		1			_	(8)		(8)		_		3		31		
	\$ 563	\$	(3)	\$ (	71) \$	675	\$	- \$	(297)	\$	(74)	\$ 51	\$ (5	) \$	4	\$	843	\$	_
<b>Equities</b> FVTPL AFS	\$ 	\$	_	\$	- \$ -	_ 2	\$	- <b>\$</b>	-	\$	-	\$ - -	\$ - (2	\$	-	\$	-	\$	-
	\$ _	\$	_	\$	- \$	2	\$	- \$	_	\$	_	\$ -			_	\$	_	\$	_
Real estate - investment property Other invested assets	\$ 7,724 6,836	\$	98 546	\$	- \$ (2)	1,069 1,266	\$	- \$ -	(248) (186)	\$	_ (342)	\$ - 5	\$ - (1		261 386	\$	8,904 8,508	\$	92 440
	\$ 14,560	\$	644	\$		2,335	\$	- \$	(434)	\$	(342)	\$ 5	\$ (1		647	\$	17,412	\$	532
Net derivatives Segregated funds net	\$ (6)		(388)		34 \$	297	\$		(116)	\$	-	\$ -	\$ 15	\$		\$	(147)		(193)
assets	 2,212		170		-	33		-	(201)		-	(1)			147		2,361		127
	\$ 21,331	\$	265	\$ (	39) \$	4,874	\$	- \$	(1,957)	\$	(662)	\$ 93	\$ (647	) \$	903	\$	24,161	\$	243

<sup>(1)</sup> These amounts are included in investment income on the Consolidated Statements of Income, 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).

The Company may hedge positions with offsetting positions that are classified in a different level.

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 for the entire term structure of the debt security.

<sup>(2)</sup> These amounts are included in AOCI on the Consolidated Statements 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.

# Note 12 Long-Term Debt

# (a) The following obligations are included in long-term debt.

					(Restated-	-note 2)
As at December 31,	Maturity date	Par	value	2013		2012
3.40% Senior notes <sup>(1)</sup>	September 17, 2015	USS	600	\$ 637	\$	595
4.90% Senior notes(1)	September 17, 2020	USS	500	529		494
4.079% Medium term notes <sup>(2)</sup>	August 20, 2015	\$	900	899		898
4.896% Medium term notes <sup>(2)</sup>	June 2, 2014	\$	1,000	999		999
7.768% Medium term notes <sup>(2)</sup>	April 8, 2019	\$	600	598		598
5.161% Medium term notes <sup>(2)</sup>	June 26, 2015	\$	550	549		549
5.505% Medium term notes <sup>(2)</sup>	June 26, 2018	\$	400	399		399
4.67% Medium term notes <sup>(2)</sup>	March 28, 2013	\$	350	_		350
Promissory note to Manulife Finance (Delaware), L.P.(3)	December 15, 2016	\$	150	150		150
Other notes payable	n/a		n/a	15		14
Total				\$ 4,775	\$	5,046

<sup>(1)</sup> The 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. The senior note may be redeemed in whole or in part, at the option of MFC at any time, at a redemption price equal to the greater of par and a price based on the yield of a corresponding U.S. Treasury bond plus a specified number of basis points. The number of basis points is 30 basis points for the 3.40% senior notes and 35 basis points for the 4.90% senior notes.

The cash amount of interest paid during the year ended December 31, 2013 was \$243 (2012 – \$249). Issue costs are amortized over the term of the debt.

## (b) Aggregate maturities of long-term debt

		(Restated–note 2)
As at December 31,	2013	2012
Less than one year	\$ 1,000	\$ 350
One to two years	2,085	999
Two to three years	150	2,042
Three to four years	14	150
Four to five years	399	14
Greater than five years	1,127	1,491
Total	\$ 4,775	\$ 5,046

# **Note 13 Liabilities for Preferred Shares and Capital Instruments**

#### (a) Carrying value of liabilities for preferred shares and capital instruments

						(Restated–note 2)
As at December 31,	Issuance date	Maturity date	Par v	/alue	2013	2012
Preferred shares – Class A Shares, Series 1 <sup>(1)</sup>	June 19, 2003	n/a	\$	350	\$ 344	\$ 344
Senior debenture notes 7.535% fixed/floating <sup>(2)</sup>	July 10, 2009	December 31, 2108	\$	1,000	1,000	1,000
Surplus notes – 7.375% U.S. dollar <sup>(3)</sup>	February 25, 1994	February 15, 2024	US\$	450	501	470
Subordinated debentures – 4.21% fixed/floating <sup>(4)</sup>	November 18, 2011	November 18, 2021	\$	550	548	548
Subordinated debentures – 4.165% fixed/floating <sup>(5)</sup>	February 17, 2012	June 1, 2022	\$	500	498	497
Subordinated debentures – 2.819% fixed/floating <sup>(6)</sup>	February 25, 2013	February 26, 2023	\$	200	199	_
Subordinated debentures – 2.926% fixed/floating <sup>(7)</sup>	November 29, 2013	November 29, 2023	\$	250	249	_
Subordinated note – floating <sup>(8)</sup>	December 14, 2006	December 15, 2036	\$	650	647	646
Subordinated note – floating <sup>(9)</sup>	December 14, 2006	January 15, 2019	\$	400	399	398
Total					\$ 4,385	\$ 3,903

The 14 million Class A Shares, Series 1 ("Series 1 Preferred Shares") were issued by MFC at a price of \$25.00 per share 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.

<sup>(2)</sup> The medium term notes may be redeemed in whole or in part, at the option of MFC at any time, at a redemption price equal to the greater of par and price based on the yield of a corresponding Government of Canada bond plus a specified number of basis points. The numbers of basis points for the 4.079%, 4.896%, 7.768%, 5.161% and 5.505% medium term notes are 46, 57.5, 125, 36 and 39, respectively.

<sup>(3)</sup> The note bears interest at the 90-day Bankers' Acceptance rate plus 2.33%, payable quarterly.

<sup>(2)</sup> Issued by MLI to Manulife Financial Capital Trust II, interest is payable semi-annually. 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 5.2%. On or after December 31, 2014, with regulatory approval, MLI may redeem the debenture, in whole or in part, at the greater of par or the fair value of the debt based on the yield on uncallable Government of Canada bonds to the next Interest Reset Date plus (a) 1.0325% if the redemption date is prior to December 31, 2019, or (b) 2.065% if the redemption date is after December 31, 2019, together with accrued and unpaid interest.

<sup>(3)</sup> Issued by John Hancock Mutual Life Insurance Company, now John Hancock Life Insurance Company (U.S.A.). 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. The carrying value of the surplus notes

- reflects an unamortized fair value increment of US\$34 (2012 US\$36), 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.
- (4) Issued by MLI, interest is payable semi-annually. After November 18, 2016 the interest rate is the 90-day Bankers' Acceptance rate plus 2.65% and is 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.
- (5) Issued by MLI, interest is payable semi-annually. After June 1, 2017 the interest rate is the 90-day Bankers' Acceptance rate plus 2.45% and is 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.
- (6) Issued by MLI, interest is payable semi-annually. After February 26, 2018 the interest rate is the 90-day Bankers' Acceptance rate plus 0.95% and is payable quarterly. With regulatory approval, MLI may redeem the debentures, in whole or in part, on or after February 26, 2018, at par, together with accrued and unpaid interest.
- (7) Issued by MLI, interest is payable semi-annually. After November 29, 2018 the interest rate is the 90-day Bankers' Acceptance rate plus 0.85% and is payable quarterly. With regulatory approval, MLI may redeem the debentures, in whole or in part, on or after November 29, 2018, at par, together with accrued and unpaid interest.
- (8) Manulife Holdings (Delaware) LLC ("MHDLL"), now John Hancock Financial Corporation ("JHFC"), a wholly owned subsidiary of MFC, issued the note to Manulife Finance (Delaware) LLC ("MFLLC"), a subsidiary of Manulife Financial (Delaware) L.P. ("MFLP") and its subsidiaries are related parties to the Company. The note bears interest at the 90-day Bankers' Acceptance rate plus 0.72% and is payable semi-annually. With regulatory approval, JHFC may redeem the note, in whole or in part, at any time, at par, together with accrued and unpaid interest.
- (9) Issued by MHDLL, now JHFC, the note is payable to MFLLC, a subsidiary of MFLP, and bears interest at 90-day Bankers' Acceptance rate plus 0.552% and is payable semi-annually. MFLP and its subsidiaries are related parties to the Company. With regulatory approval, JHFC may redeem the note, in whole or in part, at any time, at par, together with accrued and unpaid interest.

# **Note 14 Share Capital and Earnings Per Share**

The authorized capital of MFC consists of:

- an unlimited number of common shares without nominal or par value; and
- an unlimited number of Class A, Class B and Class 1 preferred shares without nominal or par value, issuable in series.

# (a) Preferred shares

The changes in issued and outstanding preferred shares are as follows.

	2013		2012	
For the years ended December 31,	Number of shares (in millions)	Amount	Number of shares (in millions)	Amount
Balance, January 1	102	\$ 2,497	74	\$ 1,813
Issued, Class 1 shares, Series 7	-	_	10	250
Issued, Class 1 shares, Series 9	_	_	10	250
Issued, Class 1 shares, Series 11	-	-	8	200
Issued, Class 1 Shares, Series 13	8	200	_	-
Issuance costs, net of tax	-	(4)		(16)
Balance, December 31	110	\$ 2,693	102	\$ 2,497

Further information on the preferred shares outstanding is as follows.

As at December 31, 2013	Issue date	Annual dividend rate	Earliest redemption date <sup>(1)</sup>	Number of shares (in millions)	Face amount	Net amount <sup>(2)</sup>
Class A preferred shares						
Series 2	February 18, 2005	4.65%	March 19, 2010	14	\$ 350	\$ 344
Series 3	January 3, 2006	4.50%	March 19, 2011	12	300	294
Series 4 <sup>(3),(4)</sup>	March 4, 2009	6.60%	June 19, 2014	18	450	442
Class 1 preferred shares						
Series 1 <sup>(3),(4)</sup>	June 3, 2009	5.60%	September 19, 2014	14	350	342
Series 3 <sup>(3),(4)</sup>	March 11, 2011	4.20%	June 19, 2016	8	200	196
Series 5 <sup>(3),(4)</sup>	December 6, 2011	4.40%	December 19, 2016	8	200	195
Series 7 <sup>(3),(4)</sup>	February 22, 2012	4.60%	March 19, 2017	10	250	244
Series 9 <sup>(3),(4)</sup>	May 24, 2012	4.40%	September 19, 2017	10	250	244
Series 11 <sup>(3),(4)</sup>	December 4, 2012	4.00%	March 19, 2018	8	200	196
Series 13 <sup>(3),(4)</sup>	June 21, 2013	3.80%	September 19, 2018	8	200	196
Total				110		\$ 2,693

<sup>(1)</sup> Redemption of all preferred shares is subject to regulatory approval. With the exception of Class A Series 2 and Series 3 preferred shares. MFC may redeem each series in whole or in part at par, on the earliest redemption date or every five years thereafter. Class A Series 2 and Series 3 may be redeemed on or after the earliest redemption date in whole or in part for cash at declining premiums that range from \$1.00 to nil per share.

<sup>(2)</sup> Net of after-tax issuance costs.

<sup>(3)</sup> For all Class 1 preferred shares and for Class A Series 4 preferred shares, on the earliest redemption date and every five years thereafter, the annual dividend rate will be reset to the five year Government of Canada bond yield plus a yield specified for each series. The specified yield for Class A Series 4 is 4.56%. The specified yield for Class 1 shares is: Series 1 – 3.23%, Series 3 – 1.41%, Series 5 – 2.90%, Series 7 – 3.13%, Series 9 – 2.86%, Series 11 – 2.61% and Series 13 – 2.22%.

<sup>(4)</sup> On the earliest date and every five years thereafter, Class 1 preferred shares and class A Series 4 preferred shares are convertible at the option of the holder in series one number higher than their existing series, and 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 the rate specified in footnote 3 above.

# (b) Common shares

The changes in common shares issued and outstanding are as follows.

	2013	2013		
For the years ended December 31,	Number of shares (in millions)	Amount	Number of shares (in millions)	Amount
Common shares				
Balance, January 1	1,828	\$ 19,886	1,801	\$ 19,560
Issued on exercise of stock options and deferred share units	1	17	_	_
Issued under dividend reinvestment and share purchase plans	19	331	27	326
Total	1,848	\$ 20,234	1,828	\$ 19,886

# Earnings per share

		(Restated–note 2)
For the years ended December 31,	2013	2012
Basic earnings per common share Diluted earnings per common share	\$ 1.63 1.62	\$ 0.94 0.92

The following is a reconciliation of the denominator (number of shares) in the calculation of basic and diluted earnings per share.

For the years ended December 31,	2013	2012
Weighted average number of common shares (in millions)	1,836	1,812
Dilutive stock-based awards <sup>(1)</sup> (in millions)	4	2
Dilutive convertible instruments <sup>(2)</sup> (in millions)	22	74
Weighted average number of diluted common shares (in millions)	1,862	1,888

<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 34 million (2012 – 35 million) anti-dilutive stock-based awards.

#### Quarterly dividend

On February 12, 2014, the Company's Board of Directors approved a quarterly dividend of \$0.13 per share on the common shares of MFC, payable on or after March 19, 2014 to shareholders of record at the close of business on February 26, 2014.

The Board also declared dividends on the following non-cumulative preferred shares, payable on or after March 19, 2014 to shareholders of record at the close of business on February 26, 2014.

- 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 \$0.275 per share
- Class 1 Shares Series 7 \$0.2875 per share
- Class 1 Shares Series 9 \$0.275 per share
- Class 1 Shares Series 11 \$0.25 per share
- Class 1 Shares Series 13 \$0.2375 per share

# Note 15 Capital Management

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 the stability and flexibility to pursue the Company's business objectives, ensuring best access to capital markets and maintaining target credit ratings as a result of retaining the ongoing confidence of regulators, policyholders, rating agencies, investors and other creditors: and.
- Optimizing 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 annually. The policy is integrated with the Company's risk and financial frameworks. It establishes guidelines regarding the quantity and quality of capital, internal capital mobility, and proactive management of ongoing and future capital requirements. The Board of Directors or its designated committees regularly review the Company's capital position and capital plans. Operational oversight of capital management across the enterprise is provided by the Capital Committee, consisting of senior finance and risk management executives and chaired by the Chief Actuary. In addition, the Chief Financial Officer meets regularly with senior finance and strategy executives to decide on desirable capital actions.

<sup>(2)</sup> The holders of the convertible preferred shares have the right to redeem those instruments for MFC shares prior to the conversion date.

The capital management framework takes into account the requirements of the Company as a whole as well as the needs of each of the Company's subsidiaries. The capital adequacy assessment considers expectations of key external stakeholders such as regulators and rating agencies, results of sensitivity testing as well as a comparison to the Company's peers. The Company sets its internal capital targets above regulatory requirements, monitors against these internal targets and initiates actions appropriate to achieving its business objectives.

The following measure of consolidated capital serves as the foundation of the Company's capital management activities at the MFC level.

# **Consolidated capital**

consolidated capital	(F	(Restated-note 2)		
As at December 31,	2013	2012		
Total equity Less AOCI (loss) on cash flow hedges	\$ 29,033 (84)	\$ 25,159 (185)		
Total equity less AOCI (loss) on cash flow hedges Liabilities for preferred shares and qualifying capital instruments	\$ 29,117 4,385	\$ 25,344 3,903		
Total capital	\$ 33,502	\$ 29,247		

# Restrictions on dividends and capital distributions

Dividends and capital distributions are restricted under the Insurance Company Act ("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.

Since the Company is a holding company that conducts all of its operations through regulated insurance subsidiaries (or companies owned directly or indirectly by these subsidiaries), its ability to pay future dividends will depend on the receipt of sufficient funds from its regulated insurance subsidiaries. These subsidiaries are also subject to certain regulatory restrictions under laws in Canada, the United States and certain other countries that may limit their ability to pay dividends or make other upstream distributions.

The Company and MLI have covenanted for the benefit of holders of the outstanding Trust II Notes – Series I (the "Notes") that, if interest is not paid in full in cash on the Notes on any interest payment date or if MLI elects that holders of Notes invest interest payable on the Notes on any interest payment date in a new series of Manufacturers Life Class 1 Shares, MLI will not declare or pay cash dividends on any MLI Public Preferred Shares (as defined below), if any are outstanding, and if no MLI Public Preferred Shares are outstanding, MFC will not declare or pay cash dividends on its Preferred Shares and Common Shares, in each case, until the sixth month following such deferral date. "MLI Public Preferred Shares" means, at any time, preferred shares of MLI which at that time: (a) have been issued to the public (excluding any preferred shares of MLI held beneficially by affiliates of MLI); (b) are listed on a recognized stock exchange; and (c) have an aggregate liquidation entitlement of at least \$200 million, however, if at any time, there is more than one class of MLI Public Preferred Shares outstanding, then the most senior class or classes of outstanding MLI Public Preferred Shares shall, for all purposes, be the MLI Public Preferred Shares.

# Note 16 Stock-Based Compensation

# (a) Stock options plans

Under MFC's Executive Stock Option Plan ("ESOP"), deferred share units and 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.

	201	2013		12
Options outstanding For the years ended December 31,	Number of options (in millions)	Weighted average exercise price	Number of options (in millions)	Weighted average exercise price
Outstanding, January 1 Granted Exercised Expired Forfeited	4 (1) (2)	\$ 21.93 \$ 15.52 \$ 15.21 \$ 20.09 \$ 28.72	35 6 - (7) (2)	\$ 24.24 \$ 12.56 \$ - \$ 25.84 \$ 19.08
Outstanding, December 31	32	\$ 21.14	32	\$ 21.93
Exercisable, December 31	21	\$ 24.27	20	\$ 25.93

	Options outstanding		Options exercisable		able	
For the year ended December 31, 2013	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)
\$11.08 – \$21.96 \$21.97 – \$29.00 \$29.01 – \$40.38	23 3 6	\$ 16.26 \$ 26.94 \$ 38.26	6.51 0.69 2.94	12 3 6	\$ 17.15 \$ 26.94 \$ 38.26	5.33 0.69 2.94
Total	32	\$ 21.14	5.32	21	\$ 24.27	4.00

The weighted average fair value of each option granted in 2013 has been estimated at \$3.24 (2012 – \$2.78) using the Black-Scholes option-pricing model. The pricing model uses the following assumptions for these options: risk-free interest rate of 1.25% (2012 – 1.50%), dividend yield of 3.70% (2012 – 3.60%), expected volatility of 32.0% (2012 – 32.50%) and expected life of 6.7 (2012 – 6.7) years. Expected volatility is estimated by evaluating a number of factors including historical volatility of the share price over multi-year periods.

#### (b) Deferred share units plans

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 1.3 million as at December 31, 2013 (2012 – 1.5 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 payment in cash equal to the value of the same number of common shares plus credited dividends on retirement or termination of employment. In 2013, the Company granted nil DSUs (2012 – 21,000) to certain new hires. In 2013, 86,000 DSUs (2012 – 16,000) were granted to certain employees who elected to defer receipt of all or part of their annual bonus. These DSUs vested immediately. Also, in 2013, 52,000 DSUs (2012 – 57,000) 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 0.3 million DSUs issued in the year were \$20.96 per unit, as at December 31, 2013 (0.2 million issued at \$13.51 per unit on December 31, 2012).

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,

Number of DSUs (in thousands)	2013	2012
Outstanding, January 1	2,715	3,010
Issued	253	224
Reinvested	83	124
Redeemed	(271)	(643)
Outstanding, December 31	2,780	2,715

Of the DSUs outstanding as at December 31, 2013, 1,322,000 (2012 – 1,472,000) entitle the holder to receive common shares, 723,000 (2012 – 625,000) entitle the holder to receive payment in cash and 735,000 (2012 – 618,000) entitle the holder to receive payment in cash or common shares, at the option of the holder.

# (c) Restricted share units and performance share units plans

For the year ended December 31, 2013, 6.1 million RSUs (2012 – 7.2 million) and 0.9 million PSUs (2012 – 0.8 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 \$20.96 per unit, as at December 31, 2013 (2012 – \$13.51 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 and PSUs granted in February 2013 vest on the date that is 34 months from the grant date (December 15, 2015), 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 and PSUs was \$72 and \$11, respectively, for the year ended December 31, 2013 (2012 – \$67 and \$5, respectively).

The carrying amount of the liability relating to the RSU and PSU plans at December 31, 2013 is \$184 (2012 – \$92) and is included within other liabilities.

Compensation expenses related to stock options was \$15 for the year ended December 31, 2013 (2012 – \$17).

# (d) Global share ownership plan

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. The Company matches a percentage of the employee's eligible contributions up to a maximum amount. The Company's contributions vest immediately. All contributions are used to purchase common shares in the open market.

# **Note 17 Employee Future Benefits**

The Company maintains pension plans, both defined contribution and defined benefit, and other post-employment plans for eligible employees and agents. These plans include broad-based pension plans for employees that are typically funded, as well as supplemental non-registered (non-qualified) pension plans for executives, retiree welfare plans and disability welfare plans that are typically not funded.

The Company has long been aware of the financial exposure associated with traditional defined benefit pension plans (i.e. final average pay plans and annuitized cash balance accounts) and retiree welfare plans. As such, the Company has been closing these plans to new members and, in the case of pension plans, has been replacing them with capital accumulation-type retirement plans. Capital accumulation plans include defined benefit cash balance plans, 401(k) plans and defined contribution plans under which the Company's approach is to allocate a fixed percentage of each employee's eligible earnings taking median market practice into account. To the extent that pension benefits delivered through registered or tax qualified pension plans limit the benefit that would otherwise be provided to executives, the Company may sponsor supplemental arrangements, which are for the most part unfunded.

## (a) Plan characteristics

Most of the Company's traditional defined benefit pension plans and retiree welfare plans are closed. New employees join cash balance or defined contribution pension programs, depending on the geography of employment, and are not eligible to participate in the retiree welfare plans. Reflecting the shift away from traditional defined benefit pension plans to capital accumulation plans, less than 2% of plan members continue to accrue final average pay benefits. Traditional defined benefit pension obligations still comprise approximately 50% of the Company's global pension obligations, due in large part to the inactive and retired members who no longer accrue defined benefit pensions but have not yet been paid their entire pension entitlements.

All pension arrangements are governed by local pension committees or management but significant plan changes require approval from the Company's Board of Directors.

The Company's funding policy for defined benefit pension plans is to make at least the minimum annual contributions required by regulations in the countries in which the plans are offered. Assumptions and methods prescribed for regulatory funding purposes typically differ from those used for accounting purposes. The Company measures its defined benefit obligations and fair value of plan assets for accounting purposes at December 31st each year.

The Company has defined benefit pension and/or retiree welfare plan obligations in the U.S., Canada, Japan, U.K. and Taiwan. The defined benefit pension plan in Indonesia was closed and replaced in its entirety by a defined contribution plan in 2013. The defined benefit pension plan obligations for the life insurance operations in Taiwan were settled upon sale of the business (refer to note 3). There are also disability welfare plans in Canada and the U.S.

The largest of these pension and retiree welfare plans are the main defined benefit plans for employees in the U.S. and Canada. These are considered to be the material plans that are the subject and focus of the disclosures in the balance of this note.

# U.S. defined benefit and retiree welfare plans

The Company operates a qualified cash balance plan that is open to new members, a non-qualified cash balance plan, under which benefit accruals ceased as of December 31, 2011, and a retiree welfare plan that was closed in 2005.

Actuarial valuations to determine the Company's minimum funding contributions for the qualified cash balance plan are required annually. Deficits revealed in the funding valuations must generally be funded over a period of up to seven years. It is expected that there will be no required funding for this plan in 2014. There are no plan assets set aside for the non-qualified cash balance plan; these benefits are to be funded as they come due.

The retiree welfare plan subsidizes the cost of life insurance and medical benefits for eligible retirees. The majority of those who retired after 1991 receive a fixed-dollar subsidy from the Company based on service. Employees who did not meet certain age and service criteria in 2002 generally receive access to the plan upon retirement but pay the full cost. The plan was closed to all employees hired after 2004. While assets have been set aside in a qualified trust to pay a portion of future retiree welfare benefits, this funding is optional. Retiree welfare benefits offered under the plan coordinate with the U.S. Medicare program to make optimal use of available federal financial support.

The qualified pension and retiree welfare plans are governed by the U.S. Benefits Committee, while the non-qualified pension plan is governed by the U.S. Nonqualified Plans Subcommittee.

## Canadian defined benefit and retiree welfare plans

The Company's defined benefit plans in Canada include a registered final average pay pension plan, a non-registered supplemental final average pay pension arrangement and a retiree welfare plan that was closed to new members in 2005. While both pension programs have been closed to new members since 1998, there remain 424 members under the registered plan who continue to accrue final average pay pensions.

Actuarial valuations to determine the Company's minimum funding contributions for the registered plan are required at least once every three years. Deficits revealed in the funding valuation must generally be funded over a period of up to five years. For 2014, the required funding for this plan is expected to be \$18. The supplemental non-registered pension plan is not funded; these benefits are to be funded as they come due.

The retiree welfare plan subsidizes the cost of life insurance, medical and dental benefits for eligible retirees. The Company subsidies have been changed to a fixed dollar amount for those who retire after April 30, 2013 and will be eliminated for those who retire after 2019. There are no assets set aside for the retiree welfare plan.

The registered pension plan is governed by the Canadian Pension Committee, while the supplemental non-registered arrangement is governed by the Board of Directors. The retiree welfare plan is governed by management.

# (b) Risks

In final average pay pension plans and retiree welfare plans, the Company generally bears the material risks which include interest rate, investment, longevity and health care cost inflation risks. In defined contribution plans, these risks are typically borne by the employee. In cash balance plans, the interest rate, investment (where applicable) and longevity risks are partially transferred to the employee.

Material sources of risk to the Company for all plans include:

- A decline in discount rates that increases the defined benefit obligations by more than the change in value of plan assets;
- Lower than expected rates of mortality; and for retiree welfare plans, higher than expected health care costs.

Historically, the Company has managed risks through plan design and eligibility changes which limit the size and growth of the defined benefit obligations. For funded plans, investment risks are managed through strategies aimed at improving the alignment between movements in the invested assets and movements in the obligations.

In the U.S., delegated committee representatives and management review the financial status of the qualified defined benefit pension plan at least monthly, and steps are taken in accordance with an established dynamic investment policy to reduce the risk in the plan as the funded status improves. As at December 31, 2013, the target asset allocation for the plan was 38% return-seeking assets and 62% liability-hedging assets with an ultimate target of 35% return seeking and 65% liability hedging as the funding permits.

In Canada, internal committees and management review the financial status of the registered defined benefit pension plan on at least a quarterly basis. As at December 31, 2013, the target asset allocation for the plan was 28% return-seeking assets and 72% liability-hedging assets with an ultimate target of 20% return-seeking assets and 80% liability-hedging assets by 2017.

# (c) Pension and retiree welfare plans

	Pension	plans	Retiree welfare plans	
For the years ended December 31,	2013	2012(1)	2013	2012(1)
Changes in defined benefit obligation:				
Ending balance prior year	\$ 3,596	\$ 3,524	\$ 603	\$ 682
Current service cost	32	33	2	2
Past service cost	8	_	3	_
Interest cost	141	149	24	29
Plan participants' contributions	1	1	4	5
Actuarial (gains) losses due to:				
Experience	8	17	4	(20)
Demographic assumption changes	164	(14)	25	(3)
Economic assumption changes	(285)	188	(46)	(31)
Benefits paid	(274)	(246)	(51)	(50)
Impact of changes in foreign exchange rates	176	(56)	32	(11)
Defined benefit obligation, December 31	\$ 3,567	\$ 3,596	\$ 600	\$ 603

	Pension	olans	Retiree welfare plans	
For the years ended December 31,	2013	2012(1)	2013	2012(1)
Change in plan assets:				
Fair value of plan assets, ending balance prior year	\$ 2,774	\$ 2,611	\$ 382	\$ 360
Interest income	109	112	15	16
Employer contributions	82	99	38	34
Plan participants' contributions	1	1	4	5
Benefits paid	(274)	(246)	(51)	(50)
Administration costs	(3)	(3)		. –
Actuarial gains (losses)	161	244	52	25
Impact of changes in foreign exchange rates	140	(44)	27	(8)
Fair value of plan assets, December 31	\$ 2,990	\$ 2,774	\$ 467	\$ 382

<sup>(1)</sup> See note 2(a) for description of accounting policy change.

# (d) Amounts recognized in the Consolidated Statements of Financial Position

	Pension plans		Retiree welfare plans
As at	December 31, 2013	December 31, January 1, 2012 <sup>(1)</sup>	December 31,         December 31,         January 1,           2013         2012(1)         2012(1)
<b>Development of net defined benefit liability</b> Defined benefit obligation Fair value of plan assets <sup>(2)</sup>	\$ 3,567 2,990	\$ 3,596 \$ 3,524 2,774 2,611	<b>\$ 600</b>
<b>Deficit</b> Effect of asset limit <sup>(3)</sup>	\$ 577 -	\$ 822 \$ 913 	<b>\$ 133</b>
Deficit and net defined benefit liability	\$ 577	\$ 822 \$ 913	<b>\$ 133</b>
Deficit is comprised of: Funded or partially funded plans Unfunded plans <sup>(2)</sup> Deficit and net defined benefit liability	\$ (136) 713 \$ 577	\$ 95 \$ 193 727 720 \$ 822 \$ 913	\$ (5) \$ 87 \$ 174 138 134 148 \$ 133 \$ 221 \$ 322

<sup>(1)</sup> See note 2(a) for description of accounting policy change.

# (e) Disaggregation of defined benefit obligation

	U.S. Plans				Canadian Plans			
	Pensio	n plans	Retiree we	elfare plans	Pensio	n plans	Retiree we	lfare plans
As at December 31,	2013	2012(1)	2013	2012(1)	2013	2012(1)	2013	2012(1)
Active members Inactive and retired members	\$ 615 1,969	\$ 688 1,925	\$ 39 423	\$ 40 429	\$ 261 722	\$ 280 703	\$ 48 90	\$ 45 89
Total	\$ 2,584	\$ 2,613	\$ 462	\$ 469	\$ 983	\$ 983	\$ 138	\$ 134

<sup>(1)</sup> See note 2(a) for description of accounting policy change.

<sup>(2)</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, 2007. In the event of insolvency of the Company, the rabbi trust assets can be used to satisfy claims of general creditors. At December 31, 2013, assets in the rabbi trust with respect to these defined benefit obligations were \$347 (2012 – \$360) compared to the defined benefit obligations under the merged plan of \$351 (2012 – \$361).

<sup>(3)</sup> No reconciliation has been provided for the effect of the asset limit since there was no effect in either year. For the funded pension plans, the present value of the economic benefits available in the form of reductions in future contributions to the plans is significantly greater than the surplus that would be expected to develop.

# (f) Fair value measurements

The major categories of plan assets and the actual % allocation to each category are as follows.

		U.S. Plans <sup>(1)</sup> Canadian			n Plans <sup>(2)</sup>			
	Pensio	on plans	Retiree w	elfare plans	Pensic	n plans	Retiree w	elfare plans
As at December 31, 2013	Fair value	% of total	Fair value	% of total	Fair value	% of total	Fair value	% of total
Cash and cash equivalents Equity securities <sup>(3)</sup> Debt securities Other investments <sup>(4)</sup>	\$ 25 813 1,318 171	1% 35% 57% 7%	\$ 10 254 198 5	2% 54% 43% 1%	\$ - 199 457 7	- 30% 69% 1%	-	- - - -
Total	\$ 2,327	100%	\$ 467	100%	\$ 663	100%	\$ -	_
As at December 31, 2012								
Cash and cash equivalents	\$ 49	2%	\$ 10	3%	\$ -	_	\$ -	_
Equity securities(3)	980	47%	194	51%	213	31%	_	_
Debt securities	919	44%	174	45%	457	68%	_	_
Other investments <sup>(4)</sup>	149	7%	4	1%	7	1%	_	_
Total	\$ 2,097	100%	\$ 382	100%	\$ 677	100%	\$ -	_

<sup>(1)</sup> All of the U.S. pension and retiree welfare plan assets have daily quoted prices in active markets, except for the private equity, timber and agriculture assets. In the aggregate, the latter assets represent approximately 6% and 6% of all U.S. pension and retiree welfare plan assets as at December 31, 2013 and 2012, respectively.

# (g) Net benefit cost recognized in Consolidated Statements of Income

Components of the net benefit cost for the pension plans and retiree welfare plans were as follows.

	Pension p	lans	Retiree welfare plans		
For the years ended December 31,	2013	2012(1)	2013	2012(1)	
Defined benefit current service cost	\$ 32	\$ 33	\$ 2	\$ 2	
Defined benefit administrative expenses	3	3	_	_	
Past service cost – plan amendments <sup>(2)</sup>	_	_	3	_	
Past service cost – curtailments <sup>(3)</sup>	8	_	_	_	
Service cost	\$ 43	\$ 36	\$ 5	\$ 2	
Interest on net defined benefit (asset) liability	32	37	9	13	
Defined benefit cost	\$ 75	\$ 73	\$ 14	\$ 15	
Defined contribution cost	52	51	_	_	
Net benefit cost	\$ 127	\$ 124	\$ 14	\$ 15	

<sup>(1)</sup> See note 2(a) for description of accounting policy change.

# (h) Re-measurement effects recognized in Other Comprehensive Income

For the years ended December 31,	Pension pl	ans	Retiree welfare plans		
	2013	2012(1)	2013	2012(1)	
Actuarial (gains) losses on defined benefit obligations:					
Experience	\$ 8	\$ 17	\$ 4	\$ (20)	
Demographic assumption changes	164	(14)	25	(3)	
Economic assumption changes	(285)	188	(46)	(31)	
Return on plan assets (greater) less than discount rate	(161)	(244)	(52)	(25)	
Total re-measurement effects	\$ (274)	\$ (53)	\$ (69)	\$ (79)	

<sup>(1)</sup> See note 2(a) for description of accounting policy change.

<sup>(2)</sup> All of the Canadian pension plan assets have daily quoted prices in active markets.

<sup>(3)</sup> Pension plan equity securities include direct investments in MFC common shares of \$1.0 (2012 - \$0.6) in the U.S. and nil (2012 - \$0.2) in Canada.

<sup>(4)</sup> Other U.S. plan assets include investment in private equity, timberland and agriculture.

<sup>(2)</sup> Past service cost of \$3 relates to a one month deferral of the effective date of the planned changes to the Canadian retiree welfare benefits for employees affected by the organizational design initiative.

<sup>(3)</sup> Past service cost of \$8 relates to the payment of pension benefits earlier than previously expected to employees affected by the organizational design initiative.

# (i) Assumptions

The key assumptions used by the Company to determine the defined benefit obligation and net benefit cost for the defined benefit pension plans and retiree welfare plans were as follows.

	U.S. Plans			Canadian Plans				
	Pensio	n plans	Retiree we	fare plans	Pension	n plans	Retiree we	lfare plans
For the years ended December 31,	2013	2012	2013	2012	2013	2012	2013	2012
To determine the defined benefit obligation at end of								
year <sup>(1)</sup> :								
Discount rate	4.7%	3.9%	4.7%	3.9%	4.8%	4.2%	4.9%	4.4%
Cash balance crediting rate	3.5%	2.8%	n/a	n/a	n/a	n/a	n/a	n/a
Initial health care cost trend rate <sup>(2)</sup>	n/a	n/a	8.5%	8.5%	n/a	n/a	6.5%	6.7%
To determine the defined benefit cost for the year(1):								
Discount rate	3.9%	4.5%	3.9%	4.5%	4.2%	4.5%	4.4%	4.5%
Cash balance crediting rate	2.8%	3.5%	n/a	n/a	n/a	n/a	n/a	n/a
Initial health care cost trend rate <sup>(2)</sup>	n/a	n/a	8.5%	8.5%	n/a	n/a	6.7%	6.8%

<sup>(1)</sup> Inflation and salary increase assumptions are not shown as they do not materially affect obligations and cost.

Assumptions regarding future mortality are based on published statistics and mortality tables. The current life expectancies underlying the values of the obligations in the defined benefit pension and retiree welfare plans are as follows.

As at December 31, 2013	U.S.	Canada
Life expectancy (in years) for those currently age 65		
Males	21.5	22.8
Females	23.8	24.6
Life expectancy (in years) at age 65 for those currently age 45		
Males	23.1	24.2
Females	25.5	25.5

# (j) Sensitivity of assumptions on obligation

Assumptions adopted can have a significant effect on the obligations reported for defined benefit pension and retiree welfare plans. The potential impact on the obligations arising from changes in the key assumptions is set out in the following table. The sensitivities assume all other assumptions are held constant. In reality one might expect interrelationships with other assumptions.

As at December 31, 2013	Pension plans <sup>(1)</sup>	Retiree welfare plans
Discount rate:		
Impact of a 1% increase	\$ (329)	\$ (58)
Impact of a 1% decrease	388	69
Health care cost trend rate:		
Impact of a 1% increase	n/a	25
Impact of a 1% decrease	n/a	(21)
Mortality rates <sup>(2)</sup>		
Impact of a 10% decrease	82	14

<sup>(1)</sup> Sensitivity excludes changes to the cash balance crediting rate as changes to this assumption do not have a significant impact.

# (k) Maturity profile

The weighted average duration (in years) of the defined benefit obligations is as follows.

		lans	Retiree welfare plans		
As at December 31,	2013	2012	2013	2012	
U.S. plans	8.6	9.1	8.8	9.2	
Canadian plans	11.6	11.8	14.4	12.1	

<sup>(2)</sup> The health care cost trend rate used to measure the U.S. based retiree welfare obligation was 8.5% grading to 5.0% for 2028 and years thereafter (2012 – 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 (2012 – 8.5% grading to 5.0% for 2028). In Canada, the rate used to measure the retiree welfare obligation was 6.5% grading to 4.8% for 2026 and years thereafter (2012 – 6.7% grading to 4.8% for 2026) and to measure the net benefit cost was 6.7% grading to 4.8% for 2026 and years thereafter (2012 – 6.8% grading to 4.8% for 2026).

<sup>(2)</sup> If the actuarial estimates of mortality are adjusted in future to reflect unexpected decreases in mortality, the effect of a 10% decrease in mortality rates at each future age would be an increase in life expectancy at age 65 of 0.9 and 1.0 years for U.S. males and females, respectively, and 0.7 and 0.7 years for Canadian males and females, respectively.

## (I) Cash flows - contributions

Total cash payments for all employee future benefits, comprised of cash contributed by the Company to funded defined benefit pension and retiree welfare plans, cash payments directly to beneficiaries in respect of unfunded pension and retiree welfare plans, and cash contributed to defined contribution pension plans, were as follows.

	Pension	Pension plans			
For the years ended December 31,	2013	2012	2013	2012	
Defined benefit plans Defined contribution plans	\$ 82 52	\$ 99 51	\$ 38	\$ 34 -	
Total	\$ 134	\$ 150	\$ 38	\$ 34	

The Company's best estimate of expected cash payments for employee future benefits for the year ending December 31, 2014 is \$80 for defined benefit pension plans, \$54 for defined contribution pension plans and \$24 for retiree welfare plans.

## **Note 18 Interests in Structured Entities**

In its capacities as an investor and as an investment manager, the Company has relationships with various types of entities designed to generate investment returns and/or fees. The Company also has relationships with entities used to facilitate financing for the Company. Some of these entities may have some or all of the following features: control is not readily identified based on voting rights; restricted activities designed to achieve a narrow objective; high amount of leverage; and/or highly structured capital. Such entities are identified as structured entities (individually "SE" or collectively "SEs").

In assessing the significance of a SE for disclosure purposes, the Company considers the nature of the Company's relationship with the SEs including whether they are sponsored by the Company (i.e. initially organized and managed). In addition, the significance of the relationship with the SE to the Company is assessed including consideration of factors such as the Company's investment in the SE as a percentage of the Company's total investments, returns from it as a percentage of total net investment income, its size as a percentage of total funds under management and the Company's exposure to any other risks from its involvement with the SE.

# (a) Investment SEs which are consolidated

The following table presents the total assets and liabilities for investment SEs that the Company controls and accordingly consolidates. The liabilities of these SEs do not represent claims against the general assets of the Company and the assets of these SEs can only be used to settle their own liabilities.

_		2013	2012 (Restated–note 2)		
As at December 31,	Total assets	Total liabilities <sup>(3)</sup>	Total assets	Total liabilities(3)	
Mezzanine Funds <sup>(1),(2)</sup>	\$ 47	\$ 47	\$ 48	\$ 48	
Total	\$ 47	\$ 47	\$ 48	\$ 48	

<sup>(1)</sup> The Company sponsored and acts as investment manager to a series of five investment funds which invest in the mezzanine financing of private companies ("Mezzanine Funds"). 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 two of the Mezzanine Funds, by virtue of non-cancelable management contracts and exposure to a significant proportion of their investment performance. The Mezzanine Funds are SEs because the Company has decision power over them through non-cancelable management contracts; they have limited lives and are structured to coinvest in the same issuers as the Company. The Company provides no guarantees to the Mezzanine Funds' investors against the risk of financial loss.

<sup>(2)</sup> The Company's investments in consolidated SEs are included in invested assets and the Company's returns from these SEs are included in net investment income.

<sup>(3)</sup> Includes non-controlling interests of \$25 (2012 – \$27).

## (b) Investment SEs which are unconsolidated

The following table presents summary financial information and the Company's investment and maximum exposure to loss related to significant unconsolidated investment SEs, many of which are sponsored by the Company.

As at December 31, 2013	Total assets	Total liabilities	Total equity	MFC's investment <sup>(1)</sup>	Maximum exposure to loss <sup>(2)</sup>
Mezzanine Funds <sup>(3)</sup> Collateralized debt obligations <sup>(4)</sup> Low income housing partnerships <sup>(5)</sup> Timber companies <sup>(6)</sup> Leveraged leases <sup>(7)</sup>	\$ 122 320 1,045 7,182 6,476	1,969 1,045 3,807	\$ – (1,649) – 3,375 –	\$ 6 - 278 588 2,629	\$ 6 - 279 630 2,629
Total	\$ 15,145	\$ 13,419	\$ 1,726	\$ 3,501	\$ 3,544
As at December 31, 2012 (Restated–note 2)					
Mezzanine Funds <sup>(3)</sup> Collateralized debt obligations <sup>(4)</sup> Low income housing partnerships <sup>(5)</sup> Timber companies <sup>(6)</sup> Leveraged leases <sup>(7)</sup>	\$ 125 406 1,153 7,767 6,328	2,023 1,153 3,712	\$ - (1,617) - 4,055 -	\$ 5 7 313 833 2,591	\$ 5 7 321 851 2,591
Total	\$ 15,779	\$ 13,341	\$ 2,438	\$ 3,749	\$ 3,775

- (1) The Company's investments are included in invested assets and the Company's returns from these SEs are included in net investment income and other comprehensive income.
- (2) The Company's maximum exposure to loss from each SE is limited to amounts invested in each, plus unfunded capital commitments, if any. The total unfunded capital commitments for investments held by the Company are disclosed in note 19. The maximum loss is expected to occur only upon bankruptcy of the entity or as a result of a natural disaster in the case of the timber funds.
- (3) As mentioned in note 18(a), two of the five funds are consolidated. The other three are considered significant unconsolidated SEs and are reflected in this table.
- (4) The Company sponsored certain asset-backed investment vehicles, commonly known as collateralized debt obligation funds ("CDOs"). In addition, the Company may invest in debt or equity securities issued by these CDOs. CDOs raise capital by issuing debt and equity securities and use the proceeds to purchase investments. In its capacity as investment manager, the Company earns investment advisory fees. The Company 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 CDOs are SEs because they have limited lives, their decision making rights are not vested in voting equity interests and because of their highly leveraged capital structures. The Company provides no guarantees to other investors in these CDOs against the risk of financial loss.
- (5) The Company has investments that qualify for low income housing and/or historic tax credits that also generate other tax benefits. These investments are primarily made through real estate limited partnerships or limited liability companies ("LIH Partnerships"). LIH Partnerships are sponsored and managed by their general partners or managing members who provide nominal amounts of capital and provide guarantees to the other investors. Substantially all of the capital is provided by limited partners or investor members who have limited liability and are not involved in management. 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 and has not sponsored any of them. The Company does not control any of the LIH Partnerships because the Company does not have power to govern their financial and operating policies. This power is held by the general partners or managing members who have significant exposure to the returns of their LIH Partnerships by way of fees and guarantees. LIH Partnerships are SEs because they have limited lives, their decision making rights are not vested in voting equity interests and they are structured to generate tax credits and deductible losses for their investors. The Company provides no guarantees to other parties involved with the LIH Partnerships against the risk of financial loss.
- (6) The Company sponsors timber companies and the Company's general fund and segregated funds invest in many of them. In its capacity as investment manager, the Company earns investment advisory fees and may also earn forestry management fees and performance advisory fees. The Company has determined that it does not control any timber company because it either does not have the power to govern their financial and operating policies or does not have significant variable returns from them, or both. The timber companies are SEs based on the degree of judgment required to assess control over them; the Company's employees provide management services and in many cases exercise voting rights on behalf of other investors. The Company provides no guarantees to the timber companies' investors against the risk of financial loss.
- (7) The Company's involvement in leveraged leases is through wholly owned unconsolidated entities (statutory business trusts) in which the Company is the sole beneficiary. The entities use capital provided by the Company and senior debt provided by other parties to finance the acquisition of assets which are leased to third party lessees under long term leases. The Company does not consolidate any of the trusts that are party to the lease arrangements because the Company does not control them. The Company does not have the ability to make substantive decisions over the trusts and was not solely responsible for their original design. Leveraged leases are SEs because of their narrow purpose and limited lives and because their financial and operating decisions are pre-determined such that they have no ongoing operations which require active management. The Company provides no guarantees to the trusts' senior lenders or lessees against the risk of financial loss.

# (i) Other invested assets

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 investments in power and infrastructure, oil and gas, private equity, real estate and agriculture, organized as limited partnerships and limited liability companies. These entities are not sponsored by the Company. The Company believes that its relationships with these Other Entities are not individually significant and, accordingly, does not provide any summary financial data for them nor does the Company distinguish here whether each is a SE. The Company's maximum exposure to losses as a result of its relationships with Other Entities is limited to its investment in them and amounts committed to be invested but not yet funded. The income that the Company generates from these entities is recorded in net investment income and other comprehensive income. The Company provides no guarantees to other investors in these entities against the risk of financial loss.

## (ii) Interest in securitized assets

The Company invests in mortgage/asset-backed securities issued by numerous securitization vehicles sponsored by other parties, including private issuers and government sponsored issuers, in order to generate investment returns which are recorded in net investment income. The Company does not own a controlling financial interest in any of the issuers. These securitization vehicles are SEs based on their narrow scope of activities and highly leveraged capital structures. Investments in mortgage/asset-backed securities are reported on the Consolidated Statements of Financial Position as debt securities and private placements, and their fair value and carrying values are disclosed in note 4. The Company's maximum loss from these investments is limited to amounts invested.

Commercial mortgage backed securities ("CMBS") are secured by commercial mortgages and residential mortgage-backed securities ("RMBS") are secured by residential mortgages. Asset-backed securities ("ABS") may be secured by various underlying assets primarily including credit card receivables and aviation leases. The mortgage/asset-backed securities that the Company invests in are primarily originated in North America.

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

		2013				
As at December 31,	CMBS	RMBS	ABS	Total	Total	
AAA	\$ 597	\$ 351	\$ 1,391	\$ 2,339	\$ 2,728	
AA	8	7	44	59	97	
A	83	27	384	494	254	
BBB	33	36	109	178	251	
BB and below	195	106	70	371	471	
Total Company exposure	\$ 916	\$ 527	\$ 1,998	\$ 3,441	\$ 3,801	

# (iii) Mutual funds

The Company sponsors and may invest in a range of public mutual funds with a broad range of investment styles. As sponsor, the Company organizes mutual funds that implement investment strategies, on behalf of future investors. The Company earns fees which are at market rates for providing advisory and administrative services to the mutual funds. The Company does not control its sponsored mutual funds because either the Company does not have power to govern their financial and operating policies, or its returns in the form of fees and ownership interests are not significant, or both. Certain mutual funds are SEs because their decision making rights are not vested in voting equity interests and their investors are provided with redemption rights. The Company's interest in mutual funds is limited to capital it invests. The Company's investments in mutual funds are recorded as part of its investment in public equities within the Consolidated Statements of Financial Position. For information regarding the Company's invested assets refer to note 4.

As sponsor, the Company's investment in startup capital of mutual funds as at December 31, 2013 was \$997 (2012 - \$839). The Company provides no guarantees to these mutual funds' investors against the risk of financial loss.

The Company's retail mutual fund assets under management as at December 31, 2013 are \$91,118 (2012 - \$59,979).

# (c) Financing SEs which are consolidated

The Company securitizes certain insured and variable rate commercial and residential mortgages and HELOC. This activity is facilitated by entities that are consolidated SEs because their operations are narrowly limited to issuing and servicing the Company's capital. Further information regarding the Company's mortgage securitization program is included in note 4(i).

# (d) Financing SEs which are unconsolidated

For each of the Company sponsored financing entities below, the Company has predetermined their financial and operating policies and controls any new issuances. Since the Company raises funds through these entities as opposed to investing in them, it is the investors in their capital that are exposed to their financial returns and not the Company.

Since the Company has decision power over them but does not control them, and considering their narrow purpose and range of activities, the Company views them to be SEs.

As at December 31, 2013	Total assets <sup>(1)</sup>	Total liabilities <sup>(2)</sup>	Total equity	MFC interests <sup>(3)</sup>
Manulife Financial Capital Trust II <sup>(4)</sup> Manulife Finance (Delaware), L.P. <sup>(5)</sup> John Hancock Global Funding II, Ltd <sup>(6)</sup>	\$ 1,000 1,482 376	\$ 1,003 1,313 376	\$ (3) 169 -	\$ 998 1,306 376
Total	\$ 2,858	\$ 2,692	\$ 166	\$ 2,680
As at December 31, 2012 (Restated–note 2)				
Manulife Financial Capital Trust II <sup>(4)</sup> Manulife Finance (Delaware), L.P. <sup>(5)</sup> John Hancock Global Funding II, Ltd <sup>(6)</sup>	\$ 1,000 1,615 417	\$ 1,002 1,463 417	\$ (2) 152 -	\$ 995 1,455 417
Total	\$ 3,032	\$ 2,882	\$ 150	\$ 2,867

<sup>(1)</sup> The assets of the entities consist of investments in specific financial instruments of the Company or its subsidiaries (e.g. debentures, funding agreements, and derivatives).

# **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.

Two class actions against the Company have been certified and are pending in Quebec (on behalf of Quebec residents only) and Ontario (on behalf of investors in Canada, other than Quebec). The decisions to grant leave and certification have been of a procedural nature only and there has been no determination on the merits of either claim to date.

The actions in Ontario and Quebec 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 believes that its disclosure satisfied applicable disclosure requirements and intends to vigorously defend itself against any claims based on these allegations. Due to the nature and status of these proceedings, it is not practicable to provide an estimate of the financial effect of these proceedings, an indication of the uncertainties relating to the amount or timing of any outflow, nor the possibility of any reimbursement.

# (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 \$5,070 (2012 – \$2,965) of outstanding investment commitments as at December 31, 2013, of which \$348 (2012 – \$269) mature in 30 days, \$1,602 (2012 – \$1,151) mature in 31 to 365 days and \$3,120 (2012 – \$1,545) 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, 2013, letters of credit for which third parties are beneficiary, in the amount of \$73 (2012 – \$84), were outstanding.

<sup>(2)</sup> The liabilities of the entities consist of financial instruments issued to capital markets and in some cases, derivatives.

<sup>(3)</sup> MFC interests include amounts borrowed from the entities and the Company's investment in the entities subordinate capital, if any, and foreign currency and interest swaps with them, if any.

<sup>(4)</sup> Manulife Financial Capital Trust II, an open-end trust, issued \$1,000 of Manulife Financial Capital Securities Series 1 notes to the Canadian capital markets in 2009 and invested the proceeds in senior debentures of MLI. Refer to note 13.

<sup>(5)</sup> Manulife Finance (Delaware), L.P. ("MFLP"), a wholly owned partnership, issued \$550 of senior and \$650 of subordinated debentures to the Canadian capital markets in 2006 and invested the proceeds in senior and subordinate notes of the Company and its subsidiaries. MFLP entered into swaps with the Company to manage the interest rate and foreign currency exposures arising on its investment in the senior and subordinate notes of the Company and its subsidiaries. The Company has guaranteed the payment of amounts on MFLP's debentures. Refer to notes 12, 13 and 19.

<sup>(6)</sup> 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. JHGF II entered into swaps with the Company to manage the foreign currency exposures arising on its issuance of medium term notes. The medium term notes were issued through 2005 and mature through 2015. Refer to note 9.

## (d) Guarantees

# (i) 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 unconsolidated partnership.

# (ii) 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. For the following subordinated debentures issued by MLI, MFC has provided a subordinated guarantee on the day of issuance: \$550 issued on November 18, 2011, \$500 issued on February 17, 2012, \$200 issued on February 25, 2013, and \$250 issued on November 29, 2013.

The following table sets forth certain condensed consolidating financial information for MFC.

		MFC			MLI	Other diaries of MFC on a	Consoli	dating	-	Total onsolidated
For the year ended December 31, 2013	(Θ	Guarantor)	MFLP	COI	nsolidated	ned basis		ments		amounts <sup>(1)</sup>
Total revenue Net income (loss) attributed to shareholders	\$	244 3,130	\$ 84 17	\$	18,539 3,399	\$ (487) (287)	\$ (:	292 3,129)	\$	18,672 3,130
For the year ended December 31, 2012 (Restated–note 2)										
Total revenue Net income (loss) attributed to shareholders	\$	374 1,810	\$ 65 5	\$	28,391 1,857	\$ 2,286 (167)		2,006) 1,695)	\$	29,110 1,810
As at December 31, 2013										
Invested assets	\$	28	\$ 2	\$	228,933	\$ -,	\$	(2)	\$	232,709
Total other assets Segregated funds net assets		34,023	1,480		51,853 239,871	9,603	(5:	5,911)		41,048 239,871
Insurance contract liabilities		_	_		192.824	11,923	(1	1,505)		193,242
Investment contract liabilities		_	_		2,524	_	•	_		2,524
Segregated funds net liabilities		-	-		239,871	_		-		239,871
Total other liabilities		5,528	1,313		52,078	461	(10	),422)		48,958
As at December 31, 2012 (Restated–note 2)										
Invested assets	\$	22	\$ 2	\$	224,252	\$ 3,658	\$	(2)	\$	227,932
Total other assets		30,473	1,613		58,496	9,889	(52	2,602)		47,869
Segregated funds net assets		_	-		209,197	_		_		209,197
Insurance contract liabilities		_	-		197,478	12,334	(1	1,417)		198,395
Investment contract liabilities		_	_		2,420	_		-		2,420
Segregated funds net liabilities		- - 702	1 463		209,197	- 440	/4	-		209,197
Total other liabilities		5,783	1,463		53,116	440	(10	0,975)		49,827

<sup>(1)</sup> Since MFLP is not consolidated into the results of MFC consolidated, the results of MFLP have been eliminated in the consolidating adjustments column.

# (iii) Guarantees regarding John Hancock Life Insurance Company (U.S.A.) ("JHUSA")

Details of guarantees regarding certain securities issued or to be issued by JHUSA 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.

	2013		2012	
As at December 31,	Debt securities	Other	Debt securities	Other
In respect of:				
Derivatives	\$ 3,401	\$ 10	\$ 2,154	\$ 14
Regulatory requirements	226	64	229	57
Real estate	_	52	_	174
Repurchase agreements	199	_	629	_
Non-registered retirement plans in trust	_	366	_	380
Other	2	70	2	62
Total	\$ 3,828	\$562	\$ 3,014	\$ 687

# (f) Lease obligations

The Company has a number of operating lease obligations, primarily for the use of office space. The aggregate future minimum lease payments under non-cancelable operating leases are \$795. Payments by year are included in the "Risk Management and Risk Factors" section of the Company's 2013 MD&A under Liquidity Risk.

# (g) 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 Asia, Canadian and U.S. 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 (Asia, Canadian and U.S. 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 (Asia, Canadian and U.S. Divisions).** Offers annuities, pension contracts, and mutual fund products and services. These businesses also offer a variety of retirement products to group benefit plans and Manulife Bank offers a variety of deposit and credit products to Canadian customers. Annuity contracts provide non-guaranteed, partially guaranteed and fully guaranteed investment options through general and separate account products. 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 investment performance on assets backing capital, net of amounts allocated to operating division and financing costs; Investment Division's external asset management business; Property and Casualty ("P&C") Reinsurance Business; as well as run-off reinsurance operations including variable annuities and accident and health.

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 (refer to note 8) and the income statement impact of the goodwill impairment in 2012 (refer to note 7) are reported in the Corporate and Other segment.

As at and for the year ended December 31, 2013	Asia Division	Canadian Division	U.S. Division	orporate nd Other	Total
Revenue Premium income Life and health insurance Annuities and pensions	\$ 5,769 561	\$ 3,208 566	\$ 6,294 1,030	\$ 82 -	\$ 15,353 2,157
Net premium income Net investment income (loss) Other revenue	\$ 6,330 605 1,979	\$ 3,774 (358) 2,644	\$ 7,324 (5,620) 4,052	\$ 82 (2,374) 234	\$ 17,510 (7,747) 8,909
Total revenue	\$ 8,914	\$ 6,060	\$ 5,756	\$ (2,058)	\$ 18,672
Contract benefits and expenses Life and health insurance Annuities and pensions	\$ 4,171 (346)	\$ 2,526 (816)	\$ 376 (2,835)	\$ <b>777</b> –	\$ 7,850 (3,997)
Net benefits and claims (recovery) Interest expense Other expenses	\$ 3,825 78 2,121	\$ 1,710 460 3,149	\$ (2,459) 46 4,076	\$ 777 461 681	\$ 3,853 1,045 10,027
Total contract benefits and expenses	\$ 6,024	\$ 5,319	\$ 1,663	\$ 1,919	\$ 14,925
Income (loss) before income taxes Income tax recovery (expense)	\$ 2,890 (265)	\$ 741 8	\$ 4,093 (1,185)	\$ (3,977) 861	\$ 3,747 (581)
Net income (loss) Less net income (loss) attributed to:	\$ •	\$ 749	\$ 2,908	\$ (3,116)	\$ 3,166
Non-controlling interests Participating policyholders	39 67	– (79)	- -	9	48 (12)
Net income (loss) attributed to shareholders	\$ 2,519	\$ 828	\$ 2,908	\$ (3,125)	\$ 3,130
Total assets	\$ 60,708	\$ 137,723	\$ 295,394	\$ 19,803	\$ 513,628

As at and for the year ended December 31, 2012 (Restated-note 2)	Asia Division	Canadian Division	U.S. Division	Corporate nd Other	Total
Revenue Premium income Life and health insurance Annuities and pensions	\$ 6,224 821	\$ 3,056 543	\$ 5,521 1,161	\$ 97 -	\$ 14,898 2,525
Net premium income prior to FDA coinsurance Premiums ceded relating to FDA coinsurance (note 8(c)) Net investment income (loss) Other revenue	\$ 7,045 - 2,194 716	\$ 3,599 - 3,852 2,778	\$ 6,682 (7,229) 6,612 3,636	\$ 97 - (1,031) 159	\$ 17,423 (7,229) 11,627 7,289
Total revenue	\$ 9,955	\$ 10,229	\$ 9,701	\$ (775)	\$ 29,110
Contract benefits and expenses Life and health insurance Annuities and pensions	\$ 5,654 (103)	\$ 4,710 1,089	\$ 8,363 (5,009)	\$ 2,349 –	\$ 21,076 (4,023)
Net benefits and claims Interest expense Other expenses	\$ 5,551 69 2,182	\$ 5,799 374 3,067	\$ 3,354 66 3,824	\$ 2,349 425 807	\$ 17,053 934 9,880
Total contract benefits and expenses	\$ 7,802	\$ 9,240	\$ 7,244	\$ 3,581	\$ 27,867
Income (loss) before income taxes Income tax recovery (expense)	\$ 2,153 (94)	\$ 989 21	\$ 2,457 (538)	\$ (4,356) 1,103	\$ 1,243 492
Net income (loss) Less net income (loss) attributed to: Non-controlling interests	\$ 2,059 34	\$ 1,010 –	\$ 1,919 -	\$ (3,253) (6)	\$ 1,735 28
Participating policyholders	56	(159)	_	_	(103)
Net income (loss) attributed to shareholders	\$ 1,969	\$ 1,169	\$ 1,919	\$ (3,247)	\$ 1,810
Total assets	\$ 63,257	\$ 130,190	\$ 271,489	\$ 20,062	\$ 484,998

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.

# By geographic location

For the year ended December 31, 2013	Asia	Canada	U.S.	Other	Total
Revenue					
Premium income					
Life and health insurance	\$ 5,828	\$ 2,725	\$ 6,297	\$ 503	\$ 15,353
Annuities and pensions	561	566	1,030	-	2,157
Net premium income	\$ 6,389	\$ 3,291	\$ 7,327	\$ 503	\$ 17,510
Net investment income (loss)	(911)	(311)	(6,536)	11	(7,747)
Other revenue	1,981	2,607	4,285	36	8,909
Total revenue	\$ 7,459	\$ 5,587	\$ 5,076	\$ 550	\$ 18,672

For the year ended December 31, 2012 (Restated–note 2)					
Revenue					
Premium income					
Life and health insurance	\$ 6,278	\$ 2,590	\$ 5,528	\$ 502	\$ 14,898
Annuities and pensions	821	543	1,161	_	2,525
Net premium income	\$ 7,099	\$ 3,133	\$ 6,689	\$ 502	\$ 17,423
Premium ceded relating to FDA coinsurance (note 8(c))	_	_	(7,229)	_	(7,229)
Net investment income	1,522	3,784	6,253	68	11,627
Other revenue	749	2,729	3,805	6	7,289
Total revenue	\$ 9.370	\$ 9.646	\$ 9.518	\$ 576	\$ 29.110

# **Note 21 Related Parties**

# (a) Transactions with related parties

Related party transactions have been in the normal course of business and 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.

For the years ended December 31,	2013	2012
Short-term employee benefits	\$ 21	\$ 23
Post-employment benefits	2	2
Share-based payments	23	23
Termination benefits	-	1
Other long-term benefits	2	2
Total	\$ 48	\$ 51

# 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, 2013	Ownership Percentage <sup>(1)</sup>	Address	Description
he Manufacturers Life Insurance Company	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	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
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
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	Wilmington, Delaware, U.S.A.	U.S. broker-dealer
John Hancock Insurance Agency, Inc.	100	Wilmington, Delaware, U.S.A.	U.S. insurance agency
Manulife Reinsurance Limited	100	Hamilton, Bermuda	Provides life and financial reinsurance primarily to affiliated
Manulife Reinsurance (Bermuda) Limited	100	Hamilton, Bermuda	Provides life and annuity reinsurance affiliated
Manulife Bank of Canada	100	Waterloo, Canada	Provides integrated banking products and service options not available from an 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

s at December 31, 2013	Ownership Percentage <sup>(1)</sup>	Address	Description
Manulife Resources Limited	100	Calgary,	Hold oil and gas properties
Manulife Properties Limited Partnership	100	Canada Toronto,	Hold oil and gas royalties and European equities
<u>'</u>		Canada	3 , 1 1
Manulife Western Holdings Limited Partnership	100	Calgary, Canada	Hold 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, casualty and financial reinsurance
Manulife Financial Asia Limited	100	Hong Kong, China	Holding company
Manulife (Cambodia) PLC	100	Phnom Penh, Cambodia	Cambodian life insurance company
Manufacturers Life Reinsurance Limited	100	St. Michael, Barbados	Provides life and annuity reinsurance to affiliates
Manulife (Vietnam) Limited	100	Ho Chi Minh	Vietnamese life insurance company
Manulife Asset Management (Vietnam) Company Ltd.	100	City, Vietnam Ho Chi Minh	Vietnamese fund management company
Manulife International Holdings Limited	100	City, Vietnam Hong Kong,	Holding company
<u> </u>		China	
Manulife (International) Limited	100	Hong Kong, China	Life insurance company serving Hong Kong and Macau
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 Investments Japan Limited	100	Tokyo, Japan	Investment management and mutual fund business
Manulife Insurance (Thailand) Public Company Limited	91.5	Bangkok, Thailand	Thai life insurance company
Manulife Asset Management (Thailand) Company Limited	91.5	Bangkok, Thailand	Investment management
Manulife Holdings Berhad	59.5	Kuala Lumpur, Malaysia	Holding company
Manulife Insurance Berhad	59.5	Kuala Lumpur, Malaysia	Malaysian life insurance company
Manulife Asset Management Services Berhad	59.5	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
The Manufacturers Life Insurance Co. (Phils.), Inc.	100	Makati City, Philippines	Filipino life insurance company
PT Asuransi Jiwa Manulife Indonesia	100	Jakarta, Indonesia	Indonesian life insurance company
PT Manulife Aset Manajemen Indonesia	100	Jakarta, Indonesia	Indonesian investment management company marketing mutual funds and discretionary funds
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
	100	Mississauga,	Developer and operator of hydro-electric power projects
Regional Power Inc.	100	Canada	1 1 3 1 1 3

<sup>(1)</sup> MFC voting rights percentages are the same as the ownership percentages except for Manulife Insurance (Thailand) Public Company Limited and Manulife Asset Management (Thailand) Company Limited where MFC's voting rights are 97.4%, respectively.

# Note 23 Segregated Funds

The Company manages a number of segregated funds, which generate fee revenue, on behalf of policyholders. Policyholders are provided the opportunity to invest in different categories of segregated funds that respectively hold a range of underlying investments. The Company retains legal title to the underlying investments; however, returns from these investments belong to the policyholders. Accordingly, the Company does not bear the risk associated with these assets outside of guarantees offered on certain variable life and annuity products. The "Risk Management and Risk Factors" section of the Company's 2013 MD&A provides information regarding variable annuity and segregated fund guarantees.

The composition of net assets by categories of segregated funds was within the following ranges for the year ended December 31, 2013.

Type of fund	Percentage
Money market funds	2 to 3%
Fixed income funds	12 to 15%
Balanced funds	29 to 32%
Equity funds	50 to 56%

Money market funds consist of investments that have a term of maturity of less than one year. Fixed income funds primarily consist of investments in fixed grade income securities and may contain smaller investments in diversified equities or high-yield debt securities. Relative to fixed income funds, balanced funds consist of fixed income securities and a larger equity investment component. The types of equity funds available to policyholders range from low volatility equity funds to aggressive equity funds. Equity funds invest in a varying mix of Canadian, U.S. and global equities.

The underlying investments of the segregated funds consist of both individual securities and mutual funds (collectively "net assets"), some of which may be considered to be structured entities. The carrying value and change in segregated funds net assets are as follows.

# Segregated funds net assets

	(	Restated–note 2)
As at December 31,	2013	2012
Investments at market value		
Cash and short-term securities	\$ 2,540	\$ 2,099
Debt securities	7,473	2,718
Equities	6,615	9,798
Mutual funds	220,936	192,370
Other investments	2,595	2,520
Accrued investment income	89	77
Other liabilities, net	(202)	(219)
Total segregated funds net assets	\$ 240,046	\$ 209,363
Composition of segregated funds net assets		
Held by policyholders	\$ 239,871	\$ 209,197
Held by Company (seed money reported in other invested assets)	175	166
Total segregated funds net assets	\$ 240,046	\$ 209,363

The total segregated funds net assets are presented separately on the Consolidated Statements of Financial Position.

# Changes in segregated funds net assets

		(Restated–note 2)
For the years ended December 31,	2013	2012
Net policyholder cash flow Deposits from policyholders Net transfers to general fund Payments to policyholders	\$ 23,059 (624) (30,031)	\$ 23,533 (718) (24,818)
	\$ (7,596)	\$ (2,003)
Investment related Interest and dividends Net realized and unrealized investment gains	\$ 8,490 25,720	\$ 6,183 16,975
	\$ 34,210	\$ 23,158
Other  Management and administration fees Sale of Taiwan insurance business Impact of changes in foreign exchange rates	\$ (3,698) (522) 8,290	\$ (3,491) - (5,294)
	\$ 4,070	\$ (8,785)
Net additions (deductions) Segregated funds net assets, beginning of year	\$ 30,684 209,362	\$ 12,370 196,993
Segregated funds net assets, end of year	\$ 240,046	\$ 209,363

Information regarding the determination of the fair values of assets held by the segregated funds is included in note 11.

The net assets may be exposed to a variety of financial and other risks. These risks are primarily mitigated by investment guidelines that are actively monitored by professional and experienced portfolio advisors. The Company is not exposed to these risks beyond the liabilities related to the guarantees associated with certain variable life and annuity products. Accordingly, the Company's exposure to loss from segregated fund products is limited to the value of these guarantees.

These guarantee liabilities are recorded within the Company's insurance contract liabilities. Assets supporting these guarantees are recognized in invested assets according to their investment type. The "Risk Management and Risk Factors" section of the Company's 2013 MD&A provides information regarding the risks associated with variable annuity and segregated fund guarantees.

# Note 24 Information Provided in Connection with Investments in Deferred Annuity Contracts and Signature Notes Issued or Assumed by John Hancock Life Insurance Company (U.S.A.)

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 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.

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 *Signature*Notes issued by the Life Company.

MFC fully and unconditionally guaranteed the payment obligations of JHUSA 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 are collectively referred to in this note as the "Guaranteed Securities". JHUSA 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 *Signature*Notes issued or assumed by JHUSA 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 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 15.

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 described in note 15.

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, 2013	MFC (Guarantor)	JHUSA (Issuer)	Other Subsidiaries	Consolidation Adjustments	Consolidated MFC
Assets Invested assets Investments in unconsolidated subsidiaries Reinsurance assets Other assets Segregated funds net assets	\$ 28 33,831 - 192 -	\$ 89,552 4,561 25,891 19,258 150,448	\$ 143,184 13,269 6,454 23,547 90,812	\$ (55) (51,661) (14,902) (19,392) (1,389)	\$ 232,709 - 17,443 23,605 239,871
Total assets	\$ 34,051	\$ 289,710	\$ 277,266	\$ (87,399)	\$ 513,628
Liabilities and equity Insurance contract liabilities Investment contract liabilities and deposits Other liabilities Long-term debt Liabilities for preferred shares and capital instruments Segregated funds net liabilities Shareholders' equity Participating policyholders' equity Non-controlling interests	\$ - 574 4,610 344 - 28,523 -	\$ 103,945 1,444 19,561 - 1,077 150,448 13,235 -	\$ 104,847 1,085 37,974 15 3,645 90,812 38,379 134 375	\$ (15,550) (5) (18,311) 150 (681) (1,389) (51,614) - 1	\$ 193,242 2,524 39,798 4,775 4,385 239,871 28,523 134 376
Total liabilities and equity	\$ 34,051	\$ 289,710	\$ 277,266	\$ (87,399)	\$ 513,628

# **Condensed Consolidating Statement of Financial Position**

As at December 31, 2012 (Restated–note 2)	MFC (Guarantor)	JHUSA (Issuer)	Other Subsidiaries	Consolidation Adjustments	Consolidated MFC
Assets					
Invested assets	\$ 22	\$ 87,557	\$ 140,422	\$ (69)	\$ 227,932
Investments in unconsolidated subsidiaries	30,069	3,991	11,419	(45,479)	_
Reinsurance assets	_	29,320	6,785	(17,424)	18,681
Other assets	404	21,270	25,859	(18,345)	29,188
Segregated funds net assets	_	127,717	83,551	(2,071)	209,197
Total assets	\$ 30,495	\$ 269,855	\$ 268,036	\$ (83,388)	\$ 484,998
Liabilities and equity					
Insurance contract liabilities	\$ -	\$ 107,585	\$ 108,864	\$ (18,054)	\$ 198,395
Investment contract liabilities and deposits	_	1,417	1,009	(6)	2,420
Other liabilities	557	20,709	36,773	(17,161)	40,878
Long-term debt	4,882	_	14	150	5,046
Liabilities for preferred shares and capital instruments	344	1,008	3,366	(815)	3,903
Segregated funds net liabilities	_	127,717	83,551	(2,071)	209,197
Shareholders' equity	24,712	11,419	33,934	(45,353)	24,712
Participating policyholders' equity	_	_	146	_	146
Non-controlling interests	-	_	379	(78)	301
Total liabilities and equity	\$ 30,495	\$ 269,855	\$ 268,036	\$ (83,388)	\$ 484,998

# **Condensed Consolidating Statement of Income**

For the year ended December 31, 2013	(Guara	MFC (Guarantor)		JHUSA (Issuer)		Other bsidiaries	Consolidation Adjustments		Consolidated MFC	
Revenue Net premium income Net investment income (loss) Net other revenue	\$	- 250 (6)	\$	5,054 (5,220) 1,547		12,322 (1,507) 4,971	\$	(1,270) 2,397		17,510 (7,747) 8,909
Total revenue	\$	244	\$	1,381	\$	15,786	5	1,261	\$	18,672
Policy benefits and expenses Net benefits and claims Commissions, investment and general expenses Other expenses	\$	- 22 280	\$	(2,692) 2,791 212	\$	2,728 8,168 2,155	\$	3,817 (1,265) (1,291)	\$	3,853 9,716 1,356
Total policy benefits and expenses	\$	302	\$	311	\$	13,051	\$	1,261	\$	14,925
Income (loss) before income taxes Income tax (expense) recovery	\$	(58) 12	\$	1,070 (206)	\$	2,735 (387)	\$	5 -	\$	3,747 (581)
Income (loss) after income taxes Equity in net income (loss) of unconsolidated subsidiaries	\$	(46) ,176	\$	864 454	\$	2,348 1,318	\$	(4,948)	\$	3,166 –
Net income (loss)	\$ 3	,130	\$	1,318	\$	3,666	\$	(4,948)	\$	3,166
Net income (loss) attributed to: Non-controlling interests Participating policyholders Shareholders	\$	– – ,130	\$	- (9) 1,327	\$	49 (14) 3,631	\$	(1) 11 (4,958)	\$	48 (12) 3,130
	\$ 3	,130	\$	1,318	\$	3,666	\$	(4,948)	\$	3,166

# **Condensed Consolidating Statement of Income**

For the year ended December 31, 2012 (Restated–note 2)		MFC (Guarantor)				Other Subsidiaries	Consolidation Adjustments	Consolidated MFC
Revenue Net premium income Net investment income (loss) Net other revenue	\$ 37		\$ (679) 5,286 1,681	\$ 10,873 7,320 7,707	\$ – (1,350) (2,102)	\$ 10,194 11,627 7,289		
Total revenue	\$ 37	4	\$ 6,288	\$ 25,900	\$ (3,452)	\$ 29,110		
Policy benefits and expenses Net benefits and claims Commissions, investment and general expenses Goodwill impairment Other expenses  Total policy benefits and expenses  Income (loss) before income taxes Income tax (expense) recovery	30 \$ 32 \$ 5 (1	8 - 3 1 1 3 4)	\$ 3,219 2,771 - 169 \$ 6,159 \$ 129 344	\$ 14,642 7,954 200 2,043 \$ 24,839 \$ 1,061 162	\$ (808) (1,362) - (1,282) \$ (3,452) \$ - -	\$ 17,053 9,381 200 1,233 \$ 27,867 \$ 1,243 492		
Income (loss) after income taxes Equity in net income (loss) of unconsolidated subsidiaries	\$ 3 1,77	-	\$ 473 196	\$ 1,223 669	\$ – (2,636)	\$ 1,735 -		
Net income (loss)	\$ 1,81	0	\$ 669	\$ 1,892	\$ (2,636)	\$ 1,735		
Net income (loss) attributed to: Non-controlling interests Participating policyholders Shareholders	\$ 1,81 \$ 1,81	0	\$ - (47) 716 \$ 669	\$ 31 (102) 1,963 \$ 1,892	\$ (3) 46 (2,679) \$ (2,636)	\$ 28 (103) 1,810 \$ 1,735		

# **Consolidating Statement of Cash Flows**

For the year ended December 31, 2013	(Gua	MFC rantor)		JHUSA (Issuer)	Su	Other bsidiaries		lidation stments	Con	solidated MFC
Operating activities	_		_		_			(4.0.40)		
Net income (loss) Adjustments for non-cash items in net income (loss)	\$	3,130	\$	1,318	\$	3,666	\$	(4,948)	\$	3,166
Equity in net income of unconsolidated subsidiaries	(	(3,176)		(454)		(1,318)		4,948		_
Increase (decrease) in insurance contract liabilities		_		(9,025)		(1,105)		_		(10,130)
Increase (decrease) in investment contract liabilities (Increase) decrease in reinsurance assets		_		54 3,904		108 (2,378)		_		162 1,526
Amortization of premium/discount on invested assets		_		(20)		17		_		(3)
Other amortization		3		89		334		_		426
Net realized and unrealized losses and impairments on assets		20		9,676		8,090		_		17,786
Gain on sale of Taiwan insurance business		(76)		632		(479) (81)		_		(479) 475
Deferred income tax expense (recovery) Stock option expense		(76) –		3		12		_		4/5 15
Net income (loss) adjusted for non-cash items	\$	(99)	\$	6,177	\$	6,866	\$	_	\$	12,944
Dividends from unconsolidated subsidiary		1,200		-		319		(1,519)		-
Changes in policy related and operating receivables and payables		(57)		(6,014)		2,835				(3,236)
Cash provided by (used in) operating activities	\$	1,044	\$	163	\$	10,020	\$	(1,519)	\$	9,708
Investing activities			_	(20.074)		(46 027)			_	(67.004)
Purchases and mortgage advances Disposals and repayments	\$	_	>	(20,974) 21,032	>	(46,827) 36,689	\$	_	>	(67,801) 57.721
Changes in investment broker net receivables and payables		_		61		(169)		_		(108)
Investment in common shares of subsidiaries		(401)		_		-		401		-
Net cash decrease from purchase of subsidiary		_		-		(359)		_		(359)
Redemption of preferred shares of subsidiaries		80		(02)		-		(80)		-
Capital contribution to unconsolidated subsidiaries Return of capital from unconsolidated subsidiaries		(247)		(93) 278		_		340 (278)		_
Notes receivable from parent		_		2/0		(222)		222		_
Notes receivable from subsidiaries		205		3		-		(208)		_
Cash provided by (used in) by investing activities	\$	(363)	\$	307	\$	(10,888)	\$	397	\$	(10,547)
Financing activities										
Increase (decrease) in repurchase agreements and securities										
sold but not yet purchased	\$	-	\$	(464)	\$	(7)	\$	-	\$	(471)
Repayment of long-term debt Issue of capital instruments, net		(350)		_		448		_		(350) 448
Net redemption of investment contract liabilities		_		(125)		(80)		_		(205)
Funds repaid, net		_		(5)		(122)		_		(127)
Secured borrowings from securitization transactions		_		_		750		_		750
Changes in bank deposits, net		(764)		-		981		-		981
Shareholder dividends paid in cash Contributions from (distributions to) non-controlling interests, net		(761)		_		_ 15		_		(761) 15
Common shares issued, net		17		_		401		(401)		17
Preferred shares issued, net		196		_		(80)		80		196
Dividends paid to parent		-		(319)		(1,200)		1,519		-
Gain (loss) on intercompany transaction		_		79		(79)		(2.40)		_
Capital contributions by parent Return of capital to parent		_		_		340 (278)		(340) 278		_
Notes payable to parent		_		_		(208)		208		_
Notes payable to subsidiaries		222		-		-		(222)		-
Cash provided by (used in) financing activities	\$	(676)	\$	(834)	\$	881	\$	1,122	\$	493
Cash and short-term securities										
Increase (decrease) during the year	\$	5	\$	(364)	\$	13	\$	-	\$	(346)
Effect of foreign exchange rate changes on cash and short-term securities Balance, beginning of year		1 22		259 3,747		219 8,984		_		479 12,753
Balance, December 31	\$	28	\$		\$	9,216	\$			12,733
Cash and short-term securities		20	ڊ	3,042	ڊ	3,210	ڊ		,	12,000
Beginning of year										
Gross cash and short-term securities	\$	22	\$	4,122	\$	9,242	\$	-	\$	13,386
Net payments in transit, included in other liabilities		-		(375)		(258)		_		(633)
Net cash and short-term securities, January 1	\$	22	\$	3,747	\$	8,984	\$	-	\$	12,753
End of year		20	_	4.004	_	0.544	_		_	42.622
Gross cash and short-term securities  Net payments in transit, included in other liabilities	\$	28	\$	4,091 (449)	\$	9,511 (295)	\$	_	\$	13,630 (744)
Net cash and short-term securities, December 31	\$	28	\$	3,642	\$	9,216	\$			12,886
<u> </u>				-,	_	-,0			_	,500
Supplemental disclosures on cash flow information:										
Interest received	\$	_	\$	3,997	\$	4,619	\$	_	\$	8,616
Interest received Interest paid	\$	_ 290	\$	3,997 107 791	\$	4,619 1,137 319	\$	- (488)	\$	8,616 1,046 1,110

# **Consolidating Statement of Cash Flows**

For the year ended December 31, 2012 (Restated–note 2)	(Guar	MFC antor)		JHUSA (Issuer)	Su	Other bsidiaries		idation tments	Con	solidated MFC
Operating activities	·	1 010	ď	660	ď	1 002	ď	(2.620)	đ	1 725
Net income (loss) Adjustments for non-cash items in net income (loss)	Þ	1,810	\$	669	\$	1,892	<b>)</b>	(2,636)	\$	1,735
Equity in net income of unconsolidated subsidiaries	(	1,771)		(196)		(669)		2,636		12.040
Increase in insurance contract liabilities Increase in investment contract liabilities		_		6,455 42		6,585 29		_		13,040 71
(Increase) decrease in reinsurance assets, net of premium ceded				(2.207)		1 271				(026)
relating to FDA coinsurance (note 8(c)) Amortization of premium/discount on invested assets		_		(2,207) 11		1,371 15		_		(836) 26
Other amortization		(2)		84		308		_		390
Net realized and unrealized gains and impairments on assets Deferred income tax expense (recovery)		(20) 14		(614) (886)		(1,490) (654)		_		(2,124) (1,526)
Stock option expense Goodwill impairment		_		3		14 200		_		17 200
Net income (loss) adjusted for non-cash items	\$	31	\$	3,361	\$	7,601	\$		<b></b>	10,993
Dividends from unconsolidated subsidiary	Ф	854	Ф	J,JU1 -	Þ	· –	Þ	(854)	Ф	10,995
Changes in policy related and operating receivables and payables		11		(1,084)		875		_		(198)
Cash provided by (used in) operating activities	\$	896	\$	2,277	\$	8,476	\$	(854)	\$	10,795
Investing activities Purchases and mortgage advances	\$	_	<b>\$</b>	(20,070)	<b>\$</b>	(61,705)	\$	_	¢	(81,775)
Disposals and repayments	Ψ	_	Ψ	18,803	Ψ	52,308	Ą	_	Ų	71,111
Changes in investment broker net receivables and payables Investment in common shares of subsidiaries		- (686)		(32)		(139)		- 686		(171)
Capital contribution to unconsolidated subsidiaries		(293)		(113)		_		406		_
Return of capital from unconsolidated subsidiaries Notes receivables from affiliates		_		39		- 45		(39) (45)		_
Notes receivable from parent		_		_		(72)		72		_
Notes receivable from subsidiaries		24		7		(129)		98		
Cash provided by (used in) by investing activities	\$	(955)	\$	(1,366)	\$	(9,692)	\$	1,178	\$	(10,835)
Financing activities Increase (decrease) in repurchase agreements and securities sold but not yet										
purchased	\$	_	\$	(177)	\$	191	\$	_	\$	14
Issue of capital instruments, net Repayment of capital instruments		_		_		497 (1,000)		_		497 (1,000)
Net redemption of investment contract liabilities		_		(36)		(84)		_		(120)
Funds repaid, net Secured borrowings from securitization transactions		_		(2)		(9) 500		_		(11) 500
Changes in bank deposits, net		_		_		880		_		880
Shareholder dividends paid in cash Contributions from (distributions to) non-controlling interests, net		(733)		_ (6)		_ 35		_		(733) 29
Common shares issued, net		_		(0)		686		(686)		_
Preferred shares issued, net Dividends paid to parent		684		_		(854)		- 854		684
Capital contributions by parent		_		_		406		(406)		_
Return of capital to parent Notes payable to affiliates		_		_ (45)		(39)		39 45		_
Notes payable to armites  Notes payable to parent		_		129		(31)		(98)		_
Notes payable to subsidiaries		72		_				(72)		
Cash provided by (used in) financing activities	\$	23	\$	(137)	\$	1,178	\$	(324)	\$	740
Cash and short-term securities Increase (decrease) during the year	\$	(36)	\$	774	\$	(38)	\$	_	\$	700
Effect of foreign exchange rate changes on cash and short-term securities	Ψ	. –	4	(65)	Ψ	(148)	4	-	4	(213)
Balance, beginning of year		58		3,038		9,170				12,266
Balance, December 31	\$	22	\$	3,747	\$	8,984	\$	_	\$	12,753
Cash and short-term securities Beginning of year Gross cash and short-term securities	\$	58	\$	3,363	ď	0.750	\$		ď	12,799
Net payments in transit, included in other liabilities	Þ	-	Þ	(325)	\$	9,378 (208)	Þ	_	Þ	(533)
Net cash and short-term securities, January 1	\$	58	\$	3,038	\$	9,170	\$	_	\$	12,266
End of year										
Gross cash and short-term securities Net payments in transit, included in other liabilities	\$	22	\$	4,122 (375)	\$	9,242 (258)	\$	_	\$	13,386 (633)
Net cash and short-term securities, December 31	\$	22	\$	3,747	\$	8,984	\$	_	\$	12,753
Supplemental disclosures on cash flow information:										
Interest received Interest paid Income taxes paid	\$	309 –	\$	4,115 77 –	\$	4,554 1,188 466	\$	(1) (624) –	\$	8,668 950 466

# Note 25 Subsequent Events

On February 25, 2014, MFC issued eight million Class 1 Shares Series 15 ("Class 1 Series 15 Preferred Shares") at a price of \$25 per share, for an aggregate amount of \$200. The Class 1 Series 15 Preferred Shares are entitled to non-cumulative preferential cash dividends, payable quarterly, if and when declared, at a per annum rate of 3.90% until June 19, 2019 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 2.16%. On June 19, 2019 and on June 19 every five years thereafter, the Class 1 Series 15 Preferred Shares will be convertible at the option of the holder into Class 1 Shares Series 16 ("Class 1 Series 16 Preferred Shares"). The Class 1 Series 16 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 2.16%. Subject to regulatory approval, MFC may redeem Class 1 Series 15 Preferred Shares, in whole or in part, at par, on June 19, 2019 and on June 19 every five years thereafter.

On February 21, 2014, MLI issued \$500 in subordinated fixed/floating debentures, which mature February 21, 2024. The debentures are guaranteed by MFC on a subordinated basis. The debentures bear interest at a fixed rate of 2.811% per annum, payable semi-annually for five years and thereafter at the 3-month Bankers' Acceptance rate plus 0.80% payable quarterly. With regulatory approval, MLI may redeem the debentures, in whole or in part, on or after February 21, 2019, at par, together with accrued and unpaid interest. The subordinated debentures form part of the Company's Tier 2B regulatory capital.

# **Note 26 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 Consolidated Statements of Financial Position of the Company, excluding any value associated with future new business. The change in embedded value between reporting periods is used by Manulife Financial's management 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 IFRS shareholders' equity plus the value of in-force business. The adjusted IFRS shareholders' equity is the fiscal year end IFRS shareholders' equity adjusted for goodwill and intangibles, fair value of surplus assets and third party debt. The value of in-force business is the present value of expected future 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 MCCSR required capital framework.

As at December 31, 2013, Manulife Financial's embedded value was \$41.7 billion, an increase of \$3.7 billion from December 31, 2012. Normal operating activities increased embedded value by \$3.0 billion as interest on last year's embedded value and the embedded value created by new business were partially offset by experience variances and the impact of actuarial assumption changes. Updates to non-operational items increased embedded value by \$0.7 billion, as a result of favourable currency impacts due to the appreciation of the US Dollar and Hong Kong Dollar, partly offset by the impact of other capital movements and shareholder dividends.

## **Embedded Value**

For the years ended December 31,		
(C\$ in millions unless otherwise stated)	2013	2012
Embedded value as at January 1	\$ 37,998	\$ 36,065
Interest on embedded value	3,166	3,076
New business	1,202	1,024
Experience variances and changes in actuarial assumptions	(1,412)	(481)
Embedded value before discount rate/currency and capital movements	\$ 40,954	\$ 39,684
Discount rate changes	_	313
Surplus yield changes	10	(34)
Currency	1,400	(1,178)
Common shareholder dividends	(961)	(947)
Other capital movements <sup>(1)</sup>	302	160
Embedded value as at December 31	\$ 41,705	\$ 37,998
Embedded value per share	\$ 22.62	\$ 20.79
Annual growth rate in embedded value		
(before the impact of discount rate, currency, dividends and capital changes)	8%	10%

<sup>(1)</sup> Includes share issues, option exercises and fair value adjustments to shareholders' equity.

The embedded value can be reconciled to the Consolidated Financial Statements as follows:

Αs	at	Dec	em	ber	31.

(C\$ in millions unless otherwise stated)	2013	2012
Shareholders' equity on Consolidated Statements of Financial Position (excludes preferred shares) Fair value adjustments Goodwill & (post-tax) intangibles	\$ 25,831 (438) (4,532)	\$ 22,952 (1,320) (4,408)
Value of adjusted IFRS shareholders' equity	\$ 20,861	\$ 17,224
Pre-tax value of expected profit embedded in insurance and investment contract liabilities (reported actuarial provision for adverse deviation – PfAD) <sup>(1)</sup> Adjustments: Value of additional policy margins not captured in reported actuarial PfAD Taxes Converting discount rates from valuation rates to higher cost of capital adjusted discount rates	\$ 44,700 9,211 (13,483) (10,968)	\$ 47,997 9,404 (14,223) (13,177)
Gross value of in-force business Cost of locked-in capital	\$ 29,460 (8,616)	\$ 30,001 (9,227)
Value of in-force business <sup>(2)</sup>	\$ 20,844	\$ 20,774
Embedded value	\$ 41,705	\$ 37,998

<sup>(1)</sup> The reported actuarial PfAD includes non-capitalized segregated fund margins.

<sup>(2)</sup> The 2013 value of in-force Variable Annuity business is \$2,241 million.

The principal economic assumptions used in the embedded value calculations in 2013 were as follows:

	Canada	U.S.	Hong Kong	Japan
MCCSR ratio	150%	150%	150%	150%
Discount rate	8.25%	8.50%	9.00%	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	26.5%	35%	16.5%	31%
Foreign exchange rate	n/a	1.0636	0.1372	0.0101

The discount rate is based on a long term moving average of risk free rates. Risk premiums varying from four to five percent 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 percent.

The assumptions are reviewed annually. The key assumptions are summarized below.

	Discount	t Rates	Interest o	n Surplus		Exchan	ge Rates
	2013	2012	2013	2012		2013	2012
Canada	8.25%	8.25%	4.50%	4.50%			
U.S.	8.50%	8.50%	4.50%	4.50%	U.S. Dollar	1.0636	0.9949
Hong Kong	9.00%	9.00%	4.50%	4.50%	Hong Kong Dollar	0.1372	0.1284
Japan	6.25%	6.25%	2.00%	2.00%	Japanese Yen	0.0101	0.0115

The embedded value has been calculated using the financial position of the Company as at September 30, 2013 projected to December 31, 2013, 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 embedded value as at December 31, 2013. The future stream of profits and cost of capital has been calculated on a IFRS basis with MCCSR capital in all territories. Surplus assets have been fair valued and projected forward at a market return of 4.50% for U.S. and Canadian dollar denominated assets, and 2.00% for Yen denominated assets. All actuarial assumptions are consistent with best estimate assumptions used in the valuation of insurance and investment contract liabilities liabilities as at December 31, 2013 on an IFRS basis, and do not include any future costs related to a continuation of the Company's macro hedge program. 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 \$3,130 million of net income attributed to shareholders in 2013.

Each of these seven sources is described below.

**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. For wealth businesses the increase in 2013 over 2012 was primarily due to lower amortization of deferred acquisition costs on our closed blocks of variable annuity business and higher fee income as a result of favourable markets and strong sales, while increases in insurance lines were due to growth.

For mutual fund and asset management businesses, starting from the third quarter of 2013, all pre-tax income is reported in expected profit from in-force business except the non-capitalized acquisition expenses which are reported in impact of new business.

**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. For business which does not have actuarial reserves, this represents the non-deferrable upfront cost of issuing the business. Consequently, the Company reported an overall loss in the Consolidated Statements of Income from new business in the first year. The new business loss in 2013 was lower than in 2012 mainly due to the repositioning of the product portfolio in U.S. Insurance, the positive impact of repricing activities in Canadian Individual Insurance, and increased interest rates in both the U.S. and Canada; partially offset by higher wealth management sales.

**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 insurance and investment contract liabilities. They also include 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, which are reported in "Management actions and changes in assumptions."

The experience gains in 2013 and 2012 were primarily driven by the favourable impact of equity market movements on segregated fund guarantees, including gains on the hedged block largely related to favourable fund manager performance, and investment gains on general fund liabilities, partially offset by experience losses from macro hedges.

Management actions and changes in assumptions reflect the income impact of changes to valuation methods and assumptions for the insurance and investment contract 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 insurance and investment contract liabilities are reported in the Corporate and Other ("Corporate") segment with a total consolidated shareholders' pre-tax earnings impact of a \$744 million in 2013 and a \$2,467 million charge in 2012. The changes in methods and assumptions in 2013 included updates of lapse and policyholder behaviour assumptions to U.S. Insurance premium persistency assumptions for universal life and variable universal life products; lapse and policyholder behaviour assumptions across insurance and variable annuity businesses, primarily in Canada and in Japan; enhancements to actuarial methods and modeling of assets and liabilities; and the U.S. Long-Term Care triennial review. Note 8 of the Consolidated Financial Statements provides additional details of the changes in actuarial methods and assumptions.

Material management action items reported in the Corporate segment in 2013 include the expected cost of equity macro hedges, losses from the sale of debt securities designated as available-for-sale ("AFS"), and severance accrual and associated costs. Material management action items reported in the Corporate segment in 2012 include a goodwill impairment charge for Canada and the expected cost of equity macro hedges, partly offset by gains from bonds designated as AFS.

Management action items reported in business segments are primarily driven by specific business unit actions. Management actions in Asia in 2013 included gains on the sale of the Taiwan insurance business and the beneficial impact of a reinsurance recapture in Hong Kong. Management actions in the U.S. in 2013 included the favourable impact of policyholder-approved changes to the investment objectives of separate accounts that support our Variable Annuity products in the U.S. Management actions in Canada in 2012 included the beneficial impact of a reinsurance recapture and segregated funds product changes resulting in reserve releases.

**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 interests, and any earnings not otherwise explained in the SOE.

**Income taxes** represent the tax charges to earnings based on the varying tax rates in the jurisdictions in which Manulife Financial conducts business. The income tax recovery for 2012 included the release of prior year tax provisions following the resolution of tax audits and a benefit from changes to tax rates in Japan.

Manulife Financial's net income attributed to shareholders for the full year 2013 increased to \$3,130 million from \$1,810 million the previous year.

# For the year ended December 31, 2013

(C\$ millions)	Asia	Canada	U.S.	Corporate and Other	Total
Expected profit from in-force business Impact of new business Experience gains (losses) Management actions and changes in assumptions Earnings on surplus Other	\$ 982 (80) 1,203 504 174 3	\$1,045 (132) (316) - 266 (43)	\$ 1,648 (48) 1,697 297 486 12	\$ 16 (3) (1,875) (1,600) (531) 6	\$ 3,691 (263) 709 (799) 395 (22)
Income (loss) before income taxes Income tax (expense) recovery  Net income (loss) attributed to shareholders	\$ 2,786 (267) \$ 2,519	\$ 820 8 \$ 828	\$ 4,092 (1,184) \$ 2,908	\$ (3,987) 862 \$ (3,125)	\$ 3,711 (581)

# For the year ended December 31, 2012

				Corporate	
(C\$ millions)	Asia	Canada	U.S.	and Other	Total
Expected profit from in-force business	\$ 926	\$ 959	\$ 1,464	\$ 70	\$ 3,419
Impact of new business	30	(201)	(247)	_	(418)
Experience gains (losses)	932	(90)	778	(660)	960
Management actions and changes in assumptions	_	341	(6)	(3,337)	(3,002)
Earnings on surplus	179	256	496	(422)	509
Other	(4)	(117)	(29)	-	(150)
Income (loss) before income taxes	\$ 2,063	\$1,148	\$ 2,456	\$ (4,349)	\$ 1,318
Income tax (expense) recovery	(94)	21	(537)	1,102	492
Net income (loss) attributed to shareholders	\$ 1,969	\$1,169	\$ 1,919	\$ (3,247)	\$ 1,810

# **BOARD OF DIRECTORS**

Current as at March 11, 2014

"Director Since" refers to the year of first election to the Board of Directors of The Manufacturers Life Insurance Company.

#### Richard B. DeWolfe

Chairman of the Board Manulife Financial Toronto, ON, Canada Director Since: 2004

#### Donald A. Guloien

President and Chief Executive Officer Manulife Financial Toronto, ON, Canada Director Since: 2009

#### Joseph P. Caron

President
Joseph Caron Incorporated
West Vancouver, BC, Canada
Director Since: 2010

#### John M. Cassaday

President and Chief Executive Officer Corus Entertainment Inc. Toronto, ON, Canada Director Since: 1993

#### Susan F. Dabarno

Corporate Director Bracebridge, ON, Canada Director Since: 2013

#### 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

Corporate Director Toronto, ON, Canada Director Since: 2008

# Luther S. Helms

Managing Partner Sonata Capital Group Paradise Valley, AZ, U.S.A. Director Since: 2007

#### Tsun-yan Hsieh

Chairman Linhart Group Pte Ltd. Singapore, 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

#### C. James Prieur

Corporate Director Chicago, Illinois, U.S.A. Director Since: 2013

#### Andrea S. Rosen

Corporate Director Toronto, ON, Canada Director Since: 2011

#### Lesley D. Webster

President
Daniels Webster Capital Advisors
Naples, Florida, U.S.A.
Director Since: 2012

# **COMPANY OFFICERS**

March 11, 2014

# **EXECUTIVE COMMITTEE:**

#### Donald A. Guloien

President and Chief Executive Officer

# Jean-Paul (J-P.) Bisnaire

Senior Executive Vice President, Corporate Affairs and General Counsel

## Craig R. Bromley

Senior Executive Vice President and General Manager, U.S. Division

#### Robert A. Cook

Senior Executive Vice President and General Manager, Asia

#### Cindy L. Forbes

Executive Vice President and Chief Actuary

## **Marianne Harrison**

Senior Executive Vice President and General Manager, Canadian Division

#### 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

#### Stephen B. Roder

Senior Executive Vice President and Chief Financial Officer

#### Paul L. Rooney

Senior Executive Vice President and Chief Operating Officer

## 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, Private Asset Management, Investment Division

#### Nicole L. Boivin

Senior Vice President and Chief Branding and Communications Officer

# Richard J. Brunet

Executive Vice President, Institutional

# Joseph M. Cooper

Executive Vice President. Global
Services and Chief Information Officer

#### Michael J. Doughty

Executive Vice President John Hancock Insurance, U.S. Division

#### Steven A. Finch

Executive Vice President and Chief Financial Officer, U.S. Division – John Hancock Financial Services

#### James D. Gallagher

Executive Vice President, General Counsel and Chief Administrative Officer, U.S. Division

#### Philip J. Hampden-Smith

Executive Vice President and Chief Marketing Officer, Asia Division

#### Michael E. Huddart

Executive Vice President, Greater China, Asia Division

#### Paul R. Lorentz

Executive Vice President and General Manager Retail (Individual Life and Wealth Management) Canadian Division

#### Hugh C. McHaffie

Executive Vice President, U.S. Wealth Management

#### H. Steven Moore

Senior Vice President, Treasurer and Investor Relations

#### Gavin L. Robinson

Executive Vice President and General Manager of Japan, Asia Division

#### Stephen P. Sigurdson

Executive Vice President, General Counsel Canada and Corporate Secretary

## Lynda D. Sullivan

Executive Vice President and Controller

# D. Gregory Taylor

Executive Vice President and Chief Financial Officer, Canadian Division

# Peter F. Wilkinson

Senior Vice President, Industry, Regulatory and Government Affairs

# **OFFICE LISTING**

# **Corporate Headquarters** Manulife Financial Corporation

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#### **Individual Insurance and Group Retirement Solutions**

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#### **International Group Program**

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#### International Group Program-**Europe** John Hancock International Services S.A.

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#### Manulife Insurance (Thailand) Public Co. Ltd.

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#### Vietnam

#### Manulife (Vietnam) Limited

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#### **Manufacturers P&C Limited**

Manufacturers P&C Limited The Goddard Building Haggatt Hall St. Michael, BB-11059 Barbados, West Indies 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 197 Clarendon Street Boston, MA 02116 U.S.A. Tel: 617 375-1500

## Manulife Asset Management a division of Manulife Asset Management (Hong Kong) Limited

47/F., The Lee Gardens 33 Hysan Avenue Causeway Bay Hong Kong Tel: +852 2910-2600

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#### PT Manulife Aset Manajemen Indonesia

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# **Manulife Asset Management**

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## **Manulife Capital**

200 Bloor Street East Toronto, ON Canada M4W 1E5 Tel: 416 852-7381

# **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.

Suite 600 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 other comprehensive income and may be subsequently reclassified to net income. AOCI also includes re-measurement of pension and other post-employment plans, which is recognized in other comprehensive income and will never be reclassified to 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:** Amounts stated on a constant currency basis are calculated by applying the most recent quarter's exchange rates to all prior periods.

Core Earnings (Losses): A measure to help investors better understand the long-term earnings capacity and valuation of the business. Core earnings excludes the direct impact of equity markets and interest rates as well as a number of other items that are considered material and exceptional in nature. While this metric is relevant to how we manage our business and offers a consistent methodology, it is not insulated from macroeconomic factors, which can have a significant impact.

**Deferred Acquisition Costs (DAC):** Costs directly attributable to the acquisition of new business, principally agents' compensation, which are capitalized on the Company's Consolidated Statements of Financial Position and amortized into income over a specified period.

**Embedded Value:** A measure of shareholders' value embedded in the current Consolidated Statements of Financial Position of the Company, excluding any value associated with future new business.

**Funds Under Management (FUM):** A 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 consists of the total of invested assets, Segregated Fund Assets, institutional advisory accounts, mutual fund assets and other funds.

**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.

**Impaired Assets:** Mortgages, debt securities and other investment securities in default where there is no longer reasonable assurance of collection.

**Insurance and Investment Contract Liabilities:** The amount of money set aside today, together with the expected future premiums and investment income, that 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. Insurance and investment contract liabilities are also referred to as policy liabilities.

**International Financial Reporting Standards (IFRS)**: Refers to the international accounting standards in Canada, effective January 1, 2011; this was a change from Canadian Generally Accepted Accounting Principles (CGAAP).

**In-Force:** Refers to the policies that are currently active.

**Long-Term Care (LTC) Insurance:** 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.

**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):** 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 behaviour assumptions, and expense assumptions used in the pricing of the products sold. Investment assumptions are consistent with product pricing, updated to reflect current market conditions. Best estimate fixed income yields are updated quarterly, and long term expected yields for alternative long-duration assets are typically updated during the annual planning cycle.

**New Business Strain:** The initial expense of writing an insurance policy that is incurred when the policy is written, and has 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 made 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 Consolidated Statements of Income, (ii) segregated fund deposits, excluding seed money, ("deposits from policyholders"), (iii) adding back the premiums ceded related to FDA coinsurance, (iv) investment contract deposits, (v) mutual fund deposits, (vi) deposits into institutional advisory accounts, (vii) premium equivalents for "administration services only" group benefit contracts ("ASO premium equivalents"), (viii) premiums in the Canadian Group Benefits reinsurance ceded agreement, and (ix) 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 insurance and investment contract liabilities that represent conservatism against potential future deterioration of best estimate assumptions. These Provisions for Adverse Deviation are released into income over time, and the release of these margins represents the future expected earnings stream.

**Return on Common Shareholders' Equity:** A profitability measure that presents the net income available to common shareholders as a percentage of the average capital deployed to earn the income.

**Sales** are measured according to product type:

**Individual Insurance:** New annualized premiums reflect the annualized premiums 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 premiums are weighted at 10% and consist of 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; 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 of a new product to an existing client as well as increases in the contribution rate for an existing plan.

**Total Annualized Premium Equivalents (APE):** APE is comprised of 100 per cent of regular premiums/deposits sales and 10 per cent of single premiums/deposits sales, for both insurance and wealth management products.

**Total Capital:** Capital funding that is both unsecured and permanent in nature. Comprises of total equity (excluding AOCI on cash flow hedges), liabilities for preferred shares, and capital instruments. For regulatory reporting purposes, the amounts are further adjusted for various additions or deductions to capital as mandated by the guidelines used by OSFI.

**Total Weighted Premium Income (TWPI):** TWPI includes 10 per cent of single premiums/deposits, plus 100 percent of first year and renewal premiums/deposits. This applies to general funds, segregated funds and mutual funds.

**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

CORPORATION HEAD OFFICE 200 Bloor Street East Toronto, ON Canada M4W 1E5 Telephone 416 926-3000 Fax: 416 926-5454

Web site: www.manulife.com

# ANNUAL AND SPECIAL MEETING OF SHAREHOLDERS

Shareholders are invited to attend the annual and special meeting of Manulife Financial Corporation to be held on May 1, 2014 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 shares 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 – CST Trust Company; in the United States – Computershare Inc.

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** 

# TRANSFER AGENTS Canada

CST Trust 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

CST Trust Company offices are also located in Toronto, Halifax, Vancouver and Calgary.

## **United States**

Computershare Inc. P.O. Box 30170

College Station, TX 77842-3170 Toll Free: 1 800 249-7702 Collect: 201-680-6578

E-mail: web.queries@computershare.com Online: www.computershare.com/Investor

## 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 2012 and 2013

	Record Date	Payment Date	Canadian (\$)
Year 2013			
Fourth Quarter	February 26, 2014	March 19, 2014	\$ 0.13
Third Quarter	November 19, 2013	December 19, 2013	\$ 0.13
Second Quarter	August 20, 2013	September 19, 2013	\$ 0.13
First Quarter	May 14, 2013	June 19, 2013	\$ 0.13
Year 2012			
Fourth Quarter	February 20, 2013	March 19, 2013	\$ 0.13
Third Quarter	November 20, 2012	December 19, 2012	\$ 0.13
Second Quarter	August 21, 2012	September 19, 2012	\$ 0.13
First Quarter	May 15, 2012	June 19, 2012	\$ 0.13

# Common and Preferred Share Dividend Dates in 2014\*

\* Dividends are not guaranteed and are subject to approval by the Board of Directors.

Record date Common and	Payment date		
Preferred Shares	Common Shares	Preferred Shares	
February 26, 2014 May 13, 2014 August 19, 2014 November 25, 2014	March 19, 2014 June 19, 2014 September 19, 2014 December 19, 2014	March 19, 2014 June 19, 2014 September 19, 2014 December 19, 2014	

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