NOVO NORDISK A S
Form 6-K
February 11, 2008

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER
Pursuant to Rule 13a-16 or 15d-16
of the Securities Exchange Act of 1934

FEBRUARY 11, 2008

NOVO NORDISK A/S

(Exact name of Registrant as specified in its charter)

Novo Allé
DK- 2880, Bagsvaerd
Denmark
(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F

Form 20-F [X] Form 40-F [ ]

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes [ ] No [X]

If Yes is marked, indicate below the file number assigned to the registrant in connection with Rule 12g-32(b):82-_____

Back to Contents

Back to Contents

Performance highlights 2007

		2007	2006	Change
Financial performance				
Sales total	DKK million	**41,831**	38,743	8.0%
Diabetes care	DKK million	**30,478**	27,866	9.4%
Of which modern insulins	DKK million	**14,008**	10,825	29.4%
Biopharmaceuticals	DKK million	**11,353**	10,877	4.4%
Gross profit	DKK million	**32,038**	29,158	9.9%
Gross margin	%	**76.6**	75.3	
Sales and distribution costs	% of sales	**29.6**	30.0	
Research and development costs	% of sales	**20.4**	16.3	
Research and development costs excl AERx® *)	% of sales	**17.2**	16.3	
Administration expenses	% of sales	**6.0**	6.2	
Operating profit	DKK million	**8,942**	9,119	(1.9%)
Operating profit excl AERx® *)	DKK million	**10,267**	9,119	12.6%
Net profit	DKK million	**8,522**	6,452	32.1%
Effective tax rate	%	**22.3**	29.6	
Capital expenditure	DKK million	**2,268**	2,787	(18.6%)
Free cash flow	DKK million	**9,012**	4,707	91.5%

Long-term financial targets

Operating profit growth	%	**(1.9)**	12.7	
Operating profit growth excl AERx® *)	%	**12.6**	12.7	
Operating margin	%	**21.4**	23.5	
Operating margin excl AERx® *)	%	**24.5**	23.5	
Return on invested capital (ROIC)	%	**27.2**	25.8	
Cash to earnings	%	**105.7**	73.0	
Cash to earnings excl AERx® *)	%	**94.2**	73.0	

Non-financial performance

Employees	FTE	**25,516**	23,172	10%
Engaging culture (employee engagement)	Scale 1 5	**4.1**	4.0	
Employee turnover	%	**11.6**	10.0	
Employment impact	Number of jobs	**81,600**	82,700	(1%)
CO_2 emissions	1,000 tons	**236**	229	3%
Water consumption	1,000m^3	**3,231**	2,995	8%
Recycling of waste	%	**38**	35	
New patent families (first filing)	Number	**116**	149	(22%)

Share performance

Dividend per share (proposed) **)	DKK	**4.50**	3.50	28.6%
Closing share price (B shares) **)	DKK	**335**	236	41.9%
Market capitalisation (B shares) ***)	DKK billion	**172**	124	38.7%

*) Excluding non-recurring costs related to discontinuation of the development of the AERx® inhaled insulin system.

**) Novo Nordisk B shares were split on 3 December 2007 and ADRs were split on 17 December 2007.

***) Novo Nordisk B shares (excluding treasury shares).

See more financial and non-financial highlights on pp 52 53.

Back to Contents

Reader s guide

Novo Nordisk s ambition is to defeat diabetes. This report illustrates how our commitment to this goal shapes our work every day across the globe.

Welcome to Novo Nordisk s *Annual Report 2007* a presentation of the company s performance during the year, our achievements and our challenges. It comprises two main elements: the management report (pp 2 50) and the consolidated financial and non-financial statements (pp 51 115).

The management report describes how we do business and explains how we will continue to create long-term value for shareholders and for other stakeholders.

The section **Welcome to Novo Nordisk** offers a quick introduction to the business and a letter from the chairman of the Board and the president and chief executive officer.

The section **Business results** presents the company s strategy, opportunities and key risks, followed by an overview of performance in 2007, with highlights, progress, comparative data and commentary. The pipeline overview and progress illustrates development projects aimed to secure Novo Nordisk s future growth.

The section **Business environment** elaborates on Novo Nordisk s key challenges as a global health-care company. It puts performance into context, with insights into how Novo Nordisk responds to an increasingly competitive environment and to the business implications of a globalising world. In the articles, we present a review of activities, strategies, ambitions and opportunities in light of the past year and looking ahead.

In our selection of themes, we have chosen to focus on presenting the drivers that will enable Novo Nordisk to pursue our vision and achieve our strategic objectives: our approach to doing business, our people and the resources we put into supporting each of the two business segments diabetes care and biopharmaceuticals.

The sections **Diabetes care** and **Biopharmaceu -ticals** provide an update of the past year s achievements in each business segment and initiatives to drive continued growth.

The section **Shareholder information** contains a description of Novo Nordisk s approach to corporate governance and remuneration policy. It also provides profiles of board members and Executive Management as well as information on the Novo Nordisk share.

The consolidated financial and non-financial statements give a detailed account of the year s performance with comparative data. The financial statements of the parent company are included on pp 105 112.

References to studies and reports are provided on the inside back flap.

To learn more, or to help us turn our vision into reality, please get in touch.

A year in the life of Novo Nordisk

Therapeutic proteins take R&D lead
15 January: Novo Nordisk discontinues R&D within small molecules and focuses research and development on therapeutic proteins. See p 8.

NovoSeven® results on ICH
26 February: Phase 3 stroke trial shows that NovoSeven® reduces bleeding in the brain, but does not improve long-term clinical outcomes. See p 39.

Funding the future in China
5 March: Novo Nordisk and the Chinese Academy of Sciences establish research foundation in China. Novo Nordisk to provide 2 million US dollars for research into diabetes and biopharmaceuticals. See p 36.

US hiring blitz
The US diabetes sales force is expanded. In January

Clinton calls for change
13 March: Former US President Bill Clinton is

Expanded Brazil facility opens
26 April: Novo Nordisk

2007, staffing and planning efforts begin, resulting in over 700 new people being hired and fully trained by 4 June 2007. See p 34.

keynote speaker at the Global Changing Diabetes Leadership Forum in New York, organised by Novo Nordisk. See p 27.

Gore visits Bagsværd

On the same day, Nobel Laureate and former US Vice President Al Gore visits Novo Nordisk in Bagsværd, Denmark, to talk about the climate change challenge. See p 22.

inaugurates Latin America s largest insulin plant in Montes Claros, Brazil. Danish Prime Minister Anders Fogh Rasmussen attends. See p 35.

Most employees outside Denmark

April: The number of employees outside Denmark exceeds the number of employees in Denmark a total of 25,194 people work at Novo Nordisk,12,579 in Denmark, 12,615 in other countries.

Back to Contents

Japanese design captures the spirit of unite for diabetes .

On 14 November blue circles were formed around the world to mark the first UN-observed World Diabetes Day.

Landmark renewable energy alliance

1 May: Novo Nordisk and the Danish energy company DONG Energy sign a partnership agreement. An increasing part of Novo Nordisk s future electricity consumption in Denmark will be supplied by wind turbines from 2009. See p 23.

Board of Directors visits China

Novo Nordisk s Board of Directors and Executive Management hold off-site board meeting in China. They visit the company s R&D centre in Beijing, the Chinese Academy of Sciences and CEIBS business school as well as major hospitals and distributors. See p 36.

Clinical trials and bioethics websites

2 July: Novo Nordisk increases transparency of clinical trials and bioethics through the launch of two new websites. See p 24.

New HRT product launched

5 May: Novo Nordisk celebrates its launch of Activella® 0.5mg/0.1mg at the ACOG Annual Clinical Meeting in San Diego, California. The new lower-dose product extends the company s HRT portfolio which already includes Activella® 1.0 mg/ 0.5 mg. See p 40.

New pilot plant in Denmark

12 June: A new pilot plant for the development and production of new biophar-maceuticals based on proteins cultured in mammalian cells is inaugurated in Hillerød, Denmark. See p 41.

US insulin filling capacity doubles

21 June: Employees at site Clayton, US, celebrate an expansion of production facilities that will double the company s insulin filling capacity in the US. See p 34.

Buoyant first-half sales

3 August: Novo Nordisk s interim report for the first six months of 2007 reveals a 14% rise in total sales measured in local currencies (up 9% in Danish kroner). Of all product groups, modern insulins lead the way by increasing 37% (up 31% in Danish kroner). See p 11.

Back to Contents

Professor Chen Zu of the Chinese Academy of Sciences and Mads Krogsgaard Thomsen, Novo Nordisk chief science officer.

Monica Priore, diagnosed with diabetes when she was five, recently swam across the Strait of Messina in Italy

---

Focus on childhood diabetes

18 September: Novo Nordisk and the International Diabetes Federation (IDF) launch the Diabetes Youth Charter, an expert review into existing data and global trends in the area of childhood diabetes. It highlights actions to improve the prevention and care of childhood diabetes. See p

Anniversary milestones

5 November: The day marks the 75th anniversary of the Steno Diabetes Center and the 50th anniversary of the Hagedorn Research Institute. See p 31.

Changing Diabetes® Barometer

7 November: Novo Nordisk presents the Changing Diabetes® Barometer, a tool

Stock split

3 December: To accommodate appreciation of the share price, Novo Nordisk s B shares are split 2:1 on the OMX Nordic Exchange Copenhagen and the London Stock Exchange. Novo Nordisk s ADRs listed on the New York Stock Exchange are similarly split on 17 December. See p 49.

29.

for the diabetes community to track national diabetes developments. See p 27.

Sustainability leader

24 September: Novo Nordisk ranks as best-in-class in healthcare one of 18 global supersectors in Dow Jones Sustainability Indexes, the world s leading indexes for sustainability-driven investment portfolios. See pp 7 and 89 99.

Biking for a cure in Death Valley

20 October: 270 cyclists including 25 from Novo Nordisk join the 10th Ride to Cure Diabetes in Death Valley, California. The 170-kilometre ride is a fundraising event organised by the Juvenile Diabetes Research Foundation. See p 31.

Levemir® approved in Japan

22 October: Novo Nordisk receives approval for Levemir® in Japan, enabling the launch in December. See p 34.

First UN-observed World Diabetes Day

14 November: The first ever UN-observed World Diabetes Day is celebrated. The day is marked by Novo Nordisk together with the International Diabetes Federation and its partners with activities all over the world. See p 26.

Liraglutide trial results

11 December: Novo Nordisk announces clinical results from a one-year mono-therapy study investigating liraglutide a once-daily human GLP-1 analogue for the treatment of type 2 diabetes. This study, the last of five phase 3 studies needed for regulatory filing, confirms the effect of liraglutide on blood glucose control and body weight. See p 32.

Back to Contents

united to change diabetes

Reaching across the globe, Novo Nordisk employees organised human blue circles, gathering more than a quarter of a million people to mark the first UN-observed World Diabetes Day on 14 November 2007.

It was a truly magnificent moment and one we are proud to have been part of. Never before have the landmarks of the world been so spectacularly lit up, and never before have so many people been engaged in advocacy to protect current and future generations against one of the biggest public health threats that mankind has ever faced.

The power of the possible

To defeat diabetes that is our aspiration and our business.

At Novo Nordisk we believe in the power of the possible. Our vision is one of civilisation based on sustainability, partnership and respect for the individual. Sustainability is a powerful, unifying force. We believe it is possible to be commercially astute and socially aware. To accelerate growth and minimise environmental impacts. To earn competitive returns and contribute to economic prosperity for society. These are the cornerstones of the Triple Bottom Line principle upon which we build our business. These are the messages we convey when we call upon governments to make the frameworks that enable us and our partners to contribute to creating wealth for the benefit of all.

Results

For Novo Nordisk, the year 2007 was yet another year with remarkable progress. Our financial results and the growth of our business were achieved despite an increasingly competitive environment and adverse currency exchange rates. This is underpinned by a solid track record on measures of economic, environmental and social impact. This was also rewarded: throughout the year, our shareholders have seen a significant appreciation of their investment in our company.

In this report we highlight the assets that will help us sustain and build leadership in the business areas we focus on. Innovation of new or improved therapies is the foundation for the future of the pharmaceutical industry. In 2007, we invested more than ever in research and development, and we saw progress in a number of areas which are crucial to the future of our company. Throughout the world we have increased our presence and thereby our share of voice in an and we must strengthen our global presence to stay competitive and expand the market for our products and services. Today, the number of Novo Nordisk employees outside Denmark exceeds that of our Danish organisation.

The expansion of our global supply chain continued to accelerate. In 2007, with the largest investment of any pharmaceutical company in Latin America, we inaugurated our insulin filling plant in Montes Claros, Brazil. We also doubled the insulin filling capacity of our manufacturing facility in Clayton, North Carolina, to meet the growing demand for our products in the US.

A significant expansion of our US sales and marketing organisation was completed in the first half of the year, aimed at supporting the continued roll-out of Levemir® and the rest of our portfolio of modern insulins.

In China we entered into a long-term strategic collaboration with the Chinese Academy of Sciences, which significantly expands our network of contacts with far-reaching implications for our research and development activities there.

Sourcing of talent and of services are key engines of globalisation. In addition to the traditional internationalisation of research and development as well as manufacturing we are now also seeing encouraging results from sourcing services.

Innovation

Driving organisational development and optimisation of cross-organisational interfaces is critical to ensuring the successful execution of global clinical trial programmes such as the suite of phase 3 studies of liraglutide, Novo Nordisk s furthest advanced new product candidate in the diabetes care business. The successful completion of the studies gives us reason to believe that this new class of diabetes therapy represents a potential, valuable treatment option for people with type 2 diabetes, and perhaps even prevention if applied for obesity-related health risks. This would represent a significant advance for diabetes care and the future of Novo Nordisk.

We saw unprecedented progress in our pipeline in 2007: next-generation modern insulin and NovoSeven® analogues, new indications for Norditropin®, lower-dose hormone replacement therapies as well as our portfolio of early-stage candidates for treatment of inflammation. Some of this progress can be ascribed to the fact that we have strengthened the project-centric organisation in our clinical development. We have improved cross-project alignment,

increasingly competitive business environment and with that we have achieved greater acceptance of our products. Our manufacturing operations continue to improve productivity, allowing us to invest more in sales and marketing for the short term and in research and development for the long term. And, most importantly, people at Novo Nordisk demonstrate that we ve got what it takes to win: accountability, ambition, responsibility, engagement, openness and readiness for change.

Three themes have been the key drivers of success and will remain on our agenda: globalisation, innovation and leadership.

Globalisation

Demands for proper healthcare are on the rise throughout the world,

systems of performance management, compensation packages and talent development programmes for all groups of employees.

Regrettably, Novo Nordisk also experienced some setbacks in research and development in 2007.

We began the year with a great disappointment when our final studies investigating rFVIIa for the treatment of intracerebral haemorrhage failed to show sufficient benefits for the patients. This was despite the fact that the trials were conducted at impressive speed, and with the highest level of professionalism. A hope for stroke patients faded away.

We also decided to stop our research and development efforts to develop small-molecule oral therapies for type 2 diabetes after many years of concerted efforts.

Back to Contents

And finally, in January 2008, we decided to discontinue the development of the AERx® inhaled insulin system and focus our research and development on a new generation of systems for administering long-acting insulin and GLP-1 via inhalation.

Discontinuing a research programme does not mean giving up hope that improved product offerings can be achieved. But if ambitions are high you have to accept that not all objectives will be met that is how it is when trying to accomplish difficult tasks. And we will continue to invest in pursuing every viable route to offer improved benefits for the people whose healthcare needs we serve.

Leadership

With aspiration of leadership follows the obligation to speak out on behalf of your constituencies and seek influence on the global agenda. In the spring, Novo Nordisk hosted the first Global Changing Diabetes Leadership Forum in New York. This event kicked off a range of activities, and we are pleased to see that our initiative has resonated well with health policy-makers and others with the power to influence the agenda towards a more sustainable future.

In parallel, we advanced our initiatives to face up to the climate change challenge and pursue our ambitious strategy to reduce the company s CO_2 emissions over a 10-year period. Here, a milestone wasa unique partnership with our energy supplier in Denmark, where 85% of our CO_2 emissions occur, to convert energy savings to increased supplies of renewable energy. It is our ambition that this too may serve as inspiration for others. We have been active advocates on the international scene, sharing our experience and supporting coalitions urging immediate and concerted action.

2007 was also the fifth anniversary of the World Diabetes Foundation, an initiative founded and funded by Novo Nordisk to improve access to and knowledge about diabetes care in the developing countries. Already now the Foundation is supporting 138 projects across all continents with encouraging results. We are humbled by its potential impact, and are hence seeking extension of funding from our shareholders for a new, 10-year period.

Challenges

At the beginning of 2008, we can confidently say that Novo Nordisk is well-positioned to meet the challenges posed by our competitive environment and societal developments. Diabetes care is one of the segments of the pharmaceutical industry with the highest expected future growth rates. This makes it attractive to continue to invest in staying ahead in this market.

It is critical that Novo Nordisk continues to deliver on promises and that we are successful in our must-win battles: First, to maintain leadership in diabetes care by expanding the use of our modern insulins, ensuring leadership within GLP-1 and progressing the next generation of modern insulins through development. Second, expanding our offerings in biopharmaceuticals by developing the next-generation successors to NovoSeven® and creating possibilities for change in treating haemophilia, growth deficiency, hormone replacement and inflammation.

Thanks

We are set on one goal: improving value for patients. Looking back at our achievements in 2007, we believe that we are on the right track. We thank our customers, shareholders and partners for their loyalty and support throughout the year. We also believe that our customers, shareholders and partners share with us a great thanks to our employees for their efforts, their creativity and their dedication that makes Novo Nordisk a very special company.

Back to Contents

novo nordisk at a glance

At 73% of sales, diabetes care is the main growth driver for Novo Nordisk's business. Solid growth and efficient production make it possible to invest in building long-term market presence.

Biopharmaceuticals, the company s other main business area, accounts for 27% of overall sales. In this area, which includes NovoSeven®, human growth hormone and HRT products, Novo Nordisk is also exploring potential new therapies in areas where significant medical needs exist.

North America	International Operations	Europe
Sales: 33% of total sales.	**Sales:** 17% of total sales.	**Sales:** 39% of total sales.
Insulin volume share: 43% of the total market.	**Insulin volume share:** 57% of the total market.	**Insulin volume share:** 57% of the total market.
Modern insulin volume share: 31% of the segment.	**Modern insulin volume share:** 54% of the segment.	**Modern insulin volume share:** 50% of the segment.
People with diabetes: 21 million people living in the US and Canada are estimated to have diabetes.	**People with diabetes:** 183 million people living in countries within International Operations are estimated to have diabetes.	**People with diabetes:** 34 million people living in Europe are estimated to have diabetes.
Performance: Growth is primarily driven by the complete portfolio of modern insulins, NovoLog®, NovoLog® Mix 70/30 and Levemir®. Novo Nordisk is the leader in the US insulin market.	**Performance:** Growth is driven by modern insulins as well as human insulin. China is a key growth driver, contributing around 50% of the growth in insulin sales.	**Performance:** Growth is primarily driven by the complete portfolio of modern insulins, NovoRapid®, NovoMix® 30 and Levemir®. Novo Nordisk continues to consolidate its leadership position in the European insulin market.
Capacity-building: 90,000 healthcare professionals have been trained or educated through Novo Nordisk s National Changing Diabetes Program®.	**Capacity-building:** 134,000 healthcare professionals have been trained or educated through Novo Nordisk s National Changing Diabetes® programmes.	**Capacity-building:** 54,000 healthcare professionals have been trained or educated through Novo Nordisk s National Changing Diabetes® programmes.

Market share data is based on IMS MAT November volume data.
IMS World now includes certain IO countries.

Back to Contents

Japan & Oceania

Sales: 11% of total sales.

Insulin volume share: 73% of the total market.

Modern insulin volume share: 62% of the segment.

People with diabetes: 8 million people living in Japan are estimated to have diabetes.

Performance: Growth is primarily driven by the modern insulins NovoRapid® and NovoRapid Mix® 30.With the launch of Levemir® in Japan in December 2007, Novo Nordisk continues to consolidate its strong leadership position in the Japanese insulin market.

Capacity-building: 58,000 healthcare professionals have been trained or educated through Novo Nordisk s National Changing Diabetes® programmes.

the world of novo nordisk

Novo Nordisk is a focused healthcare company headquartered in Denmark. With market presence in 179 countries, and R&D and production facilities spanning five continents, the company s global reach is expanding.

Novo Nordisk is a world leader in diabetes care.

Key market figures for the diabetes care business in each of the four regions are provided here. See more on pp 11 and 52.

In its other business segment, biopharmaceuticals, Novo Nordisk has a leading position within the therapeutic areas of haemostasis management, growth hormone therapy and hormone replacement therapy. Sales in the biopharmaceuticals business are reported globally and by therapy area. See pp 11 12 and 52.

Novo Nordisk has 26,008 employees in 80 countries; 12,689 are based in Denmark and 13,319 abroad. Of these, 4,695 work in R&D, 7,900 in production, 8,368 in sales and distribution and 5,045 in administration. The largest production sites are located in Denmark. The company has invested in establishing a seamless global supply chain and significantly expanded production facilities in all regions, particularly the growth markets of the US and China.

Ownership structure

Novo A/S, an unlisted Danish public limited liability company wholly-owned by the Novo Nordisk Foundation, holds 25.5% of Novo Nordisk s total share capital and 71% of the total number of votes. The Novo Nordisk Foundation is a self-governing and profit-making foundation, whose purpose is to provide a stable basis for the commercial and research activities conducted by the companies within the Novo Group and to support scientific, humanitarian and social purposes.

Novo Nordisk s B shares are listed on the stock exchanges in Copenhagen and London. Its ADRs are listed on the New York Stock Exchange under the symbol NVO .

History

Novo Nordisk has its origins in two Danish companies founded in the 1920s Nordisk Insulinlaboratorium and Novo Terapeutisk Laboratorium. These two companies, which merged in 1989 to become Novo Nordisk, independently pioneered several key breakthroughs in diabetes care during the last century. Both companies took a broader approach to diabetes: in 1932 Nordisk Insulinlaboratorium founded the Steno Memorial Hospital and six years later Novo Terapeutisk Laboratorium established the Hvidøre Diabetes Sanatorium. This resolve to treat the person and not just the symptoms of the disease is a forerunner of Novo Nordisk s modern-day

commitment to sustainable development and balanced growth.

Scientific breakthroughs which characterised both of the companies during their history as competitors continued after the merger, and Novo Nordisk s ongoing commitment to innovation is still evidenced today by its emphasis on research and development.

Back to Contents

leading the novo nordisk way

The Novo Nordisk Way of Management forms the values-based governance framework for the company. From vision to policies, it describes how people at Novo Nordisk put values into action and defines the principles for how the company does business.

The Novo Nordisk Way of Management consists of three elements: the Vision, the Charter and global company policies.

The **Vision** sets out the direction for Novo Nordisk. It expresses what Novo Nordisk is striving for, how the company works and how it is guided by its values in its endeavours to find the right balance between commercial interests and acting as a responsible business.

The **Charter** describes the company s values, commitments, fundamentals and follow-up methods. The values underpin the commitments to the Triple Bottom Line and sustainable development. The fundamentals are a set of 11 management principles to ensure focus on business objectives, customers, compliance, collaboration and sharing of better practices, and quality mindset. And the follow-up methods provide ongoing systematic and validated documentation of performance in all material areas of Novo Nordisk.

The global company **policies** set global standards and give operational guidelines in 13 specific areas: bioethics, business ethics, communication, environment, finance, global health, health and safety, information technology, legal, people, purchasing, quality and risk management.

The Novo Nordisk Way of Management

The **follow-up methodology** has four key components which provide assurance to stakeholders of the quality of the company s processes and performance.

Financial and non-financial audit is a systematic methodology to assess performance as accounted for in the annual reporting. Furthermore, Novo Nordisk voluntarily includes independent assurance of the company s non-financial reporting.

Facilitation is a specific follow-up method that is unique to companies in the Novo Group. It is used to provide systematic and validated documentation of the levels of compliance with the Novo Nordisk Way of Management. The global facilitator team consists of senior people with deep insight into the business and the business environment.

Organisational development is assessed through an annual **Organisational audit**, commissioned by the Board of Directors and Executive Management. This process, conducted at senior management level, includes an assessment of linking business and organisation as well as succession management.

Quality audit monitors adherence to the quality requirements, including quality management systems. It aims to ensure continuous improvements and optimal use of internal standardisation. Quality audit supplements inspections by regulatory bodies.

Commitments: the Triple Bottom Line

Novo Nordisk is committed to sustainable development and balanced growth. The principles of sustainable development to preserve the planet while improving the quality of life for its current and future inhabitants resonate well with the philosophy upon which the company was founded and how it does business today: constantly striving to improve performance as measured by the Triple Bottom Line principle.

In Novo Nordisk s Articles of Association it is stated as the objectives that the company strives to conduct its activities in a financially, environmentally and socially responsible way . This implies that any decision should always seek to balance three considerations: Is it economically viable? Is it socially responsible? And is it environmentally sound?

This is the Triple Bottom Line business principle, which ensures that decision-making balances financial growth with corporate responsibility, short-term gains with long-term profitability and shareholder return with other stakeholder interests.

The Triple Bottom Line is how Novo Nordisk has chosen to interpret its commitment to sustainable development. It is built into the corporate governance structures, management tools, individual performance assessments and reward schemes.

Economically viable means managing the business in a way that ensures corporate profitability and growth, and seeks to leave a positive economic footprint in the community. Environmentally sound decisions address the company s impact on the external environment as well as the bioethical implications of its activities. Socially responsible implies caring for people. For Novo Nordisk, this applies to the people who rely on the company s products and to employees. It also considers the impact of the business on society.

Back to Contents

Employees from Bulgaria volunteer to build a playground at a children s hospital.

Managers participate in the Novo Nordisk educational programme Lighthouse to increase their leadership skills.

Employees put energy into the promise to change diabetes.

Setting long-term targets

Sustainability is a moving target. Understanding the dynamics of society and the business environment that can enhance or impede corporate growth helps identify risks and opportunities for the company as a commercial business and as a corporate citizen. Such insights are gained via trendspotting, scenario analyses and forecasting in a 10-year perspective as part of the Strategic Planning Process (see pp 8 9).

This translates into medium- and short-term priorities and targets for the company s financial and non-financial performance. Novo Nordisk has adopted the Balanced Scorecard as the company-wide management tool for measuring progress. As part of the remuneration package, individuals are rewarded for performance that meets or exceeds the financial and non-financial targets in the Balanced Scorecard, which comprise corporate, unit-specific and individual targets. Progress is tracked against targets in the annual accounts. Financial performance is guided by a set of four long-term targets focusing on growth, profitability, financial return and cash generation (see p 10). Non-financial performance is guided by measures for the company s impacts on the Triple Bottom Line. These include socio-economic impacts such as job creation, the ability to manage environmental impacts and optimise resource efficiency, and social impacts related to employees, patients and communities (see pp 14 and 93 94).

Guided by the Novo Nordisk Vision

The ambition to ultimately defeat diabetes is at the core of the company s vision. It is a business proposition and the main driver for Novo Nordisk s contribution to sustainable development. Good health is a driver of economic growth and a prerequisite for achieving greater social equity. Serving unmet medical needs also motivates the aspiration to offer products and services in areas that make a difference.

This vision sets Novo Nordisk s objectives in context and inspires employees in their work. It is a beacon that keeps everyone s focus on creating long-term shareholder value and leveraging the company s unique qualities to gain competitive advantage.

Novo Nordisk believes in the value that is created by people who are engaged in what they do. Offering an inspiring place to work attracts and retains talented people and is a key factor for long-term success in an increasingly competitive business environment.

Novo Nordisk s values are consistent with principles of good governance. Putting values into action is as manifest in employees everyday business dealings as in formal global standards and management practices.

We will be the world s leading diabetes care company

Our aspiration is to defeat diabetes by finding better methods of diabetes prevention, detection and treatment.

We will offer products and services in other areas where we can make a difference

Our research will lead to the disco very of new, innovative products, also outside diabetes.

We will achieve competitive business results

Our focus is our strength.

We will stay independent and form alliances whenever

A job here is never just a job

We are committed to being there for our customers whenever they need us.

We will be innovative and effective in

Our values are expressed in all our actions

Decency is what counts.

Every day we strive to find the right balance between compassion

We will work actively to promote collaboration between all parties in the healthcare system in order to achieve our common goals.

We will develop and market such products ourselves whenever we can do it as well as, or better than, others.

they serve our business purpose and the cause we stand for.

everything we do.

We will attract and retain the best people by making our company a challenging place to work.

and competitiveness, the short and the long term, self and commitment to colleagues and society, work and family life.

Back to Contents

business strategy, opportunities and key risks

In the face of intensified competition the leadership challenge is to stay focused on pursuing long-term objectives for value creation and overcoming barriers to sustainable growth.

Novo Nordisk is a focused healthcare company. This focus underlines the company s claim to leadership in its markets. Novo Nordisk offers therapies in areas where significant unmet medical needs remain: diabetes care, haemostasis management, growth hormone deficiency and hormone replacement therapy.

Over the years, Novo Nordisk has built expertise in protein engineering and expression and protein formulation, supported by device technology for the convenient administration of medicines. Leveraging these core competences is critical to securing long-term success. In line with this strategy, Novo Nordisk has decided to discontinue R&D activities within small molecules for the oral treatment of diabetes and to refocus its activities within inhaled insulin, discontinuing clinical development of AERx® inhaled insulin (AERx® iDMS).

The dedicated focus in just two core business segments diabetes care and biopharmaceuticals is supported by a simple organisational structure of functional excellence, a common values-based business approach and global standards. This structure facilitates flexibility and agility in a dynamic and highly competitive business environment.

The corporate strategy is based on a 10-year perspective and describes how Novo Nordisk intends to translate its vision into action.

The market approach is underpinned by the Triple Bottom Line principle, which encompasses both risk mitigation and innovation. To better manage emerging risks and act on opportunities, Novo Nordisk engages with a broad range of stakeholders. The company seeks to make a positive economic, environmental and social impact through its operations, global management standards, community engagements, partnerships, technology transfers and knowledge exchange.

and biosimilar products become available. Competing under such conditions hinges on the ability to offer superior products and to effectively convey the value proposition to customers and healthcare professionals. Delay or failure of key development projects would impair Novo Nordisk s ability to successfully market current and new products. Causes of delay may include slow recruitment for clinical trials, safety or efficacy concerns, filing delay or insufficient production capacity.

Novo Nordisk seeks to maintain its lead in injectable insulins through continued market penetration of the company s modern insulins, and to build new platforms with pulmonary insulin and GLP-1, where the compound liraglutide appears to be promising.

Our core competences are in therapeutic proteins, and this is where we can make the greatest difference in driving company growth and achieving better outcomes for people whose healthcare needs we serve.

Lars Rebien Sørensen
president and chief executive officer

Barriers to success include customers willingness and ability to pay. Ageing populations in the developed parts of the world have led to increased pressure on healthcare costs, and governments seek to cut prices and do not offer premiums for new, innovative products. This development threatens to undermine the profitability of bringing improved treatments to market. In contrast, in the developing parts of the world the challenge is to provide access to medicines and to healthcare.

Novo Nordisk has stepped up its efforts to engage payers and policy-makers in all parts of the world in understanding the magnitude of the economic implications of inaction on diabetes. These efforts include building an evidence-based argumentation for action and for the health-economic benefits of insulin treatment. The company s global programmes to offer inclusive diabetes care help alleviate the current diabetes

Diabetes care

Strategic objective: maintaining leadership Novo Nordisk offers a full portfolio of modern insulins and has a strong pipeline with a late-stage product candidate that the company hopes will meet current and future needs. The company has sufficient production capacity to scale up deliveries, and a well-tuned sales force in place globally. Moreover, significant investments in diabetes research make Novo Nordisk the largest player in this field.

This position is the foundation of Novo Nordisk s promise to change diabetes. To curb the diabetes pandemic, which is largely attributable to an escalating consumer culture, action is required on several fronts. First, to improve the quality of life for people with diabetes. Modern insulin therapy serves individuals varying needs. Improved outcome, which can be measured as reduction of HbA_{1c} levels, may be achieved by early initiation of insulin therapy and timely intensification. Second, as a longer-term effort, interventions to prevent the onset of type 2 diabetes. And third, research into finding a cure for type 1 diabetes.

Growth drivers and risk factors The market for diabetes care is growing rapidly. It is also becoming increasingly competitive as new products

burden while simultaneously building long-term presence in emerging markets and paving the way for commercially viable solutions in the longer term.

Biopharmaceuticals

Strategic objective: expand the business With a solid range of therapeutic products, the strategy for biopharmaceuticals is to expand the business by pursuing new indications and exploring new potential in other areas where Novo Nordisk can make a difference.

As the primary objective, Novo Nordisk aims at expanding its leadership in haemophilia based on the company s product NovoSeven® and a number of innovative compounds that cover different blood clotting factors, including analogues of FVII, in the pipeline.

The therapy areas in the biopharmaceuticals segment predominantly address small patient groups with significant unmet medical needs. The exception here is hormone replacement therapy, where Novo Nordisk has gained market-leading positions despite a generally declining market.

Back to Contents

Representatives from the External Affairs network in Novo Nordisk.

Building on research and development to change diabetes.

Growth drivers and risk factors Given the nature of indications investigated and the limited number of patients for whom treatment is relevant, conducting clinical trials is cumbersome and time-consuming. At the same time, the risk of failure is great, and even when results are positive there is no guarantee of commercial viability. Still, Novo Nordisk is committed to pursuing treatment options if there is a sufficiently well-founded hypothesis that the compound could benefit patients. As with diabetes care, delay or failure of key development projects would impair Novo Nordisk s ability to successfully market current and new products.

In the new therapy area, inflammation, success is unlikely to be achieved solely through organic growth, so Novo Nordisk is actively promoting itself as an attractive partner in research and development, and is open to acquisitions that could complement the internal activities.

Facing industry challenges

The pharmaceutical industry is subject to extensive regulation, which aims to ensure patient safety, but also increases costs. The approval process for new products is generally lengthy, expensive and subject to unanticipated delays. Sustaining revenue growth therefore also depends on the timely and successful approval, introduction and marketing of new products, as well as gaining approval for existing products for new indications.

Government-imposed industry price regulations, mandatory reference prices with subsequent payment burdens to patients through higher co-payments, and mandatory substitution of biosimilar drugs adversely affect Novo Nordisk and most of the industry in general.

Protecting patent rights is material to Novo Nordisk s business. Loss of market exclusivity and the introduction of lower-cost biosimilar products result in significant loss of sales. The therapeutic proteins market is becoming increasingly attractive. Novo Nordisk has a generally low short-term exposure to patent expiration, but, like other branded products, is exposed to competition.

On a path of continued growth

In recent years, Novo Nordisk has grown at a rate that generally outperforms peers in the pharmaceutical industry.

The company is building up a global sourcing programme,

Quality is paramount in pharmaceutical production. Quality failures could jeopardise patients well-being and would entail major reputational risks as well as risks of costly compensation payments. With an aim to mitigate this Novo Nordisk has a global quality system in place, with audits, improvement plans and management reviews.

To achieve its ambitious business objectives Novo Nordisk depends upon the ability to attract and retain skilled people in key positions across the organisation, and particularly in growth markets such as the US and China. Competition for talent among pharmaceutical and biotechnology companies is intensifying, and, as a result, Novo Nordisk has stepped up its efforts on employer branding. Innovation and high performance depend on people s engagement at work, leadership development and lifelong learning. These are the key parameters for success addressed by the Novo Nordisk people strategy and monitored through regular facilitations, organisational audits and annual surveys.

Evidence of good governance and full compliance is a precondition for maintaining the licence to operate and innovate. In a competitive environment with increasing public scrutiny and regulation, the risk of legal action due to perceived or actual failure to adhere to marketing practices is ever present. Monitoring adherence to the Novo Nordisk Way of Management, supported by the company s business ethics policy and related audits, aims to mitigate such risks.

Legal issues related to intellectual property, product liability claims or business practices are included in the overview of current legal cases on pp 87 88.

Financial risks related to currency exposure are described on p 76.

Managing risks

Novo Nordisk defines risks as events or developments which could reduce our ability to meet our overall objectives . This includes both financial and non-financial risks that could affect the company throughout its value chain: from discovery and development, through manufacturing, sales and support functions.

Integrated and systematic risk reporting is aligned with other management reporting and occurs on a quarterly basis. Through this process, risk factors and mitigations are identified and factored into the individual units business plans. This disciplined inquiry into the context for identified risks and assessment of which objectives may be threatened enables Novo Nordisk to be more attentive to factors that help or hinder

having made substantial investments in expanding production capacity in the US, Brazil and China. In doing so, Novo Nordisk seeks to grow its presence in strategic markets, spread risks and optimise costs and logistics. Any failure or breakdown in vital production facilities or with key suppliers could, in addition to potential physical damage or loss of life, affect the supply of products.

long-term value creation. As part of the strategic planning process, Novo Nordisk conducts an annual in-depth identification and evaluation of long-term growth opportunities.

Back to Contents

Market shares are based on IMS MAT November 2007 volume data.

performance in 2007

Novo Nordisk is on a solid growth track. In 2007, the results testified to a robust sales growth in all major markets for the portfolio of modern insulins supported by productivity improvements.

Sales increased by 13% in 2007 in local currencies and by 8% in Danish kroner due to a significant negative currency development. This result is in line with the expected growth in reported sales of 6 9%, communicated in connection with the release of financial results for the third quarter of 2007. The primary growth contribution came from the robust market penetration of the company s modern insulins NovoRapid®, NovoMix® and Levemir® in all markets. Sales of modern insulins increased by 35% (29% in Danish kroner).

In Biopharmaceuticals, double-digit sales growth was sustained, with sales of NovoSeven® increasing by 10% (4% in Danish kroner), and sales of Norditropin® increasing by 11% (6% in Danish kroner). Other products primarily the hormone replacement therapy products Activelle® and Vagifem® also contributed to growth.

Sales growth was realised in all regions measured in local currencies, the main contributors being North America and International Operations, which provided 53% and 23% respectively of the total sales growth. Europe contributed 21% and Japan & Oceania 3% of the sales growth in 2007 measured in local currencies.

The gross margin increased to 76.6% in 2007, lower than in 2006) was impacted by the non-recurring cost of DKK 1,325 million following the decision to discontinue the development of AERx®, the company s pulmonary insulin delivery system, communicated to the market in January 2008. This is significantly below the expectations of growth in operating profit of close to 10% as reported , communicated at the end of the third quarter of 2007. Adjusted for the non-recurring costs related to the discontinuation of AERx®, operating profit growth was 13%.

Net profit increased by 32% to DKK 8,522 million. When adjusted for the non-recurring income from the divestment earlier in the year of Dako s business activities and the non-recurring costs related to the discontinuation of AERx®, net profit increased by 25%.

Earnings per share (diluted) increased by 34% to DKK 13.39.

Four long-term targets guide the company s financial development, aimed at ensuring long-term shareholder value creation. These targets are operating profit growth, operating margin, return on invested capital and cash conversion. Progress towards achievement of all four long-term financial targets was on track in 2007, and this was underpinned by good progress on the key non-financial goals.

The operating margin for 2007 was realised at 21.4%. Excluding costs related to the discontinuation of AERx®, it was 24.5%, being very close to the long-term target of 25%.

Operating profit growth was realised at (2%). However, adjusted for the non-recurring costs

up from 75.3% in 2006, primarily reflecting sustainable productivity improvements. The productivity improvements facilitated continued investments in research and development and also in sales and distribution. Significant progress in the research and development pipeline was achieved in 2007, most notably with the completion of the phase 3 clinical studies of liraglutide, Novo Nordisk s once-daily, human analogue of GLP-1.

Reported operating profit of DKK 8,942 million (2% related to the discontinuation of AERx® and a significant negative currency impact, the underlying operating profit increased by close to 25%. The long-term target is aiming at an average annual increase of 15%. The performance reflects solid underlying sales growth as well as an improved gross margin.

The return on invested capital was 27.2%, edging

Back to Contents

closer to the long-term target of 30%. This was achieved through a solid growth in the underlying profit combined with a modest growth in invested capital as a result of reduced unit costs on inventory, and lower investments in tangible assets.

The cash to earnings ratio for the year was realised at 106%, compared to the long-term target of 70%. Adjusted for the non-recurring costs related to the discontinuation of AERx®, which did not impact the cash flow in 2007, the cash to earnings ratio for 2007 was realised at 94%.

Diabetes care

Novo Nordisk retained its position as global leader, with 53% of the total insulin market and 43% of the modern insulin market, both measured by volume. The company is determined to sustain its leadership in diabetes care by leveraging the value of its full portfolio of modern insulins and delivery devices while developing new antidiabetic agents and next-generation insulins to better address future needs for effective diabetes care. See pp 26 37.

Sales performance

Sales of diabetes care products increased by 14% measured in local currencies and by 9% in Danish kroner to DKK 30,478 million compared to 2006.

Modern insulins, human insulins and insulin-related products

Sales of modern insulins, human insulins and insulin-related products increased by 14%, measured in local currencies, and by 9% in Danish kroner to DKK 28,329 million. All regions contributed to growth, measured in local currencies, with North America and International Operations delivering the highest growth rates. In 2007, sales of modern insulins increased by 35% in local currencies, and by 29% in Danish kroner to DKK 14,008 million. All regions realised solid growth rates, with North America and Europe as the primary contributors to growth. Sales of modern insulins contributed 76% of the overall growth in local currencies and now constitute

set to work on promoting the company s portfolio of modern insulins across the US.

Europe

Sales in Europe increased by 7% in local currencies and 7% measured in Danish kroner, reflecting continued progress for the portfolio of modern insulins. At the end of 2007, Novo Nordisk held 57% of the total insulin market and 50% of the modern insulin market, both measured by volume, and is capturing the main share of growth in the modern insulin market.

International Operations

Sales in the International Operations region increased by 20% in local currencies and by 14% in Danish kroner. Increases in sales of modern insulins were particularly evident in Turkey and China. In addition, sales of human insulins continue to add to overall growth in the region, driven by China. The key contributor to growth in International Operations is China, which accounted for around 50% of the region s sales growth in 2007.

Japan & Oceania

Sales in Japan & Oceania increased by 4% in local currencies but decreased by 4% measured in Danish kroner as a consequence of the depreciation of the Japanese yen versus Danish kroner during 2007. This growth in reported sales reflects sales growth for the modern insulins, NovoRapid® and NovoRapidMix® 30, both of which were increasingly sold in the leading prefilled delivery device, FlexPen®. In December 2007, Novo Nordisk launched Levemir® in Japan and is now also in Japan the only company with a full portfolio of modern insulins. Modern insulins are increasingly being sold in the leading prefilled delivery device, FlexPen®. At the end of 2007, Novo Nordisk held 73% of the total insulin market in Japan and 63% of the modern insulin market, both measured by volume.

Oral antidiabetic products (NovoNorm®/Prandin®)

Sales of oral antidiabetic products increased by 14% in local currencies and by 8% in Danish kroner to DKK 2,149 million compared to 2006. This primarily reflected increased sales in International Operations and North America,

53% of Novo Nordisk s sales of insulins.

Sales of human insulin declined by 7% to DKK 12,572 million ((3%) in local currencies) in line with Novo Nordisk s increased focus on modern insulins and the general market trend.

North America

Sales in North America increased by 26% in local currencies in 2007 and by 16% in Danish kroner, reflecting a solid penetration of the modern insulins Levemir®, NovoLog® and NovoLog® Mix 70/30. Novo Nordisk continues to consolidate its leadership position in the US insulin market with 42% of the total insulin market and 30% of the modern insulin market, both measured by volume. Currently, more than 35% of Novo Nordisk s modern insulin volume is being sold in FlexPen®.

During 2007, Novo Nordisk expanded its US diabetes care sales force from around 1,200 to around 1,900 people. Following training, the enlarged team mainly due to an increased market share in China and a higher average sales price in the US market.

Biopharmaceuticals

Novo Nordisk is seeking to expand its leading positions within the biopharmaceuticals therapy areas by pursuing new indications for its existing product range and by exploring new potential proteins in other areas. See pp 38 41.

Sales performance

Sales of biopharmaceutical products increased by 10% measured in local currencies and by 4% measured in Danish kroner to DKK11,353 million compared to 2006.

NovoSeven®

Sales of NovoSeven® increased by 10% in local curren-

Back to Contents

Market shares are based on IMS MAT November 2007 volume data.

cies and by 4% in Danish kroner to DKK 5,865 million compared to 2006. This sales growth, driven by sales in North America, primarily reflected increased sales within the congenital bleeding disorder segments, where Novo Nordisk is the global leader. Treatment of spontaneous bleeds for congenital inhibitor patients remains the largest area of use.

Growth hormone therapy (Norditropin®)

Sales of Norditropin® (ie growth hormone in a liquid, ready-to-use formulation) increased by 11% measured in local currencies and by 6% measured in Danish kroner to DKK 3,511 million. All regions, and especially North America and Europe, contributed to growth measured in local currencies. Novo Nordisk continues to gain market share in the growth hormone market, and is the second-largest company in the market with a 23% market share measured in volume.

Other products

Sales of other products within biopharmaceuticals, which predominantly consist of hormone replacement therapy (HRT)-related products, increased by 8% in local currencies and by 2% in Danish kroner to DKK 1,977 million. This development primarily reflects continued sales progress in the US market for Vagifem®, Novo Nordisk s topical oestrogen product. The launch of Activella® low dose in the US augmented the upward trend. At the end of 2007, Novo Nordisk was the second-largest participant within the global HRT market.

Pipeline progress

See pp 16 17 for a status on the current pipeline and pp 18 19 for progress during the year, including major regulatory approvals.

management and other senior employees (around 525 in total) amounting to DKK 130 million. The comparable expense for 2006 was DKK 113 million (around 425 participants in total).

Licence fees and other operating income were DKK 321 million in 2007, positively impacted by an income in the first quarter of 2007 related to the outlicensing of an oral antidiabetic compound.

As a consequence of the non-recurring costs related to the discontinuation of AERx®, operating profit in 2007 decreased by 2% to DKK 8,942 million compared to 2006. Adjusted for the non-recurring costs related to the discontinuation of AERx®, operating profit growth was 13%.

Net financials and tax

Net financials showed a net income of DKK 2,029 million in 2007 compared to a net income of DKK 45 million in 2006.

Included in net financials is the result from associ -ated companies with an income of DKK 1,233 million, primarily related to the non-recurring tax-exempt income of approximately DKK 1.5 billion from Novo Nordisk s divestment of its ownership of Dako s business activities as well as Novo Nordisk s share of losses in ZymoGenetics, Inc, of approximately DKK 0.3 billion. In 2006, the result from associated companies was a loss of DKK 260 million.

The foreign exchange result was an income of DKK 910 million compared to an income of DKK 141 million in 2006. This development reflects gains on foreign exchange hedging activities due to the lower value in 2007 of main currencies, in particular US dollars and Japanese yen, versus Danish kroner compared to the exchange rate levels prevailing in 2006. Foreign exchange hedging gains of DKK 691 million have been deferred for future income recognition, primarily in

Operating performance

The cost of goods sold was DKK 9,793 million in 2007, representing a gross margin of 76.6% compared to 75.3% in 2006. This improvement reflects improved production efficiency, a lower level of write-downs and impairment in 2007 compared to 2006 and higher average prices in the US. The gross margin was negatively impacted by around 0.8 percentage points due to currency developments, primarily the lower value of US dollars and Japanese yen versus Danish kroner compared to 2006.

Total non-production-related costs increased by 15% to DKK 23,417 million. The increase primarily reflects costs related to research and development as well as sales and distribution. Research and development costs increased more than sales, primarily reflecting the non-recurring costs related to the discontinuation of AERx® of DKK 1,325 million, which relates to write-down and impairment of tangible and intangible assets, and costs in relation to the discontinuation of clinical trials. Sales and distribution costs increased slightly more than sales, primarily reflecting the increase in the US diabetes care sales force.

In 2007, Novo Nordisk expensed costs in relation to share-based long-term incentive programmes for senior

2008.

The realised results for net financials in 2007 were slightly higher than the previously communicated expectation of a total net financial income of around DKK 1,950 million .

The effective tax rate for 2007 was 22.3%, a decrease from 29.6% in 2006. The significantly lower effective tax rate for 2007 primarily reflects a non-recurring reduction of around 3 percentage points from Novo Nordisk s divestment of its ownership of Dako s business activities as well as a non-recurring effect of close to 2 percentage points from the re-evaluation of the company s deferred tax liabilities as a consequence of the reduction in the Danish corporation tax rate to 25% introduced in 2007.

The realised effective tax rate for 2007 was in line with the previously communicated expectation of a tax rate of around 22% for the full year of 2007.

Capital expenditure and free cash flow

Net capital expenditure for property, plant and equipment for 2007 was realised at DKK 2.3 billion compared to DKK 2.8 billion for 2006. The main investment projects in 2007 were capacity for AERx® insulin strip manufacturing, expansion of FlexPen® assembly capaci-

Back to Contents

ty, as well as the expansion of the purification and filling capacity for insulin products. The realised capital expenditure was slightly lower than the previously communicated expectation of around DKK 2.5 billion .

Free cash flow for 2007 was DKK 9.0 billion compared to DKK 4.7 billion for 2006. Novo Nordisk s financial resources at the end of 2007 were DKK 13.6 billion and higher than the amount at the end of 2006. Included in the financial resources are unutilised committed credit facilities of approximately DKK 7.5 billion. The cash flow was higher than the previously communicated expectation of around DKK 7.5 billion and is reflecting a stronger operating performance, improvements in working capital requirements as well as a lower than anticipated level of investments in the fourth quarter of 2007.

Equity

At the end of 2007, total equity was DKK 32,182 million, equal to 67.4% of total assets, which is the same level as at the end of 2006.

Proposed dividend

At the Annual General Meeting on 12 March 2008, the Board of Directors will propose a 29% increase in dividend to DKK 4.50 per share of DKK 1. This corresponds to a pay-out ratio of 34.9%, when adjusted for the non-recurring costs related to the discontinuation of AERx® and the non-recurring income from the divestment of Dako s business activities, and compares to a pay-out ratio of 34.4% for the financial year 2006. No dividend will be paid on the company s holding of treasury B shares.

Share repurchase programme

During 2007, Novo Nordisk repurchased 15,537,012 B shares of DKK 1 each at an average price of DKK 311 per share, equal to a cash value of DKK 4.8 billion. During 2006, Novo Nordisk repurchased B shares equal to a cash value of DKK 3 billion. The Board of Directors has approved an increase of DKK 6.5 billion in the ongoing DKK 10 billion share repurchase programme, bringing the total value of the share repurchase programme to DKK 16.5 billion. The programme is now expected to be finalised before the end of 2009 as compared to the previously communicated completion time before the end of 2008 .

share capital will amount to DKK 634,000,000 divided into an A share capital of DKK 107,487,200 and a B share capital of DKK 526,512,800.

Legal issues

Novo Nordisk is party to a number of legal cases. See an overview of current legal issues and information on contingencies for pending litigation on pp 87 88.

Long-term incentive programmes

Novo Nordisk s remuneration policy aims to attract, retain and motivate members of the Board of Directors and Executive Management of Novo Nordisk. See pp 44 45. Novo Nordisk will present for approval at the Annual General Meeting in 2008 its guidelines for incentive-based remuneration for the Board of Directors and Executive Management of Novo Nordisk.

Long-term share-based incentive programme for senior management

As of 2004, members of Novo Nordisk s Executive Management (currently five) and the other members of the Senior Management Board (currently 22) participate in a performance-based incentive programme where a proportion of the calculated shareholder value creation is allocated to a joint pool for the participants. See pp 44 45.

For 2004, 252,688 B shares were allocated to the joint pool and the market value of the scheme was expensed in 2004. The number of shares in the 2004 joint pool has not been reduced as the financial performance in the subsequent years (2005 2007) reached specified threshold levels. Accordingly, the full number of shares was transferred to 22 current and former members of senior management immediately after the announcement of the full-year 2007 financial results on 31 January 2008. See pp 81 82.

For 2007 and based on an assessment of the economic value generated in 2007 as well as the performance of the R&D portfolio and key sustainability projects, the Board of Directors approved on 30 January 2008 the establishment of a joint pool for the financial year of 2007 by allocating a total of 166,445 Novo Nordisk B shares, corresponding to a cash value of DKK 43 million. This allocation amounts to 6.5 months of fixed base salary on average per participant. This amount was expensed in 2007.

Holding of treasury shares and reduction of share capital

On 30 January 2008, Novo Nordisk A/S and its wholly-owned affiliates owned 25,815,130 of DKK 1 each of its own B shares, corresponding to 4% of the total share capital.

In order to maintain capital structure flexibility, the Board of Directors will also propose a reduction in the B share capital from DKK 539,472,800 to DKK 526,512,800 by cancelling 12,960,000 B shares of DKK 1 from the company s company s holding of treasury B shares at a nominal value of DKK 12,960,000, equal to 2% of the total share capital. After implementation of the share capital reduction, the company s

As the long-term share-based incentive programme is evaluated by the Board of Directors to have worked successfully in 2007, it is planned to continue in 2008 with an unchanged structure. Novo Nordisk has, however, decided to make this decision subject to the formal approval by the Annual General Meeting in March 2008 of the guidelines for incentive-based remuneration for the Board of Directors and Executive Management of Novo Nordisk.

Long-term share-based incentive programme for vice presidents

As of 2007, around 500 key employees below top level management also participate in a share-based pro-

Back to Contents

gramme, based on similar performance criteria as the programmes for senior management. The pool will operate with a maximum contribution per participant equal to four months fixed base salary. The shares in the pool are also locked up for a three-year period before they potentially may be transferred to the participants.

On 30 January 2008, the Board of Directors approved the establishment of a pool for 2007 by allocating a total of 527,665 Novo Nordisk B shares, corresponding to a cash value of DKK 135 million. This was based on an assessment of the economic value generated in 2007 as well as the performance of the R&D portfolio and key sustainability projects. This allocation amounts to 3.25 months of fixed base salary on average per participant. This amount will be recognised over four years.

Non-financial performance

In 2007, Novo Nordisk continued to perform well in terms of managing direct and indirect economic, environmental and social impacts in areas of strategic importance. The Triple Bottom Line approach aims to deliver long-term value to the business and contribute to global society. See p 53 for an overview of non-financial measures.

Economics

Novo Nordisk created 2,344 new positions worldwide and had 25,516 full-time positions, measured as full-time equivalents (FTE) at the end of the year. This is an increase of 10% on 2006 and reflects increased activities in all business areas. Via the multiplier effect, the increase translates into 56,100 indirect jobs in the supply chain worldwide.

In 2007, the number of employees outside Denmark exceeded the number of employees in Denmark. This is reflected in the distribution of remuneration between geographical areas.

Environment

In 2007, the energy-related emissions of CO_2 from Novo Nordisk s global operations increased by 3%. The total energy consumption also increased by 3%. Since 2005, the company has

parison to sales growth there is a continued positive development from 2003 to 2007.

Compliance with environmental regulation is a high priority, and in 2007 the results of preventive measures were clear: the number of breaches of regulatory limit values decreased by 82% from 123 in 2006 to 22 in 2007. In the same period, the number of accidental releases decreased by 22% to a total of 105.

During 2007, a total of 14 suppliers were audited on their environmental and social performance. As a follow-up on the revised responsible sourcing programme, nine internal trainings on the new social and environmental implementation procedure were conducted with the participation of a total of 168 employees responsible for procurement from all lines of business.

Social

By the end of 2007, Novo Nordisk employed 26,008 persons (full-time and part-time positions) an increase of 10% compared to 2006.

The level of engaging culture (employee engagement) is measured by the average answers of 10 equally weighted questions in the annual survey, eVoice. In 2007, the consolidated score (on a scale of 1 5) was as high as 4.1, increasing by 0.1 from 2006. In 2007, the focus on the facilitations and follow-up on resulting action points was maintained. In 2007, 99% of all action points arising from facilitations were closed.

In 2007, the annual spending on training, measured as average spend per employee, increased by 16%, reflecting the company s strategic priority on talent and leadership development, and on lifelong learning offered to all employees. Moreover, the fact that the company took on board some 4,200 new employees during the year has required that additional resources be spent on induction training.

Changing Diabetes®, Novo Nordisk s global campaign to improve prevention, detection and care, effectively put diabetes on the public and political agendas.

On the first UN-observed World Diabetes Day,

implemented energy-saving projects at all production sites, which have resulted in an estimated 12,000 ton reduction in total CO_2 emissions. Comparing the CO_2 emissions to sales shows a continued positive development from 2003 to 2007. Assessments of performance against the company s ambitious long-term target to reduce its CO_2 emission by 10% over a 10-year period as part of the WWF Climate Savers Programme, indicate that performance is on track.

The Eco Intensity Ratios (EIR) showed improved performance in both business areas, and for both water and energy.

The quantity of waste decreased by 27% from 2006 to 2007. The positive development is due to an increased focus on waste, which has resulted in a 56% decrease of the quantity of hazardous waste. In com-

14 November 2007, Novo Nordisk organised events to mark the day across the world. In total 278,764 people in 50 countries took part. The company s global advocacy effort to promote awareness of and action on diabetes is a response to the UN Resolution on diabetes, adopted in December 2006, in recognition of diabetes as a major global health challenge and in respect of the human right to proper care. See pp 26 29.

Novo Nordisk s strategy to improve access to diabetes care is a long-term leadership strategy to promote medicines as well as to provide sustainable diabetes care for all. The company has revisited its activities and framed a new global programme targeting particularly vulnerable populations: migrant communities in developed countries, people in least developed countries and emerging economies, and children. See p 29.

Back to Contents

outlook for 2008

Novo Nordisk expects slightly more than 10% growth in sales measured in local currencies for 2008.

This is based on expectations of continued market penetration for Novo Nordisk s key strategic products within diabetes care and biopharmaceuticals, as well as expectations of increased competition during 2008.

Given the exchange rates prevailing on 28 January 2008, the reported sales growth in 2008 is expected to be around 3.5 percentage points lower than the growth rate measured in local currencies.

For 2008, reported **operating profit** is expected to increase by at least 25% despite the negative currency environment. The guidance for reported operating profit for 2008 includes an estimate of non-recurring costs of DKK 300 million in relation to the discontinuation of AERx® to cover severance payments and other costs. Adjusting for the impact from currency and the non-recurring costs in 2007 and 2008 related to the discontinuation of AERx®, underlying operating profit is expected to grow by at least 20%.

For 2008, Novo Nordisk expects a **net financial income** of DKK 450 million, reflecting significant foreign exchange hedging gains, primarily related to the US dollar.

The effective **tax rate** for 2008 is expected to be approximately 24%.

Capital expenditure is expected to be around DKK 2.5 billion in 2008. Expectations for **depreciations, amortisation and impairment losses** are around DKK 2.5 billion, and **free cash flow** is expected to be around DKK 7.5 billion.

All of the above expectations are provided that currency exchange rates, especially the US dollar and related currencies, remain at the level prevailing on 28 January 2008. All other things being equal, movements in key invoicing currencies will impact Novo Nordisk s operating profit as illustrated below:

Invoicing currency

	Annual impact on Novo Nordisk s operating profit of a 5% movement in currency
USD	DKK 470 million
JPY	DKK 140 million
GBP	DKK 85 million
USD-related*	DKK 100 million

* For 2008 onwards the currency sensitivity for USD-related currencies has been focused to solely reflect the impact from CNY and CAD.

Novo Nordisk has hedged expected net cash flows in relation to US dollars, Japanese yen and British pounds for 17, 15 and 10 months respectively. The financial impact from foreign exchange hedging is included in Net financials .

Forward-looking statement

Novo Nordisk s reports filed with or furnished to the US Securities and Exchange Commission (SEC), including this document and the company s Form 20-F expected to be filed with the SEC in February 2008, and written information released, or oral statements made, to the public in the future by or on behalf of Novo Nordisk, may contain forward-looking statements.

Words such as believe , expect , may , will , plan , strategy , prospect , foresee , estimate , project , anticipate , ca words and terms of similar meaning in connection with any discussion of future operating or financial performance identify forward-looking statements. Examples of such forward-looking statements include, but are not limited to

- statements of plans, objectives or goals for future operations, including those related to Novo Nordisk s products, product research, product introductions and product approvals as well as cooperations in relation thereto,
- statements containing projections of revenues, income (or loss), earnings per share, capital expenditures, dividends, capital structure or other net financials,
- statements of future economic performance, future actions and outcome of contingencies such as legal proceedings, and
- statements of the assumptions underlying or relating to such statements.

In this document, examples of forward-looking statements can be found under the headings Business strategy, opportunities and key risks , Performance in 2007 , Outlook for 2008 and note 31, Financial Risk , on p 76.

These statements are based on current plans, estimates and projections. By their very nature, forward-looking statements involve inherent risks and uncertainties, both general and specific. Novo Nordisk cautions that a number of important factors, including those described in this document, could cause actual results to differ materially from those contemplated in any forward-looking statements.

Factors that may affect future results include, but are not limited to, global as well as local political and economic conditions, including interest rate and cur-

rency exchange rate fluctuations, delay or failure of development projects, unplanned loss of patents, interruptions of supplies and production, product recall, unexpected contract breaches or terminations, government-mandated or market-driven price decreases for Novo Nordisk s products, introduction of competing products, reliance on information technology, Novo Nordisk s ability to successfully market current and new products, exposure to product liability and legal proceedings and investigations, changes in governmental laws and related interpretation thereof, including on reimbursement, intellectual property protection and regulatory controls on testing, approval, manufacturing and marketing, perceived or actual failure to adhere to ethical marketing practices, investments in and divestitures of domestic and foreign companies, unexpected growth in costs and expenses, failure to recruit and retain the right employees and failure to maintain a culture of compliance. Please also refer to the overview of risk factors on pp 8 9.

Unless required by law, Novo Nordisk is under no duty and undertakes no obligation to update or revise any forward-looking statement after the distribution of this document, whether as a result of new information, future events or otherwise.

Back to Contents

Pipeline | **Overview**

Therapeutic area	Compound/product	Description
Diabetes care		
Insulin	**NovoMix® 50/70**	**Premixed formulations of the rapid-acting modern insulin, insulin aspart. Provide a combined rapid- and intermediate-acting insulin effect at the ratio 50/50 or 70/30.**
	NN5401	A next-generation modern insulin.
	NN1250	A next-generation modern insulin.
GLP-1 (Glucagon-Like Peptide-1)	**Liraglutide**	A once-daily analogue of human GLP-1 stimulating the release of insulin only when glucose levels become too high, and inducing weight loss.
	Liraglutide	A once-daily analogue of human GLP-1 stimulating the release of insulin only when glucose levels become too high, and inducing weight loss.
	Once-weekly GLP-1	A once-weekly analogue of human GLP-1.
Oral	**PrandiMet**	A single tablet formulation combining the short-acting insulin secretagogue repaglinide with an insulin-sensitising agent, metformin.
Biopharmaceuticals		
Haemophilia	**rFVIIa** Temperature stable	**A temperature-stable recombinant factor VIIa.**
	rFVIIa Short-acting analogue	A single-dose, short-acting rFVIIa analogue, a next-generation successor to NovoSeven®.
	rFVIIa Long-acting analogue	A long-acting rFVIIa analogue, a next-generation molecule targeting prophylactic therapy.
	rFVIIa Subcutaneous	A subcutaneous formulation of rFVIIa for the treatment of haemophilia patients with inhibitors.

Haemostasis	**NovoSeven®** Novo Nordisk s recombinant blood clotting factor VIIa	The efficacy and safety of NovoSeven® is tested on severe bleeding in trauma patients.
		The efficacy and safety of NovoSeven® is tested in spinal surgery patients.
		The efficacy and safety of NovoSeven® is tested in cardiac surgery patients.
	rFXIII	A recombinant blood clotting factor XIII.
Growth disorders	**Norditropin®**	The efficacy of Novo Nordisk s Norditropin® in reducing mortality is tested in adult patients in chronic dialysis treatment.
	Long-acting human growth hormone	A long-acting human growth hormone.
Hormone replacement therapy	**Vagifem®** low dose	A low-dose product for vaginal application intended for effective relief of symptoms associated with vaginal dryness.
	Activelle® low dose	A low-dose continuous-combined product.
Oncology	**IL-21**	Interleukin 21 is an immuno-stimulatory protein that helps the immune system attack tumour cells.
	Anti-KIR	A first-in-class therapeutic antibody that stimulates the body s own immune system to kill cancer cells.

Back to Contents

Indication	Phase 1	Phase 2	Phase 3	Filed
Type 1 and type 2 diabetes				
Type 1 and type 2 diabetes				
Type 1 and type 2 diabetes				
Type 2 diabetes				
Obesity				
Type 2 diabetes				
Type 2 diabetes				
Haemophilia patients with inhibitors				
Haemophilia patients with inhibitors				
Haemophilia patients with inhibitors				
Haemophilia patients with inhibitors				
Bleeding in emergencies, trauma				
Bleeding during spinal surgery				
Bleeding during cardiac surgery				
Bleeding during cardiac surgery				
Adult patients in chronic dialysis (APCD)				

Growth disorders
Topical hormone replacement therapy
Hormone replacement therapy
Malignant melanoma
Renal cell carcinoma
Ovarian cancer
Colorectal cancer
Acute myeloid leukaemia (AML)
Multiple myeloma

pipeline overview

Novo Nordisk s research and development efforts focus on offering superior therapies that help save people s lives or improve their quality of life.

The strategy is to address unmet medical needs by leveraging the company s core capabilities within diabetes research, protein engineering, expression, formulation and delivery.

In diabetes care the aim is to maintain the company s position as the world leader. In biopharmaceuticals the aims are to expand the franchise within haemostasis and growth hormone deficiency, and to build a presence in inflammation.

See more at novonordisk-trials.com

The website includes results from clinical trials finalised after October 2002 for Novo Nordisk-marketed products and all Novo Nordisk s efficacy clinical trials in phases 2 4. As of mid-2008, all phase 1 trials will be posted. In 2007, phase 1 trials were registered upon requirement by authorities and/ or journal editors as a prerequisite for publication.

See current pipeline overview
novonordisk.com/science/pipeline

Phase 1

Studies in a small group of healthy volunteers, and sometimes patients, usually between 10 and 100, to test a new drug for best dosage and potential side effects.

Phase 2

Testing a drug at various dose levels in a larger group of patients to learn about side effects, the body s use of the drug and its effect on the condition.

Phase 3

Studies in large groups of patients worldwide, comparing the new medication with a commonly used drug or placebo for both safety and efficacy.

Filed

A New Drug Application is submitted for review by various government regulatory agencies.

Back to Contents

Phase 1
Studies in a small group of healthy volunteers, and sometimes patients, usually between 10 and 100, to test a new drug for best dosage and potential side effects.

Phase 2
Testing a drug at various dose levels in a larger group of patients to learn about side effects, the body s use of the drug and its effect on the condition

pipeline progress

In 2007, significant progress was made across Novo Nordisk s clinical development pipeline.

This overview illustrates key development activities: entries into the pipeline, progression of development compounds, exits from the pipeline and major regulatory approvals.

Diabetes care
With significant investments in the diabetes pipeline, progress was satisfactory in all segments: insulin, Glucagon-Like Peptide-1 (GLP-1) and oral antidiabetics (OAD).

Biopharmaceuticals
Progress in the biopharmaceuticals pipeline was satisfactory in haemo -philia, growth disorders and hormone replacement therapy. Within haemostasis, ie critical bleeding, there was a setback following results of the phase 3 trial in intracerebral haemorrhage.

Type 2 diabetes

Once-weekly GLP-1 analogue
Once-weekly GLP-1 human analogue for people with type 2 diabetes is being tested in a phase 1 study initiated in 2007 by Novo Nordisk. With the aim of assuming a leadership position also in the GLP-1 segment, Novo Nordisk is building a portfolio of GLP-1 products.

Haemophilia patients with inhibitors

rFVIIa long-acting analogue
In 2007, Novo Nordisk initiated a phase 1 study of its long-acting recom-binant factor VIIa analogue. The analogue is a potential next-generation successor to NovoSeven® in the treatment of haemophilia patients with inhibitors. With its long duration of action it is intended to enable preven-tion of bleeding for the patient.

rFVIIa for subcutaneous administration
In 2007, Novo Nordisk initiated a phase1 study of a subcutaneous formu-lation of rFVIIa for the treatment of haemophilia patients with inhibitors. The subcutaneous administration is expected to provide con-venience to patients as the current haemophilia treatment regimen is delivered intravenously.

Growth disorders

Long-acting human growth hormone
In 2007, Novo Nordisk initiated a phase 1 study of a long-acting human growth hormone. The product is intended to provide patients with the convenience of fewer injections.

Immunotherapy

Anti-KIR

Anti-KIR is a first-in-class therapeutic antibody that entered phase 1 studies in AML and multiple myeloma aimed at stimulating the body's natural killer cells to eradicate tumour cells. Novo Nordisk expects to outlicense Anti-KIR

Type 1 and type 2 diabetes

NN1250

NN1250 is a neutral, soluble, long-acting insulin analogue with improved properties. It entered phase 2 in January 2008.

NN5401

NN5401 is a neutral, soluble, insulin analogue with improved properties. It entered phase 2 in January 2008.

Haemophilia patients with inhibitors

rFVIIa short-acting analogue (NN1731)

In 2007, Novo Nordisk moved its fast-acting recombinant factor VIIa ana-logue into phase 2. The analogue is a next-generation successor to NovoSeven® in the treatment of haemophilia patients with inhibitors. From a single dose its fast haemostatic effect is intended to provide faster cessation of bleeding and pain relief for the patient.

Haemostasis

NovoSeven® cardiac surgery

Preliminary results of this phase 2 study confirm the safety profile known from the cardiac surgery setting and from other studies of NovoSeven® outside of haemophilia with inhibitors. While the primary aim of this trial was safety, the trial also demonstrated the biologic haemostatic effect of NovoSeven®.

NovoSeven® spinal surgery

Novo Nordisk completed its phase 2 study in spinal surgery trial in 2006 and the project has been on hold in 2007, pending detailed analysis of the results from the cardiac surgery phase 2 trial.

NovoSeven® traumatic brain injury

Given the results obtained in the intracerebral haemorrhage study, Novo Nordisk decided not to pursue this indication further.

Immunotherapy

IL-21

IL-21 has shown early signs of biological activity in trials with renal cell carcinoma and malignant melanoma. Further phase 1/2 investigations are ongoing. Novo Nordisk expects to outlicense IL-21.

Back to Contents

Phase 3
Studies in large groups of patients worldwide, comparing the new medication with a commonly used drug or placebo for both safety and efficacy.

Regulatory approval
Following successful completion of phase 3 studies, compounds are sub-mitted for review by national or regional government regulatory agencies. Following regulatory approval the products can be marketed.

Type 2 diabetes

Liraglutide

Liraglutide is Novo Nordisk s once-daily human analogue of the naturally occurring GLP-1 hormone. In 2007, Novo Nordisk completed five major phase 3 trials in the LEAD (Liraglutide Effect and Action in Diabetes) development programme, and regulatory submission is expected by mid-2008 in Europe and the US. The progress and clinical results of the LEAD trials were encouraging. See more on pp 32 33.

In 2007, Novo Nordisk successfully completed the phase 2 study of liraglutide as an antiobesity treatment for obese, non-diabetic people.

Type 1 and type 2 diabetes

AERx® iDMS

Novo Nordisk has decided to refocus its activities within inhaled insulin and to discontinue clinical development of AERx® iDMS insulin, which was in phase 3 development. The decision was based on a detailed analy-sis of the future prospects for inhaled insulin and a review of the medical and commercial potential of the AERx® inhaled insulin system. The deci-sion to discontinue the development of AERx® was not due to safety concerns.

Haemostasis

NovoSeven® intracerebral haemorrhage

In 2007, Novo Nordisk completed the phase 3 study with NovoSeven® in patients suffering from a bleeding in the brain, intracerebral haemorrhage. The trial showed that treatment with NovoSeven® significantly reduced intracerebral bleeding compared to placebo treatment. Improvement in clinical outcomes in terms of functional independence and neurological impairment was observed on day 15 after the bleeding, but mortality and severe disability were not improved at the end of the study period (day 90). With regard to safety, study results were in line with the established safety profile of NovoSeven®. Novo Nordisk decided not to file for regula-tory approval.

NovoSeven® trauma

In 2007, Novo Nordisk continued its phase 3 study with NovoSeven® in severe bleeding in patients suffering a trauma. The phase 3 trial is expected to be completed in 2010.

Growth disorders

Norditropin® adult patients in chronic dialysis

In 2007, Novo Nordisk initiated a global phase 3 study for the treatment of adult patients in chronic dialysis (APCD) with its human growth hor-mone Norditropin®. The 2,500 patients will be treated for two years.

Hormone replacement therapy (HRT)

Vagifem® low dose

In 2007, Novo Nordisk successfully completed the US phase 3 study of Vagifem® low dose, a topical product for vaginal application. The product is now filed for regulatory approval in the US. A phase 3 study with Vagifem® low dose is ongoing in the EU.

Type 1 and type 2 diabetes

Levemir®

Levemir® is Novo Nordisk s long-acting modern insulin. In 2007, the prod-uct was approved and launched in Japan. This completed the launch of the company s full portfolio of modern insulins in Europe, the US and Japan. In total, Levemir® has now been launched in 61 countries.

Furthermore, the European Commission approved Levemir® for use in combination with oral antidiabetics.

NovoRapid®

NovoRapid®, Novo Nordisk s fast-acting modern insulin, was approved for elderly people by the European Commission.

NovoMix® 50/70

Following European approval, the two modern premixed insulins were launched in the first European countries in 2007. These insulins contain a higher proportion of short-acting insulin compared to the modern pre-mixed insulin NovoMix® 30.

In Japan, NovoMix® 70 was filed for approval in December 2007.

Type 2 diabetes

NovoNorm® Fixed Combo, PrandiMet

In 2007, Novo Nordisk filed a New Drug Application in the US for NovoNorm® Fixed Combo, PrandiMet . The product combines in a sin-gle tablet formulation the short-acting insulin secretagogue repaglinide with an insulin-sensitising agent, metformin. Novo Nordisk further grant-ed Sciele exclusive US marketing rights to the product in 2007.

This completed Novo Nordisk s research and development activities within the oral antidiabetics segment as all other small-molecule projects were discontinued and existing projects divested in 2007. Novo Nordisk took this step to dedicate its resources to protein-based pharmaceuticals.

Haemophilia patients with inhibitors

NovoSeven® single dose

NovoSeven® single dose for haemophilia patients with inhibitors was approved by the European Commission and subsequently launched. The treatment regimen is dosed at 270 microgrammes per kilogramme body-weight and is expected to offer patients protection of veins, fewer injec-tions and less interruption to daily life.

rFVIIa temperature stable

rFVIIa temperature stable was filed for regulatory approval in Europe, the US and Japan in 2007. A temperature-stable product is expected to deliv-er significant patient benefits, including rapid dosing and ease of access to treatment outside of home or hospital settings.

Growth disorders

Norditropin®

Norditropin® was approved for Noonan syndrome and Turner syndrome in the US. The accessory NordiFlex PenMate® was also approved in the US.

Hormone replacement therapy (HRT)

Activelle® low dose

In addition to the approval in the US in late 2006, the Activelle® low-dose version was approved by the Swedish regulatory authorities in 2007 and the mutual recognition procedure is now ongoing in Europe.

Back to Contents

Concentrated effort to drive progress through the pipeline. Some 4,200 new employees joined Novo Nordisk in 2007.

challenges to the pharmaceutical industry

The pressure is on in the pharmaceutical industry. Staying competitive requires more than financial muscle market shares are increasingly earned through innovation, flexibility and the ability to respond to societal challenges. The industry is faced with increasing R&D costs, patent expiries and low R&D productivity. Companies must also navigate in a business environment characterised by heightened regulatory pressures, cost containment of public health-care budgets and a general scepticism about the industry s interest in improving human health.

Challenges such as these are surfacing against a backdrop of rising healthcare costs, an escalating chronic disease burden and a growing and ageing population.

Globalisation affects both the business environment and health trends: greater wealth frequently translates into unhealthy lifestyles, which in turn prompts an upsurge in health disorders and increased pressure on healthcare budgets in developed and developing countries alike.

Innovation in the pipeline

The industry s ability to develop new products is being questioned in light of a decreasing number of approvals of new medicines. In 2006, the US Food and Drug Administration approved just 22 new molecular entities (NMEs) and biologics despite a record 55 billion US dollars expenditure on research and development by North American companies. In 1996, when spending on R&D was less than half this figure, a total of 53 NMEs were approved.

1.2

billion people in developing countries will be middle class by 2030 three times today s number.

66%

of all older people are living in the developing world; by 2025, it will be 75%, according to the WHO.

50%

of people with diabetes in the OECD countries have their eyes checked every year.

This approval slowdown, which coincides with lucrative products going off-patent, augurs badly for a sizeable segment of the industry.

Compared to its peers, Novo Nordisk is relatively well insulated against these trends flexibility in funding innovation is aimed at keeping the pipeline busy. Globally, competition in the pharmaceutical industry is intensifying. Novo Nordisk recognises that continued spending on R&D is crucial to its ability to remain competitive, and its annual expenditure here is one of the highest in its class.

Novo Nordisk currently has quite a strong pipeline supported by the necessary technology platforms and core competences. Two other strengths are our ability to find new indications for existing molecules and our focus on meeting unmet medical needs among neglected groups of patients, says Lars Rebien Sørensen.

R&D investments are accelerating in emerging markets such as India and China with their large pools of highly qualified people, and Novo Nordisk is building its presence in these countries.

Patents and partnerships

Over the next few years, the pharmaceutical industry faces a flood of patent expiries, giving generic companies the oppor -tun ity to enter the market with cheaper products. In response, some companies are cutting jobs in an effort to rein in costs before they lose patent protection. Novo Nordisk s current exposure is less severe, allowing it to create rather than cut jobs.

Another advantage is Novo Nordisk s biopharmaceutical expertise: the production process is technologically demanding and its products, based on large, complex molecules, are more difficult to copy or modify than chemical drugs.

Identifying promising new drug candidates in early development and collaborating with their inventors is an additional Novo Nordisk strategy.

For Novo Nordisk, partnerships such as the licence agreement it signed in December 2007 with C2X Pharma and the French national institute for health and medical research (Inserm) for thrombin-activable factor X, should provide

Back to Contents

Clinical trials require meticulous measurement.

CEO Lars Rebien Sørensen visits the Naivasha District Hospital in Kenya.

effective tools in broadening the portfolio of haemophilia and haemosta-sis projects. Partnerships can be cost-effective methods of leveraging expertise, and we intend to avail ourselves of more such opportunities, says Lars Rebien Sørensen.

More regulatory pressure

At the same time as competition between pharmaceutical companies is intensifying, regulatory authorities are exerting more pressure on the industry. Companies are being asked for greater proof that new compounds submitted for approval have a benefit over products already available. This includes requests for more safety data, which is also made publicly available, as well as a demand that companies continuously track the safety and efficacy of products after they are marketed by way of phase 4 studies. Such requirements are being harmonised internationally, increasing the scale and complexity of clinical trials. Novo Nordisk uses its experience and knowledge within its core therapeutic areas to work together with authorities to design studies that address these concerns. Consistently high ethical standards within clinical trials and transparency on clinical trial results are key to the company s approach.

Compared with many of our peers, we are in a fortunate position. Our top-line performance is strong, productivity in the pipeline is high, we are relatively well protected against patent expiries, and our production capacity and sales forces are geared for continued expansion.

Lars Rebien Sørensen
president and chief executive officer

Demonstrable value for money required

Healthcare costs are rising, with governments and payers straining to meet the needs of the growing disease burden. Healthcare spending has historically outpaced economic growth everywhere in the world, a trend set to continue. The total global expenditure for healthcare is 4 trillion US dollars, according to the World Health Organization. The cost burden is prompting governments and payers to look more closely at the value of pharmaceutical products. While spending on medicines has gone up as part of the overall healthcare bill, medicines share of healthcare spending remains very small about 10 cents of every dollar spent in the US on healthcare, for example.

In this challenging environment, pharmaceutical products must demonstrate value for money, which is why Novo Nordisk is increasingly focused on producing evidence of the health-economic benefits of its products, and particularly of improved diabetes treatment. One such initiative is the Global Changing Diabetes® Barometer (see pp 27 28), which demonstrates the substantial savings that may accrue to payers from diagnosing diabetes early and before any complications arise.

Ethical conduct is a business imperative

Ethical, social and governance issues are also gaining greater prominence. Increasingly, investors and customers expect evidence of ethical behaviour in all aspects of business, including the conduct of clinical trials and the promotion and marketing of products. Stakeholders are looking at companies ability to handle such issues consistently across diverse markets. Well before this trend became common currency, Novo Nordisk formulated its Way of Management (see p 6). This blueprint, with its clear description of core values, implies that the challenges faced by the industry are best resolved by working in partnership with governments, regulators and the healthcare community to meet the world s healthcare needs. The company-wide implementation of a business ethics policy underpins this values-based approach.

It takes a lot of effort to earn and maintain stakeholder trust. As a healthcare company, we have a particular responsibility when it comes to how we do business, how we make our money, and also how we spend it, says Lise Kingo, executive vice president and chief of staffs.

And the best response to scepticism, she says, is transparency and honest engagement with critical stakeholders.

Market research shows that there are five key drivers impacting a company s reputation: perceived quality of its products, its services, market leadership, corporate responsibility and innovation. Reputation study results in 2007 from four strategic markets the US, Germany, the UK and China show a solid performance of Novo Nordisk.

Back to Contents

Leif Henriksen and Peter Jacobi at Biopharmaceuticals, Gentofte, Denmark. They and their colleagues have optimised energy and water consumption and reduced CO_2 emissions from 2004 to 2007 by 9.5%.

lean production cuts costs

To stay competitive in a globalising world Novo Nordisk has invested in establishing seamless global supply and maintains a strong focus on optimising production efficiency. This effort underpins the company s ambitious strategy in response to the climate change challenge.

Intensified competition from biosimilar production and cost containment by payers have increased the urgency for optimising cost margins. Over the last few years, Novo Nordisk has successfully driven its gross margin upwards and will continue this effort to outperform its peers. In light of the company s market leadership in diabetes care and the boost to productivity achieved by the company s cLEAN® programme, this goal is attainable. cLEAN® is Novo Nordisk s version of lean a well-known process optimisation philosophy. The small c stands for current and emphasises that cLEAN® evolves continuously. As of 2007, its methods are also being adopted within research and development and administrative areas.

These improvements, along with an improved product mix, make a significant contribution to the company s financial results. The gross margin improved to 76.6% in 2007 from 75.3% in 2006. This enables Novo Nordisk to invest for the future by putting more funds into research and development and expanding the sales force.

Empowering people to act

Backed by the support of top management, Novo Nordisk has invested substantially in the cLEAN® programme. Through a cLEAN® Academy, all employees in Product Supply will have completed training in its basic concepts by 2010. This is complemented by more in-depth training for certain employees. The training is as much about behaviour as it is about tools. cLEAN® is a mindset, and one that empowers employees to act whenever they see room for improvement and business benefits, not just in terms of costs. The goal is that continuous improvement leads to more stable and efficient processes and eliminates waste saving time, money and resources. The programme is global, with production employees in Brazil, China, Denmark, France, Japan and the US all following the same philosophy.

As evidence that this strategy is working, Novo Nordisk has not needed to increase its Product Supply staff levels since 2003, even though the company s production volume has grown significantly in that time.

Kim Lorenzen, project manager at the Material Handling warehouse in Hillerød, Denmark, agrees: cLEAN® shakes us out of our daily routines and inspires us to think along different lines.

2014

is the year by which Novo Nordisk aims to supply all its Danish facilities with electricity from wind farms.

12,000

tons of CO_2 emission s are estimated to have been eliminated by recent Novo Nordisk energy-screening programmes.

cLEAN® in action

As an example of how the cLEAN® philosophy plays out, employees in diabetes product manufacturing at Novo Nordisk in Denmark set the goal of increasing the capacity for the freeze-drying of products to better meet market demand. Freeze -drying is used to ensure long product life, easy transportation and the prevention of chemical and biological reactions. Through a combination of reduced shift times and process optimisations, capacity increased by 236%, saving money, maintenance and equipment.

At the Novo Nordisk insulin production facility in Clayton, North Carolina, US, the use of cLEAN® tools to make a mechanical improvement and remove a persistent bottleneck reduced downtime by 93% on an insulin pen cartridge filling line.

At the Diabetes Active Pharmaceuticals Ingredients Quality Control laboratory in Kalundborg, Denmark, the team was

Back to Contents

On 30 November 2007, some 70 investors and analysts visit Kalundborg, Denmark site of the world s largest insulin plant and the facility that will soon produce liraglutide.

Lars Clausen, executive vice president, DONG Energy, and Lise Kingo, executive vice president and COS, Novo Nordisk, seal their ambitious wind power deal with a handshake.

able to shorten analysis time by more than 25% by turning the spotlight on one of the invisible tasks easily overlooked in the busy daily routine. The key to the results was performance management and immediate follow-up.

Also in Kalundborg, new cooling towers at the fermentation plant boost capacity by 50% and at the same time achieve the largest single reduction in energy consumption: annual savings of 4 million kWh and an annual reduction in $C0_2$ emissions of some 2,500 tons.

Production efficiency accelerates CO_2 reduction

At the same time, production efficiency underpins Novo Nordisk s climate strategy and contributes to lowering the levels of CO_2 emissions. The company has set an ambitious target, as part of its commitment to the WWF Climate Savers programme, to reduce CO_2 emissions in 2014 to a level that is 10% below the 2004 level, despite a significant production increase.

Novo Nordisk is committed to actively addressing climate change. Reducing carbon dependency is a business priority, and the company acknowledges its responsibility to respond to what is now recognised as one of the greatest global challenges to our future.

The three levers in Novo Nordisk s climate strategy are optimisation through cLEAN®, energy savings in production and conversion to renewable energy. Energy-screening programmes from 2005 to 2007 led to an estimated reduction in CO_2 emissions of 12,000 tons.

An innovative partnership for wind power

In 2007, Novo Nordisk entered into a pioneering agreement with DONG Energy, Denmark s largest energy company: DONG Energy assists Novo Nordisk in identifying energy-saving options and in return Novo Nordisk will purchase corresponding quantities of energy from a new offshore wind farm off the west coast of Denmark.

With this agreement Novo Nordisk has devised a cost-neutral way to significantly achieve reductions in CO_2 emissions and at the same time help build the market for renewable energy in Denmark. This is what makes the agreement unique: it is commercially viable, and that makes it a solution that both parties would like to see other companies adopt.

From 2014, Novo Nordisk is expected to purchase about a third of the total energy produced by the wind farm. The aim is that, by then, electricity supplies for Novo Nordisk s facilities in Denmark, which currently account for 85% of the company s total CO_2 emissions, will be entirely based on power from this wind farm. The partnership will run till 2020.

A quality mindset

In times of increased regulatory pressure for the pharmaceutical industry to meet high safety and quality standards, emphasis on quality goes hand in hand with effective and efficient production. More stable processes serve to ensure product quality.

We are doing more with less, quite simply. Low unit costs allow us to invest more in research and development and in sales and marketing. This is what will keep us strong in the long run, and it s a very motivating message to our employees.

Per Valstorp
senior vice president, Product Supply

At Novo Nordisk, cLEAN® in manufacturing is an expression of the Quality Mindset, one of the fundamental management principles in the Novo Nordisk Way of Management: Everyone must continuously improve the quality of their work.

The robust quality system at Novo Nordisk has resulted in a consistently high level of performance regarding the quality of the company s products as well as compliance in the manufacturing of products. Novo Nordisk s production is generally in compliance with international standards for current good manufacturing practice (cGMP). In 2007, more than 70 inspections by various health authorities or certifying bodies were passed.

Back to Contents

responsible business practices

Consistent messages and a broad perspective take precedence over ad hoc solutions to win short-term competitive gains. Novo Nordisk s presence in its markets relies on trust. This has been built over many decades and is a valuable asset that must be protected and nurtured.

The discovery, development and marketing of medical drugs entail careful attention to a range of ethical considerations. Novo Nordisk upholds high global standards in the areas of human ethics (clinical trial ethics, stem cell ethics), animal ethics (the reduction, refinement and replacement of animal experiments) and the use of gene technology in research and production. These ethical criteria also apply to external partners such as contract research organisations. On several occasions, the company has been the driver behind new standards that have gained wider adoption in the industry. In 2007, a dedicated website on bioethics was launched.

Transparency of clinical trials

Since 2005, Novo Nordisk has published the results of all sponsored phases 2 4 interventional trials for marketed products. This was done in response to stakeholder demands for increased transparency. In 2007, Novo Nordisk introduced its own dedicated clinical trials website novonordisk-trials.com providing an overview of all later-stage (phases 2 4) clinical trials. In 2008, phase 1 studies will also be disclosed.

Novo Nordisk only conducts clinical trials in countries where it intends to seek marketing approval and where there is an ethics committee to approve the trial. In 2007, more than 20,000 people in 46 countries were involved in Novo Nordisk-sponsored clinical trials. Around 40% of the people involved live in developing countries. People who participate in Novo Nordisk trials only do so with informed consent and will always be offered the best available and proven treatment after the end of the study.

95%

of employees in sales and marketing were trained in business ethics standards.

20,000

people were participants in Novo Nordisk clinical trials in 2007.

40%

of people involved in Novo Nordisk clinical trials live in developing countries

When testing investigational compounds we use only one clinical standard. So the same guidelines apply to our clinical trials in any country, supplemented, of course, by adherence to local rules, says Anders Dejgaard, chief medical officer, Global Development.

Ethical marketing practices

Novo Nordisk s business ethics programme includes compliance with legislation and offers guidance on individual behaviour. The Business Ethics Policy is backed by three procedures for ethical business conduct, product promotion and contracting with agents and other third parties. Managers and members of senior management participate in training workshops. Business ethics e-learning is mandatory for all managers, and the e-learning programme is open to all employees. In 2007, 95% of employees in sales and marketing were trained in face-to-face workshops around the world. A Compliance Hotline is in place to alert management to possible breaches of the policy, and performance is monitored via audits.

A human rights perspective

Novo Nordisk supports the United Nations Universal Declara -tion of Human Rights, which celebrates its 60th anniversary in 2008, and has actively done so since 1999. As a signatory to the United Nations Global Compact, Novo Nordisk is committed to supporting and respecting human rights throughout its sphere of influence, primarily its relations with employees, suppliers and customers.

Engaged in the public debate

As part of its strategy to achieve broader business goals, Novo Nordisk seeks to make voices heard in order to raise awareness of the current unsustainable path of diabetes. Novo Nordisk s global public affairs strategy rallies people with diabetes, healthcare professionals, decision-makers, patient organisations, media and constituency groups around new solutions. The aim is to get governments and international organisations to give diabetes priority on a par with its scope and severity and to improve health outcomes for people with diabetes.

The company has Government Affairs offices in

Washington and Brussels. Both offices focus on efforts to improve diabetes treatment. Recent US achievements include the introduction of bipartisan legislation, supported by the American Diabetes Association, which will create a cross-agency programme to promote wider use of Medicare s diabetes screening benefit, saving money and lives.

Global public affairs standards

Novo Nordisk s Changing Diabetes® campaign leverages both public relations and public affairs activities (see pp 26 29). To ensure consistency with the Novo Nordisk Way of Management and compliance with requirements from governments and international institutions, a set of global public affairs standards is being instituted. This will include rules governing external disclosure.

See more on responsible business practices at novonordisk.com/sustainability. Click: Values in action

People participating in Novo Nordisk trials do so with informed consent and are always offered the best available and proven treatment after the end of the study.

Back to Contents

people put values to work

Novo Nordisk s culture and values serve to bridge the increasingly diverse global employee base and ensure a consistent approach to its way of working.

In pace with its rapidly growing business, Novo Nordisk is expanding its workforce. At the end of the year, the total number of employees was 26,008 an increase from 2006 of 2,395 people. For the first time, the majority are located outside the company s home base in Denmark.

An expansion of this magnitude carries the challenge of smooth induction into the Novo Nordisk Way of Management. This values-based approach guides the way employees approach their work, no matter where in the world they are located.

In the annual organisational review three strategic drivers were identified: globalisation, innovation and leadership. In response, the Global People Strategy focuses on talent and leadership development, talent attraction, performance management, people engagement and organisational development.

An engaging culture

Company values being accountable, ambitious, responsible, engaged with stakeholders, open, honest and ready for change are seen in daily interactions between managers and employees as well as in dealings with external parties.

A high degree of identification with these values is evidenced by the level of employee engagement. In 2007, eVoice, the global employee survey, included a new index mapping the level of engagement measured by 10 criteria. Employees were asked to indicate on a scale of 1 to 5 the extent to which they agreed with statements such as: Novo Nordisk is leading the fight against diabetes , Novo Nordisk s results within the social and environmental area are important to the future of the company , and I know how my job contributes to the success of Novo Nordisk . The average score was 4.1.

Employees are inspired by the company s vision and values,

12,256

more people worked at Novo Nordisk in 2007 than in 2000; a workforce expansion of 89%.

1,120

applications were received for 27 Novo Nordisk jobs during a 2007 graduate recruitment drive.

1st

place was Novo Nordisk's ranking in the 2007 'Best Places to Work in New Jersey' awards programme.

and our Triple Bottom Line approach to doing business, says Executive Vice President and Chief of Staffs Lise Kingo.

In external surveys a similar picture is apparent: Novo Nordisk s values and culture combined with the company s focus on people development appeal to graduates and other job seekers. In 2007, the company had1,120 applicants for 27 positions in its graduate programmes.

Also in 2007, Novo Nordisk in the US was ranked the top employer in New Jersey in competition with many other, larger pharmaceutical companies. In Denmark, Novo Nordisk s retention rates exceed industry benchmarks. However, in fast-growing and competitive markets like China it remains a challenge to retain talented people. For this reason, the company has established an MBA programme for Novo Nordisk managers in China at the prestigious Peking University (see p 37).

Spurring talent development

We have a strong organisation with a motivated workforce. But that does not invite complacency. We need to raise the bar constantly for how we develop our leaders and support the development of all our employees. This is key to our future business success, says Lars Christian Lassen, senior vice president, Corporate People & Organisation.

Novo Nordisk offers tailored education programmes for all employees. These include introductory programmes for new employees, a wide range of professional courses and management development programmes. The company s investment in training and development exceeds the industry average, as measured by average training costs per employee.

New managers undergo mandatory leadership training and vice presidents and general managers also complete a mandatory programme, Spotlight, which focuses on personal leadership. In addition, there are two talent programmes for leaders who demonstrate high potential: Lighthouse for vice presidents and general managers, and Greenhouse for managers and young talent.

Since 2004, 75 vice presidents and general managers have completed the Lighthouse programme, which is designed to explore personal leadership, sustainability and innovation in new ways. Participants meet people from diverse backgrounds who can stimulate new thinking: Native American leaders, people living in the favelas of Rio de Janeiro or healthcare workers in Beijing.

The Lighthouse pool is the source of eight out of ten

senior leadership appointments.

Promoting a healthier lifestyle

The NovoHealth programme, aimed at preventing lifestyle diseases among employees, is now a global effort. This programme encourages and supports a healthy lifestyle by offering access to healthy food in the workplace, a smoke-free work environment, exercise and individual health checks every second year.

Health-promoting activities across the organisation will be aligned through NovoHealth to ensure sharing of better practices.

See more on people and workplace at novonordisk.com/sustainability
Click: Values in action

Back to Contents

US ballerina Zippora Karz dances on despite diabetes.

Times Square, New York, on World Diabetes Day, 14 November.

the challenge to change diabetes

The scale of the diabetes pandemic continues to escalate and diabetes could become the worst pandemic of the 21st century. As a global leader in diabetes care, Novo Nordisk has the potential and moral obligation to make a difference beyond providing better medicine and devices.

The company s medical ambition sets the bar: The goal is to improve patient outcome and save lives, and this is what drives the Changing Diabetes® activities. It builds on Novo Nordisk s position as the global leader in diabetes care, underpinned by its full portfolio of modern insulins and more than 80 years of experience. Novo Nordisk actively supports the implementation of the UN Resolution on diabetes and in 2007 demonstrated its commitment to work with partners: united to change diabetes.

There are 246 million people worldwide with diabetes, a number expected to reach 380 million by 2025, according to the International Diabetes Federation (IDF)[1)]. Millions more may develop diabetes due to the risk factors of overweight and obesity, sedentary lifestyles and unhealthy diets. Other societal factors such as globalisation, urbanisation, an ageing population and migration are driving the diabetes pandemic.

278,764

people in 50 countries were engaged in Novo Nordisk-led activities on World Diabetes Day, 14 November 2007.

55%

of diabetes deaths are among women

In March 2007, Novo Nordisk teamed up with former US President Bill Clinton for a debate about the future of diabetes treatment.

Today, the quality of life for people with diabetes is far from acceptable. Two out of three people are in poor control of their diabetes because of inadequate access, treatment or care. More than 50% of people with diabetes do not even know they have it. Poor control translates into late-stage complications such as blindness, kidney disease and lower-limb amputations, affecting the quality of life of people with diabetes and their families.

When numbers grow so large, they tend to lose their meaning. Behind the figures are people with diabetes whose biggest wish is to see this debilitating condition effectively defeated.

Advocacy for change

Novo Nordisk advocates an ambitious approach to changing diabetes. Firstly, to give priority to people with diabetes and

Back to Contents

Denise Cleary is a diabetes sales representative in Newfoundland and Labrador on the east coast of Canada.

270 cyclists, including 25 Novo Nordisk employees, joined the 10th Ride to Cure Diabetes in Death Valley, California, on 20 October.

convince governments and international organisations of the need to give diabetes priority. Secondly, to drive health outcomes for people with diabetes. And thirdly, to mobilise political support to break the curve of the global diabetes pandemic.

These are the strategic cornerstones of Novo Nordisk s global Changing Diabetes® programme.

Leadership in action: sustainable health policy

As part of its collaborative, multi-stakeholder approach to changing dia betes, Novo Nordisk held the first Global Changing Diabetes® Leadership Forum in March 2007. The Forum s ambition was to translate the UN Resolution on diabetes, adopted by the United Nations General Assembly in December 2006, into national action plans for the prevention, treatment and care of diabetes.

The keynote speaker at the Forum was former US President Bill Clinton, who stated: There is a rising tide of obesity and resulting diabetes; it is an unbearably inhumane problem that falls disproportionately on the poor. We will compromise our country s economic future even as we risk raising the first generation of children who will live shorter lives than their parents. We will never be forgiven, and I mean never, if we allow our children to live shorter lives than our own.

The Forum was attended by some 150 representatives of governments, international organisations and patient organisations as well as academics and journalists from 21 countries. Their dialogue took inspiration from *Redefining Health Care: Creating Value-Based Competition on Results*, by professors Elizabeth Teisberg and Michel E. Porter. The book claims that healthcare systems today have the wrong type of competition a competition to shift costs instead of improve care .

At the Forum, Novo Nordisk s President and Chief Executive Officer Lars Rebien Sørensen pledged to launch a diabetes barometer a

We have a medical ambition to improve patient outcomes by focusing on transparency and measurability to drive change. The Changing Diabetes® Barometer will guide our efforts towards our ultimate goal of allowing all patients to have an HbA_{1c} below 7%.

Jakob Riis
senior vice president, International Marketing

global tool that would track and measure best performance in the prevention, treatment and care of diabetes worldwide.

What you can measure, you can manage, Lars Rebien Sørensen elaborated.

This initiative is part of Novo Nordisk s response to help implement the UN Resolution on diabetes.

Barometer: tracking performance

In November 2007, Novo Nordisk launched the global Changing Diabetes® Barometer[2)]. It identifies diabetes indicators such as the HbA_{1c} test of blood sugar level, using published data. The Barometer aims to provide a scorecard for tracking change and pinpointing areas in need of improvement so that healthcare providers, governments and patient associations are better able to measure progress and set priorities for national diabetes action plans.

The first Barometer report covers 21 countries. It highlights that lifelong healthcare cost can be reduced by as much as 20% and that people with diabetes can live longer and better lives if they are treated

Back to Contents

adequately and diagnosed earlier, before any complications arise. The report found that10 of the 21countries did not have a national diabetes strategy in 2007. Seven countries lacked data on important treatment indicators such as HbA_{1c}, blood pressure and lipids levels, and only a couple of countries had systems in place enabling registration of data on key treatment indicators and consistent follow-up on a national scope.

It is essential that we figure out how to be far more effective in preventing diabetes, or at least preventing its progression to complications, says professor Elizabeth Teisberg. Improved early-stage care can dramatically reduce the incidence of amputations, blindness, heart attacks and other complications. The Barometer will spur discussion about ways to improve outcomes over the full cycle of care.

The cost of inaction

Inaction is far costlier to society than investing today in better diabetes diagnosis, treatment and prevention. That was a key conclusion of The Silent Epidemic[3)], an economic study of diabetes in developed and developing countries carried out by the Economist Intelligence Unit (EIU) and sponsored by Novo Nordisk.

The EIU study looked at the economic cost of diabetes in five countries: China, Denmark, India, the UK and the US. It concluded that the health spending and productivity loss arising from diabetes are already taking a noticeable share of GDP from many countries. In India, for example, which has the world s largest number of people with diabetes, productivity losses took the equivalent of 20.4 billion US dollars from India s economy, or 1.9% of GDP. This amounts to a productivity loss of 497 dollars per individual with diabetes, equivalent to around half of India s per capita GDP.

86,000
people have visited Novo Nordisk s Changing Diabetes® Bus during its journey across five continents stopping in 13 countries.

80%
of diabetes deaths occur in low- and middle-income countries.

Novo Nordisk is undertaking several socio-economic studies to examine the burden of diabetes and the costs and benefits of improved diabetes care, including in China and India, which have the largest diabetes populations in the world.

If diabetes remains unchanged, the world will face an impossible economic burden alongside a devastating toll on the lives of many people, says Charlotte Ersbøll, corporate vice president, Branding and Responsibility. With leadership comes responsibility. Novo Nordisk has the capability to make changes and innovate for new solutions to the diabetes epidemic where it is hitting the hardest.

Inclusive access to diabetes care

Novo Nordisk supports the United Nations Millennium Development Goals and recognises the link between poverty and ill health. The company s framework programme Changing global access to diabetes care aims to ensure that the company is acting responsibly and proactively to make diabetes care inclusive for all across geographies, cultures, social standing, age, gender and ethnicity. Access to health defined as availability, accessibility, affordability and quality is a critical precondition for effective prevention, treatment and care. The programme targets disadvantaged communities and the most vulnerable population groups with the lowest access to diabetes care, specifically people living in the least developed countries, low-income groups in emerging economies, migrants in developed countries and children.

Novo Nordisk s initiatives towards global access to diabetes care are the result of a long-term leadership strategy not only to promote medicines, but also to provide sustainable diabetes care for everybody who needs it. This ambition poses huge challenges. The solution hinges on the ability to drive

Public affairs roadmap for Changing Diabetes®

Back to Contents

By 2025, an estimated 80% of all people with diabetes will live in developing countries. Improving these people s access to proper care is a moral obligation. Finding commercially viable solutions to curb the diabetes pandemic is a business imperative.

Lise Kingo
executive vice president and chief of staffs

focused, targeted and collaborative actions. Novo Nordisk cooperates with governments, healthcare providers, NGOs, universities, healthcare professionals and diabetes associations worldwide to establish data, build evidence and pilot new intervention approaches.

The new global access programme builds on the experience gained during the past five years of work through several initiatives. Programmes such as the pioneering World Partnership programme in eight developing countries, the National Changing Diabetes® programmes with an accumulated 406 activities in 66 countries, the pricing policy focused on offering affordable insulin to the world s 50 least developed countries and the projects funded by the World Diabetes Foundation have one common denominator: they offer a partnership approach to filling gaps in under-resourced and unsustainable healthcare systems.

New initiatives include:

Maternal health in India: the World Diabetes Foundation turns five

At a local maternity clinic on the outskirts of Chennai, hundreds of pregnant women have gathered to be screened for gestational diabetes mellitus (GDM) at the Dr V Seshiah Diabetes Care and Research Institute. Some women are here for the first time, encouraged by posters or public announcements to take a free blood test. Others already have GDM and are here to have a monthly check-up. All are present as part of a project called Diabetes in Pregnancy Awareness and Prevention (DIPAP). It targets GDM, a type of diabetes that affects pregnant women who were not known to have diabetes previously. The project is supported by the World Diabetes Foundation (WDF). There is no known specific cause of GDM, but it is believed that the hormones produced during pregnancy reduce a woman s receptivity to insulin, resulting in high blood sugar. Undiagnosed, it can lead to miscarriages or stillbirths, malformations, large babies with the risk of injuries during delivery and a higher risk of mother and child developing diabetes.

For the WDF, which marked its fifth anniversary in 2007, the clinic s work is an example of how small projects can influence the quality of life of thousands of people with diabetes. Five years ago, India had no authentic data from large populations on the prevalence of GDM. The WDF started funding DIPAP in 2004. Since then, 13,139 women in the State of Tamil Nadu have been screened for diabetes and 1,700 cases of GDM have been detected. A healthy diet and exercise are sufficient treatment for 95% of women with GDM. Furthermore, project data has established that 16% of all pregnant women in urban areas and 10% in rural areas develop gestational diabetes. This data has played a significant role in changing policies for GDM treatment in the

pilot projects in Cameroon, Guinea, Tanzania and Congo aiming to ensure that the preferential prices offered by Novo Nordisk to governments in least developed countries make insulin more affordable and available to more patients,
the development of tools to bridge disparities in healthcare, targeted at migrant communities,
pilot projects aimed at securing access at the base of the pyramid, starting in BRIC countries (Brazil, Russia, India and China),
a programme targeted at improving the lives and well-being of children with diabetes worldwide.

Children and youth at risk

Type 2 diabetes, once considered the adult-onset form of diabetes, is now on the rise among children and adolescents, due to the same lifestyle factors prompting the rise of the pandemic among adults. World Diabetes Day 2007 centred on the impact of diabetes on children and adolescents. In September 2007, at the congress of the European Association for the Study of Diabetes (EASD), Novo Nordisk and the IDF presented a global overview of the diabetes burden among children and adolescents. This expert review into existing data and global trends within childhood diabetes, now referred to as the Diabetes Youth Charter[4)], highlighted that many children are in poor control of their diabetes. The experts found that early diagnosis, prevention and improved control could help prevent many deaths. Following this, Novo Nordisk, together with the IDF and the International Society for Pediatric and Adolescent Diabetes (ISPAD), launched the DAWN Youth programme at the ISPAD Congress in September 2007. This programme will facilitate advocacy, research and action to improve the lives of young people with diabetes and their families. DAWN[5)] (Diabetes Attitudes, Wishes and Needs) is Novo Nordisk s global study of the psychosocial barriers to diabetes care.

southern-Indian state of Tamil Nadu, which has a population of 62 million.

The WDF is an independent trust founded by Novo Nordisk to address diabetes in the world s poorest countries. It is the only international foundation devoted solely to funding projects within diabetes care. In its first five years, it has funded 138 projects in 77 developing countries, focusing on diabetes awareness, education, capacity-building and better access to healthcare. Our mantra is to be a catalyst to help others do more, explains WDF Managing Director Dr Anil Kapur.

See more at worlddiabetesfoundation.org

Back to Contents

improved prevention, detection and treatment

As the world leader in diabetes care, Novo Nordisk s ambition is to defeat diabetes by finding better methods of prevention, detection and treatment. The company s strategy is framed around the promise of changing diabetes and finding ways to improve people s lives.

Modern insulin therapy serves individuals' varying needs and lifestyles while providing blood sugar control and, in some instances, less weight gain in a simple and cost-effective way.

Novo Nordisk is the only company that offers a full range of modern insulins (see box). The company is intent on expanding its leadership within injectable insulins by pushing market penetration and seeking label extensions, while continually exploring alternative delivery methods.

We are continuously building upon our expertise in protein expression and engineering, protein formulation and device technology. This, coupled with our in-depth understanding of diabetes biology and the causes or origins of diabetes, puts Novo Nordisk in a unique position to realise our vision of eventually defeating diabetes, says Peter Kurtzhals, senior vice president, Diabetes Research Unit.

Other building blocks in the strategy to sustain leadership in diabetes care are a deep understanding of customer needs, coupled with the ability to deliver high-quality clinical data as well as convincing health-economic data that support the arguments for the company s products.

The control factor

The American Diabetes Association (ADA) and the European Association for the Study of Diabetes (EASD) recommend tight blood sugar control and early adoption of insulin therapy for people with diabetes who are not meeting their treatment goals.

232

billion US dollars was the estimated world spend in 2007 to treat and prevent diabetes and its complications.

9.2%

of people in North America had diabetes in 2007

With poor control of their condition, these people risk serious complications such as cardiovascular disease, blindness, kidney disease and lower-limb amputations.

In 2007, the first results of a three-year 4-T trial[6)] (Treating to Target in Type 2 Diabetes) were presented by researchers at the Oxford Centre for Diabetes, Endocrinology and Metabolism. It studied people with type 2 diabetes in Ireland and Great Britain who were not in control of their blood sugar despite taking two different antidiabetic tablets. The trial compared the effects of adding various Novo Nordisk modern insulins to the treatment regimen for one year: three equally large groups were treated with NovoMix® 30, NovoRapid® or Levemir®.

The results showed that participants in the trial could lower their blood sugar using any of the insulin regimens tested. The one-year outcome confirmed the advantages of starting once daily with Levemir® fewer hypoglycaemic events and less weight gain. In patients with HbA_{1c} (a measure of long-term blood sugar levels) of above 8.5% when entering the study, a more intensified treatment with insulin may be needed to reach target.

Blood sugar control is key

The IMPROVE® Control programme, a Novo Nordisk global observational study involving more than 50,000 people with diabetes, is also generating insight into the need for improved control. Participants started on treatment with NovoMix® 30. Most of them had either been on tablet therapy or received no treatment. Others had been on insulin therapy, but did not

The modern insulin portfolio

There is no one-size-fits-all approach to diabetes treatment. Modern insulins are designed to mimic the body s own physiological insulin regulation of blood glucose levels more closely than human insulin. Modern insulins offer better glucose control, less hypoglycaemia and increased convenience, leading to fewer serious complications and better treatment outcomes.

Modern insulins are classified by how fast they start to work in the body and how long their effects last. Different types of insulin work differently, depending on many factors such as the body s individualised response to insulin, lifestyle choices, including type of diet and amount of exercise, and how well blood sugar levels are managed.

Novo Nordisk offers a full portfolio of modern insulins covering fast-acting, long-acting and premixed modern insulins:

- Levemir®, a soluble long-acting basal insulin analogue for once-daily use.
- NovoRapid® (NovoLog® in the US), a rapid-acting insulin analogue to be used at mealtimes.
- NovoMix® 30 (NovoLog® Mix 70/30 in the US), a dual-release modern insulin that covers both mealtime and basal requirements.

Novo Nordisk also has advanced products within insulin delivery systems. These include FlexPen®, the world s most-used insulin delivery device.

Back to Contents

For 50 years, researchers at the Hagedorn Research Institute have worked to find a cure for diabetes.

Over 30 children had lots of fun while learning about diabetes during a bring-your-kids-to-work day at Novo Nordisk in Bagsværd, Denmark.

achieve the treatment targets. Safety and efficacy results after six months treatment will be presented at the annual meeting of the American Diabetes Association in 2008.

The need for better understanding of diabetes is underscored by research[7)] presented in 2007 by the Global Task Force on Glycaemic Control. This panel of global experts in diabetes and endocrinology, in association with Novo Nordisk, conducted a survey of nearly 1,400 healthcare professionals and more than 1,000 patients in eight countries, and found limited patient awareness and understanding of HbA_{1c} testing. Healthcare professionals underestimated the value of the test in managing diabetes. Another issue highlighted by the study is the fact that in general people only begin insulin treatment after complications have occurred and have become serious.

Convenience drives compliance

People with type 2 diabetes typically start insulin therapy with long -acting or pre-mixed insulin, and experience shows that they want very simple, very convenient devices for administering their insulin. Novo Nordisk offers a broad range of injection devices for added convenience and accurate dosing, but is also committed to pursuing alternative delivery models. This is an area in which Novo Nordisk is determined to gain the lead. Fast-acting inhaled insulin in the form it is known today is unlikely to offer significant clinical or convenience benefits over injections of modern insulin with pen devices. A completely new approach to inhaled insulin is needed. Novo Nordisk has therefore refocused its research and development activities towards inhalation systems for long-acting formulations of insulin and GLP-1. This work will be done in Hayward, California, US, and Hillerød, Denmark, and will target both liquid-based and powder-based technologies.

Opportunities in new treatment options

The scope of the diabetes pandemic and the many unmet treatment needs of those millions of people with diabetes who do not achieve their treatment targets invite fierce competition to offer improved treatment.

Proper treatment of diabetes is not just about medicine but about awareness, education and training.

Lise Kingo
executive vice president and chief of staffs

While modern insulins are currently proven to be the best option, investments are funnelled to research into two new areas. One is next-generation modern insulins, which may offer even better safety and efficacy. The other is GLP-1, a new class of therapies that offer new options for early- and intermediate-stage diabetes.

In 2007, Novo Nordisk announced results from phase 3 trials for li-raglutide. Liraglutide, Novo Nordisk s once-daily human analogue of the hormone GLP-1, is an experimental protein-based option being studied for the treatment of type 2 diabetes. It has been shown to intervene earlier in the disease progression and offer blood sugar control and weight loss. Development of liraglutide and other GLP-1 products is central to Novo Nordisk s strategy for sustaining its leadership in diabetes care (see pp 32 33).

Search for a cure

While much focus is being directed at the earlier detection and improved treatment of type 2 diabetes, Novo Nordisk s commitment to finding a cure for type 1 diabetes remains firm. Through the Hagedorn Research Institute, an independent basic research component within Novo Nordisk that celebrated its 50th anniversary in 2007, Novo Nordisk is the world s largest private sponsor of research into diabetes. Hagedorn is a major industrial partner in two cutting-edge research efforts: Beta Cell Biology Consortium (BCBC), supported by the National Institutes of Health (NIH); and the Juvenile Diabetes Research Foundation (JDRF) Center for Beta Cell Therapy in Diabetes in Europe, funded by the European Union.

Back to Contents

Diabetes care | **Liraglutide**

liraglutide key to future growth

Diabetes is a demanding condition. It requires constant attention and measuring of blood sugar levels. And with type 2 diabetes being a progressive disease, too many patients never reach an acceptable level of control of their diabetes. The consequence is debilitating and expensive late complications.

Liraglutide, Novo Nordisk s once-daily human analogue of the naturally occurring hormone Glucagon-Like Peptide-1 (GLP-1), is a compound being developed for the treatment of type 2 diabetes. GLP-1 works by stimulating the release of insulin only when glucose levels become too high, and by decreasing appetite. The effect can be described as enhancing the function of tired or worn-out insulin-producing cells. Liraglutide is being studied as a once-daily product that may be administered any time of day. Because of the mechanism of action, glucose monitoring may not be necessary.

In contrast to some other antidiabetic treatments, liraglu-tide may also lead to weight loss instead of weight gain. It is being studied for its potential as a therapeutic option in early-stage diabetes.

In 2007, Novo Nordisk concluded phase 3 studies of liraglutide. The LEAD™ programme Liraglutide Effect and Action in Diabetes is the largest and most complex set of clinical trials Novo Nordisk has ever undertaken for a diabetes product. As one of the most important products in Novo Nordisk s pipeline, liraglutide is critical to drive the future growth of the company.

3,992

persons participated in Novo Nordisk's LEAD™ phase 3 programme.

300

million people in the world are obese, according to the World Health Organization.

We are very pleased with the clinical results. The phase 3 studies have investigated the use of liraglutide throughout the progressive stages of diabetes: from early diagnosis where oral agents are used to intensified insulin therapy. In these studies, reduction in HbA^{1c} and body weight were measured, says Mads Krogsgaard Thomsen, chief science officer. The level of HbA^{1c} reflects the average blood glucose level over the past two to three months, and a decrease is therefore considered a measure of treatment effect. The American Diabetes Association recommends a treatment goal of HbA_{1c} <7%.

The data, to be submitted for publication in peer-reviewed journals, makes Novo Nordisk confident, that once approved by regulatory bodies, liraglutide has the potential to become an important new treatment option for people with type 2 diabetes. Novo Nordisk hopes to become a leader in the GLP-1 market. Novo Nordisk expects to file for regulatory approval of liraglutide in Europe and the US before the end of the second quarter of 2008.

How GLP-1 works

Liraglutide mimics GLP-1, which is a hormone released in the intestine.

Liraglutide is intended to work on several levers in type 2 diabetes, most importantly increasing beta cell function and leading to improved glucose control, but without the weight gain that is a natural consequence of this change in metabolism. In clinical studies weight loss was generally observed. It

Liraglutide phase 3 programme
LEAD (Liraglutide Effect and Action in Diabetes)

Study objective	Primary endpoint	Number of persons	Results announced

LEAD 1 Effect of liraglutide in combination with sulphonylurea (SU) (glimepiride)	HbA_{1c} (26 weeks)	1,041	20 August 2007
LEAD 2 Effect of liraglutide in combination with metformin	HbA_{1c} (26 weeks)	1,091	20 August 2007
LEAD 3 Effect of liraglutide in monotherapy	HbA_{1c} (52 weeks)	746	11 December 2007
LEAD 4 Effect of liraglutide in combination with metformin and TZD (rosiglitazone)	HbA_{1c} (26 weeks)	533	14 September 2007
LEAD 5 Effect of liraglutide in combination with metformin and SU (glimepiride)	HbA_{1c} (26 weeks)	581	21 June 2007

Detailed results from the full LEAD™ programme are expected to be communicated at scientific meetings and in peer-reviewed journals.
More details can be found at novonordisk-trials.com

Back to Contents

The innovation space of GLP-1 fits perfectly with our skill base. GLP-1 and insulin are the two most promising areas in diabetes care be in, and where the most advancement seems possible.

Mads Krogsgaard Thomsen
executive vice president and chief science officer

is believed that the glucose-dependent action, sustained beta cell function and weight loss work together in a virtuous circle, says Peter Kristensen, who as project vice president for liraglutide has overseen the trial programme.

The LEAD™ programme spanned more than 40 countries and included around 4,000 people with type 2 diabetes whose blood glucose was inadequately controlled. The programme is comprised of five randomised, controlled, double-blind studies.

The conclusive study, the results of which were announced in December 2007, indicates that the effects of liraglutide appear to be sustainable after one year s treatment. This is to be further investigated.

Liraglutide studied for obesity treatment

In November 2007, Novo Nordisk announced the clinical results from a double-blind, placebo-controlled phase 2 study of the use of liraglutide for treatment of obesity in people who do not have diabetes. It is aimed at clinically obese people with a Body Mass Index (BMI) above 30.

In the study liraglutide was given once daily over 20 weeks. All doses of liraglutide were seen to reduce body weight. The study also indicated a beneficial effect on systolic blood pressure after treatment with liraglutide, most likely associated with the weight loss.

In order to study the long-term weight reduction of liraglutide treatment, around 85% of all participants in the study volunteered to continue into an open-label extension phase of the study.

Production capacity in place

Obesity a 21st century health crisis

Being overweight and obese significantly increases the risk of developing type 2 diabetes. According to the World Health Organization, at least 300 million people in the world are obese[8)]. With numbers such as these, obesity and its related disorders is set to become one of the 21st century s biggest health crises. Already today, more than half the OECD population has a BMI at more than 25, currently applied as the upper level of normal weight.

In the US, 66% of the population is overweight and 33% obese.The global prevalence of overweight adults is projected to increase by 50% over the next 10 years to 1.5 billion people and by 2015 roughly half a billion people will be obese, if the current trend is not reversed.

There is broad consensus among experts and decision-makers that successful control requires collaborative efforts of governments, communities, civil society, healthcare, industry, individuals and other stakeholders.

Clearly, there is considerable consumer demand for safe and effective weight loss medicines without too many unpleasant side effects. Still, there is widespread medical consensus that the first line of intervention to control obesity should be advice on exercise and dietary adjustments. Medicines or surgery should only be considered if this route fails and the individual is at risk of developing medical complications to obesity.

Novo Nordisk s Diabetes 2025 scenarios forecast that, in the future, antiobesity medicines are likely to play a central role similar to today s highly efficacious cholesterol and blood pressure lowering medications, namely as the lead intervention in large populations. However, costs for life-long treatment may affect the prospect of any new obesity-related medicine from achieving widespread use. Certainly, long-term health-economic benefits will affect reimbursement by health management groups.

Future Novo Nordisk antiobesity medications will be developed and marketed to tackle obesity associated with serious health risks. Novo Nordisk will work within the existing consensus and guidelines regarding antiobesity pharmacological interventions, but will strive to better define the obese subjects with a substantial health risk, so treatment can be targeted at those who need it most.

Novo Nordisk believes that diabetes leadership involves taking an active role in the promotion of the value of wellness and healthy eating and exercising campaigns (see p 25).

The making of GLP-1 is quite similar to the production processes required for the production of modern insulins, and Novo Nordisk s production capacity is geared to begin supplying the market once regulatory approval has been obtained. With the company s extensive programme to build global sourcing and optimise production efficiency (see pp 22 23), facilities in Kalundborg, Denmark, are available for a dedicated production of liraglutide.

Looking ahead

As part of the longer-term life-cycle management initiatives supporting the GLP-1 franchise, Novo Nordisk initiated a phase 1 study of a once-weekly human GLP-1 analogue in 2007. Based on Novo Nordisk s protein acylation technology, this compound is designed for treatment with expected administration in a convenient injection device.

With the ambition to also become the leader in the GLP-1 field, we are working actively to secure this position by building up a portfolio of products, says Mads Krogsgaard Thomsen.

Back to Contents

modern insulins available to more people

With 53% of the total insulin market and 43% of the modern insulin market, both measured by volume, Novo Nordisk is the global market leader. The modern insulin and device portfolios showed continued strong sales growth in 2007.

We offer excellent products and devices, and we put a strong organisation behind it, focusing on delivering results to the people with diabetes using our products. That is our simple recipe for success, says Kåre Schultz, executive vice president and chief of operations. This doesn t mean it is a smooth road ahead. But we have good reason to be confident about our future.

As the market leader, our commitment has been unwavering over time, backed by our products and business approach. We put all our efforts into making sure that what we do truly makes a difference for people with diabetes, says Kåre Schultz.

Levemir® gains momentum

Market performance in 2007 reflected the success of Novo Nordisk s portfolio of modern insulins. Both NovoRapid® and NovoMix® 30 (NovoLog® and NovoLog® Mix 70/30 in the US respectively) consolidated their market positions. In addition, a number of pivotal developments in 2007 helped strengthen the position of Levemir®, the company s long-acting basal insulin not least its entry into crucial new markets.

Levemir® was launched in Japan in 2007, making Novo Nordisk the only company in Japan to offer a full portfolio of modern insulins. Novo Nordisk has long been the market leader in Japan.

In Europe and the US, where Levemir® was launched in 2004 and 2006 respectively, it is gaining a solid foothold in the basal insulin category. Today, it is marketed in 61 countries worldwide.

53%

was Novo Nordisk s estimated share of the global insulin market (by volume) in 2007.

700

people joined Novo Nordisk s US diabetes care sales team in 2007.

20%

of the world s elderly population has diabetes.

61

countries offer Levemir®, Novo Nordisk s once-daily, soluble, long-acting basal insulin analogue.

At the meeting of the American Diabetes Association in 2007, Novo Nordisk presented detailed results from the Levemir® PREDICTIVE™ clinical trial in the US. This six-month study included 5,604 persons with type 2 diabetes and showed that they were able to reduce their blood sugar level by adjusting their own dosage of Levemir®, compared to dosing adjusted by their primary care physician. This underscores the simplicity of starting insulin therapy with Levemir®.

Once-daily use of Levemir®

In 2007, Novo Nordisk received marketing authorisation from the European Commission for the use of Levemir® once-daily in combination treatment with tablet-based antidiabetics (OADs) for people with type 2 diabetes.

During 2007, a number of publications based on clinical trials, the observational study PREDICTIVE™ and reviews[9)], all supported the fact that once-daily Levemir® is effective in managing glucose levels in type 2 diabetes.

The Weight of the World

The finding from the PREDICTIVE™ study that Levemir® also resulted in less weight gain is attracting attention from healthcare professionals. Historically, insulin treatments have had negative weight implications for patients; an unfortunate side effect which can exacerbate the problems associated with the condition it is intended to improve.

The Weight of the World , a review of clinical research, trials and surveys regarding weight in diabetes and its impact, which was conducted by leading diabetes experts, concluded that even a relatively modest weight loss can result in improved glycaemic control, reduce the risk of heart disease and can also increase life expectancy.

United States expanded sales force

Novo Nordisk is the only company in the United States the world s largest pharmaceutical market to offer a complete portfolio of modern insulins. The company

expanded its US diabetes sales force in 2007 with an additional 700 people, bringing the total to around 1,900.

In this fiercely competitive market, Novo Nordisk managed to achieve a 43% share in the modern insulin market (by volume) in 2007, making it the leader, measured by volume. Along with the expanded sales force, more focused selling with greater responsiveness to understanding the needs of customers, particularly primary care physicians, is driving market penetration of Levemir®.

The clinical data from PREDICTIVE™ has strengthened our message to healthcare professionals about the advantages of Levemir® for people with type 2 diabetes, says Camille Lee, vice president, Diabetes Brand Marketing, Novo

Diabetes highlights 2007

Levemir® launched in Japan.

European Commission approves use of **Levemir®** once-daily in combination treatment with tablet-based antidiabetics for people with type 2 diabetes.
European Commission approves **NovoRapid®** for treatment of diabetes in the elderly and in people with renal or hepatic impairment.
NovoLog® takes leadership position in the US.

Once-daily Levemir® gains momentum in the US through PREDICTIVE™ 303 results and widened outreach to primary care.
FlexPen® is the most used insulin device in the world.

Back to Contents

The long-acting basal modern insulin Levemir® entered new markets in 2007.

Beatriz de Lourdes Gonçalves from Belo Horizonte, Brazil, has type 1 diabetes.

Nordisk Inc. In 2007, NovoLog® (NovoRapid®) became the leading brand in the rapid-acting category. In addition, Novo Nordisk products have at minimum 80% coverage in the managed care formularies, which are restricted lists of reimbursable medicines. All of these elements put us in a strong position in the US diabetes care market, says Camille Lee.

Europe modern insulin growth

In Europe, Novo Nordisk continued to increase the market share of its modern insulins. This was boosted not only by the Levemir® once-daily approval with OADs, but also the approval in Europe in 2007 of NovoRapid® for the treatment of diabetes in the elderly and in people with renal or hepatic impairment.

Since diabetes is a progressive disease, many older people with diabetes require more intensive insulin therapy over time. According to the International Diabetes Federation (IDF), approximately 20% of the world s elderly population has diabetes, and the figure is increasing steadily.

We have become the European market leader in modern insulins. Our next ambition is to bring the benefit of modern insulins to all people with diabetes in Europe, says Kåre Schultz.

Emerging markets on the move

Novo Nordisk s International Operations (IO) consists of 142 countries that between them generate more than 50% of global GDP growth. These emerging markets are home to more than 85% of the world s population and 80% of all people with diabetes in the world some 183 million in all. Sales of diabetes care products in the region in 2007 grew by 20% measured in local currencies and by 14% in Danish kroner. China is currently Novo Nordisk s fifth-largest market (see pp

36 37) and is expected to be its second- or third-largest within the next five years. Other key markets are Brazil, Russia, India and Turkey.

International Operations is contributing significantly to creating new growth for Novo Nordisk. Average earnings in the IO countries are still low, but a growing middle class in countries like China, India and Brazil is stimulating demand for modern insulins, says Jesper Høiland,

Leadership in modern insulins is key to realising both our vision and our financial targets.

Kåre Schultz
executive vice president and chief operating officer

senior vice president, International Operations. If you look at the pharmaceutical industry as a whole, analysts anticipate significant growth rates of 10 15% in the emerging markets. Due to our early and sustained presence and our market leadership, Novo Nordisk is in a strong position to capture a large share of that growth.

Japan & Oceania leading the market

With the launch of Levemir® in 2007, Novo Nordisk is the only company in Japan offering a full portfolio of modern insulins. Novo Nordisk has long been the market leader in Japan and had 73% of the insulin market (by volume) in 2007. Japan, with a population of 130 million people, is the world s second-largest pharmaceutical market. Diabetes is a large and growing public health issue. It is estimated that diabetes currently affects more than 16 million people in Japan: 8 million have diabetes or glucose levels indicating diabetes, and 8.8 million have prediabetes.

Back to Contents

Diabetes care | **Emerging markets**

tackling diabetes on all fronts in China

China s rapid economic transformation poses major challenges to society, and one of these is diabetes. A growing middle class is adopting Western lifestyles with too little exercise and diets high in saturated fat proven risk factors for diabetes and other chronic diseases. Over weight and obesity are on the rise, even among children and youth. Globalisation, an ageing population and urbanisation are contributing factors to the health crisis.

Nearly 40 million Chinese are estimated to have diabetes, the second-highest number of people with diabetes in any single country after India. As a sign that the problem will get worse before it gets better, 64 million Chinese have impaired glucose tolerance, or prediabetes. At this rate, the International Diabetes Federation (IDF) predicts that the number of adults with diabetes in China will reach 46 million by 2025, or 12% of the worldwide figure.

This is expected to have a major impact on China s economy. The World Health Organization predicts that by 2015, China s economy will experience a net loss in national income from diabetes and cardiovascular disease of 558 billion US dollars.

Early, long-term presence

In 1994, Novo Nordisk began to invest in building a strong presence in China. Today, Novo Nordisk is the market leader in the insulin market and is also among the fastest-growing pharmaceutical companies in China.

Achieving market leadership is the result of a concerted effort to put diabetes on the agenda and to present Novo Nordisk as having better products and the most extensive knowledge of diabetes. The commitment to change diabetes, with a focus on education, training and public awareness, has made Novo Nordisk a trusted partner in China.

Because the causes of the diabetes pandemic in China are so complex, Novo Nordisk, together with key opinion-leaders within diabetes, launched a study in 2007 to examine the socio-economic impact of the condition. This study will look at the cost and benefit of improved diabetes care using evidence-based research, and will contribute to providing data that can help build a better understanding of the dynamics of diabetes.

80%

of deaths in China are attributable to chronic diseases, according to the Chinese Centre for Disease Control and Prevention.

2

million Chinese migrate every month from rural areas to coastal cities

Staying focused

Novo Nordisk China employs 1,250 people, has a production facility in Tianjin and a thriving R&D centre the first R&D centre established in China by an international pharmaceutical company. The Tianjin plant has been expanding its production capacity by around 40% a year.

Novo Nordisk is also expanding its sales force in China, extending its outreach beyond the biggest cities into many smaller cities. Distribution and logistics are a challenge in a country as vast as China. Price negotiation, which takes place at national, provincial and even city level, is another challenge.

Staying in the lead requires constant focus and continued investments. There is fierce competition for a share of the growing diabetes market, and Novo Nordisk intends to sus-

Investing in scientific

molecular biology, protein chemistry and cell biology, the R&D centre plays a key role in Novo Nordisk s overall R&D strategy. China today is moving

ment in 2007 establishing a joint research foundation in China.

The aim of the Novo Nordisk Chinese Academy of Science

innovation

Novo Nordisk s R&D centre in China is located in Zhongguancun Life Science Park just outside Beijing. The centre has been developing and expanding since 2002. As an integrated part of Novo Nordisk s Biopharmaceuticals Research Unit, the 45 employees work closely with R&D colleagues in Denmark. With a strong technology platform within the areas of towards a very innovative culture with lots of opportunity and resources within life sciences, says Baoping Wang, head of the centre. He expects that the centre will soon be able to identify a first new drug discovery project of its own.

As a further recognition that the company s scientific innovation will focus increasingly on China in future years, Novo Nordisk and the Chinese Academy of Sciences signed an agree-Research Foundation is to fund or co-fund activities of common interest within the fields of diabetes and biophar-maceuticals, including related disciplines and technologies such as protein chemistry, immunology, inflammation, toxicology, en-docrinology and drug delivery. Novo Nordisk is funding 2 million US dollars in support of research into diabetes and biopharmaceuticals.

Back to Contents

Nearly 40 million people in China
are estimated to have diabetes.

The China Health Star Search is a contest for people with diabetes. In quizzes and
presentations they compete on knowledge about how to reach treatment targets.

**With our promise of changing diabetes, we believe
that we are making a difference. That s why many people join us and why many people stay.**

Ron Christie
general manager, China

tain its market leadership by building the market for the company s modern insulins, maintaining a strong sales organisation and relentlessly making the case for earlier detection and improved treatment of diabetes.

Novo Nordisk will continue to expand its activities in China. The current number of employees is likely to more than double within the next five years, and Ron Christie, Novo Nordisk s general manager in China, is confident of the future direction.

We believe that within five years China will represent the second- or third-largest market in Novo Nordisk, he says.

Education is the key

The first step to improving diagnosis and treatment is education. It is estimated that only 25% of people with diabetes in China are diagnosed and treated; only about 40,000 doctors in the country of 1.3 billion people are trained in diabetes care. In 2002, Novo Nordisk established the National Diabetes Management programme with the Chinese Ministry of Health. This led, among other things, to the creation of the first-ever national guidelines for the diagnosis and treatment of diabetes and the education of doctors in 300 cities. Through Novo Nordisk education programmes more than 150,000 healthcare professionals in China have received training in diabetes care since 2002.

The Novo Nordisk China Health Star Search raised public awareness by involving more than 40,000 people with diabetes in a contest to share their positive stories about living with diabetes. It has run in 43 cities and through media coverage reached out to millions of people. Other initiatives include a Changing Diabetes® bus that will cover 100 cities over a three-year period and a patient network of some 600,000 members.

Ongoing medical reform

Access to national healthcare insurance has been a barrier to improved care in China. Today, only 12% of Chinese have comprehensive medical healthcare insurance. This is set to change in coming years, with the Chinese government pledging to establish a medical service system covering all urban and rural Chinese by 2010. In 2007, the Chinese government extended national health insurance coverage to 32 million migrant workers. As health insurance spreads and more Chinese people get access to advanced pharmaceutical products, the market for dia betes care is set to grow at an even faster pace.

Investment in people

Competition for market share as well as employees and knowledge is fierce. To help retain talent, Novo Nordisk prioritises the creation of attractive career opportunities, but even more importantly, shared values and a corporate culture underpin the Novo Nordisk Way of Management.

In 2007, the Novo Nordisk Peking University International MBA programme was established at the prestigious Peking University, offering Novo Nordisk managers in China a tailored programme to develop business knowledge, strategic thinking and leadership. With our promise of changing diabetes, we believe that we are making a difference. That s why many people join us and why many people stay, says Ron Christie.

Back to Contents

Enea Atroce is a nine-year-old from Switzerland who has haemophilia.

meeting needs in haemophilia

With next-generation successors to NovoSeven® in the pipeline and several new molecules Novo Nordisk demonstrates its commitment to offering improved treatment options for people with haemophilia.

1st

haemostasis research laboratory in the US dedicated to acquired haemophilia and other rare bleeding disorders such as Glanzmann s thrombasthenia (approved in 82 countries) and and FVII deficiency.

Sustaining the lead in haemophilia

NovoSeven® is positioned as the first-line treatment for bleedings in haemophilia patients with inhibitors because of its efficacy, safety profile and onset of action. Further improvements in terms of formulation and dosing have been made, making NovoSeven® even more convenient, while at the same time maintaining efficacy and safety profiles. With the main NovoSeven® patents due to expire in November 2010 (in the US) and February 2011 (in the EU), Novo Nordisk is placing high priority on sustaining its haemophilia inhibitor portfolio with new, superior, patent-protected molecules. With the portfolio advancements during 2007, Novo Nordisk is progressing well. In 2007, NovoSeven® sales exceeded one billion US dollars, thereby reaching blockbuster status. NovoSeven® is still expected to show growth, albeit at a lower pace, notes Jesper Brandgaard, chief financial officer, Novo Nordisk.

Just one infusion

In 2007, NovoSeven® was launched in Europe for single-dose use (270 µg/kg), making administration of NovoSeven® more convenient for mild to moderate bleedings.

The approval means that NovoSeven® can be administered with just one infusion to treat a bleeding episode. The single dose will help haemophilia patients with inhibitors to cope with the disruption that multiple intravenous infusions cause to their lives. In addition, Novo Nordisk has filed for regulatory approval of a temperature-stable version of NovoSeven® in Europe as well as in the US. A temperature-stable product is expected to deliver significant patient benefits, including ease of access to treatment irrespective of where the patient expe-

A decade ago, recombinant factor VIIa (rFVIIa), the active ingredient in NovoSeven®, dramatically changed the lives of two boys with haemophilia A who had inhibitors (antibodies) to coagulation factor VIII and could not control their bleedings. Today, NovoSeven® is the leading treatment for people with congenital haemophilia with inhibitors, about 3,500 people worldwide. Novo Nordisk is a leader in developing therapies to stop or reduce bleeding episodes in haemophilia patients with inhibitors. Haemophilia is a disabling, inherited bleeding disorder that has a tremendous medical, social, psychological and financial impact upon patients, their families and society. There remain many unmet needs in this group of people.

It is our intention to develop a range of product improvements for this patient population to address serious unmet medical needs, says Anne Prener, corporate vice president, NovoSeven® Management.

NovoSeven® is used intravenously in the acute treatment of bleeding episodes and for the prevention of bleeding during surgery or invasive procedures in patients with congenital haemophilia with inhibitors to coagulation factors VIII or IX. In addition, it has been approved for use in patients with life-threatening bleeding is Novo Nordisk s research facility in New Brunswick, New Jersey, US.

1

billion US dollars. When sales of NovoSeven® hit this figure in June 2007, it became a block-buster.

Back to Contents

riences a bleed, since the product will become portable without the need for refrigeration.

Next-generation compounds

To be able to offer better treatment and protect patent rights, Novo Nordisk is developing a class of future-generation rFVIIa compounds with improved properties. In 2007, Novo Nordisk initiated a phase 2 study of the short-acting rFVIIa analogue (NN1731). The study is expected to include around 75 haemophilia patients with inhibitors and will evaluate both safety and efficacy.

In June, Novo Nordisk initiated a phase 1 study of GlycoPEGylated factor VIIa, a long-acting version of coagulation factor VIIa (recombinant) to determine if it will provide long-term prevention of bleeding episodes.

A subcutaneous formulation of rFVIIa is being studied for the treatment of haemophilia patients with inhibitors.

Novo Nordisk is also actively pursuing the development of several new molecules for the treatment of haemophilia patients with inhibitors. The company has a pipeline of clotting factors destined to be used in haemophilia and other congenital bleeding disorders.

NovoSeven® in critical bleedings

Novo Nordisk is currently exploring the potential of NovoSeven® for managing critical bleedings in selected areas where rFVIIa can potentially make a clinical difference to patient outcomes. While several projects in the pipeline show promise, research in this area suffered a setback in 2007 when Novo Nordisk decided not to pursue regulatory approval for NovoSeven® in the treatment of people suffering from bleeding in the brain, also known as intracerebral haemorrhage, or ICH. Preliminary results of a phase 3 trial confirmed the safety profile and showed that NovoSeven® reduces bleeding in the brain, but does not improve long-term clinical outcomes.

Consequently, Novo Nordisk has discontinued its ICH development

Novo Nordisk is committed to building leadership and providing therapeutic improvements for people with haemophilia.

Anne Prener
corporate vice president, NovoSeven® Management

Outreach projects that work

Lack of access to haemophilia care is particularly daunting in the developing part of the world, where this disease is not a priority. It is estimated that the disorder affects some 600,000 people globally, of whom an estimated two thirds live in developing countries. Haemophilia only affects males, and about half of the patients may require treatment for bleeding episodes several times a month. But today, only a small minority in the developed world some 30,000 receive proper treatment.

In many developing countries, young boys with haemophilia risk spontaneous and severe joint, muscle and internal bleedings with complications such as chronic joint disease and crippling. Without proper diagnosis and care they may die at an early age.

The Novo Nordisk Haemophilia Foundation (NNHF) was established in 2005 as an independent, non-profit entity to address the significant need to improve treatment of people with haemophilia in the developing world. It funds programmes to improve haemophilia care and treatment and to raise awareness by focusing on capacity-building, patient education, diagnostic programmes and registries in the developing world. With an annual grant from Novo Nordisk of approximately 10 million Danish kroner it

programme. Data from the phase 3 clinical trial, as well as the extensive analyses of the study results that have been conducted, have been submitted for publication in peer-reviewed journals. With regard to safety, study results were in line with the established safety profile of NovoSeven®. The results came as a disappointment, particularly given the encouraging results from the phase 2 trial. We hoped that NovoSeven® could become a treatment for the people who suffer from ICH, and for whom no effective medical treatment exists, says Lars Rebien Sørensen, president and chief executive officer, Novo Nordisk.

NovoSeven® is being studied in a phase 3 trial for treatment of critical bleeding in trauma patients. In a completed phase 2b study, NovoSeven® was demonstrated to reduce transfusion needs in patients with severe blunt trauma. A phase 2 safety study of the use of NovoSeven® in cardiac surgery has been completed. The study confirmed the safety profile known from the cardiac surgery setting and from other studies of NovoSeven® outside of haemophilia with inhibitors. While the primary aim of this trial was safety, the trial also demonstrated the biologic haemostatic effect of NovoSeven®.

currently supports 21 projects in South America, North Africa, Asia, the Middle East and Eastern Europe in partnership with healthcare authorities, medical professionals, NGOs and patient organisations.

The first project to be completed provides a good example. In Uzbekistan, a relatively small investment from the NNHF led to training of doctors and nurses and the creation of a diagnostic facility, resulting in a national screening programme and registry. A local organisation supported the project and funded a new centre for the treatment of bleeding disorders.

It is estimated that the NNHF s work impacts the lives of about 20,000 people with haemophilia in the countries where it has projects.

We have a social responsibility to reach out to people whose survival and quality of life depend on proper detection, diagnosis and treatment, says Stephen Robinson, general manager, the Novo Nordisk Haemophilia Foundation.

See more at nnhf.org

Back to Contents

expanding the range of biopharmaceuticals

Novo Nordisk s strategy to expand its biopharmaceuticals business is two-pronged. While seeking additional uses for existing products, the company also explores potential new therapies for neglected medical conditions.

In 2007, this strategy delivered several successes. These included the approval of new indications for the company s human growth hormone product Norditropin®, new product launches within hormone replacement therapy, and a new pilot production facility to spur faster advancement in areas of unmet needs within inflammation. The growth hormone business continued in 2007 to steadily penetrate the market, including hard-won success in the competitive US market. With a global market share of approximately 23% in terms of value, Novo Nordisk ranks second worldwide in growth hormones. In 2007, the company made significant progress towards taking top place.

New indications for Norditropin®

There is a number of very small patient groups with few, if any, medical options. For these people, the development of new treatments is vital. Such was the case with NovoSeven®, which was developed for a population of 3,500 individuals with congenital haemophilia (see p 38). To encourage the development of treatment for rare disorders that may not otherwise be commercially viable, the US Food and Drug Administration (FDA) designates drugs that treat fewer than 200,000 US patients with an orphan drug status. Having orphan drug status in the US means that no other company can promote this new indication for a seven-year period. This offers a win-win proposition for patients, companies and society.

In June 2007, Norditropin® received the designation along with FDA approval for use of Norditropin® in the treatment of short stature associated with Noonan syndrome.

Noonan syndrome is defined as an autosomal dominant genetic syndrome commonly characterised by short stature, congenital heart defects and characteristic facial features. It is classified as a rare

80%

of children with Noonan syndrome have significantly short stature.

20%

is the annual mortality rate for US adults in chronic dialysis.

23%

of the global market for growth hormones (in value) makes Novo Nordisk number two in this market.

2008

is the year when Novo Nordisk s first projects to treat autoimmune diseases enter clinical trials

cians in the US the option of dosing up to higher levels than previously. Turner syndrome is a rare chromosomal condition caused by complete or partial absence of the second sex chromosome (X chromosome) in females. This occurs in approximately one in 2,500 live female births. Short stature is the most common feature associated with Turner syndrome and affects the majority of patients.

Children born with growth disorders that can be treated with growth hormone benefit not only in terms of physical growth but also in terms of their quality of life and well-being, according to data[10] from Novo Nordisk s group for Global Health Economics and Outcomes Research.

New hope for dialysis patients

Norditropin® may also have potential for the treatment of complications associated with adult patients in chronic dialysis (APCD). In 2007, Novo Nordisk initiated a phase 3 trial encompassing about 2,500 patients worldwide.

This double-blind, placebo-controlled study evaluates the impact of growth hormone treatment on the survival rate of APCD patients following two years treatment. Growth hormone treatment is being studied for its ability to increase the patients lean body mass and level of serum albumin, which have been shown to be leading indicators for survival in APCD. The study is expected to take around three years to complete.

The annual mortality rate for adult patients in chronic dialysis in the US is a discouraging 20% (17% in Europe and 9 10% in Japan). A number of patients in chronic dialysis suffer from serious malnutrition and frequent inflammation that no available treatment has been able to remedy. This malnutrition-inflammation state has been closely associated with a higher death rate.

Worldwide, more than one million people with advanced kidney disease have to go to hospital several times a week for dialysis. A few of these people will receive kidney transplants, but most will be in dialysis for the rest of their lives. This possible new use of growth hormone would address a significant unmet medical need for thousands of patients. Novo

condition, with a population of less than 200,000 US patients. Up to 80% of children with Noonan syndrome suffer from significantly short stature, with few treatment options available to help their physical growth.

The area of paediatric growth hormone treatment is one where approval of new indications is rare. In fact, the approval of Norditropin® is the first new indication approval in six years within this field.

Helping girls with Turner syndrome

In September 2007, Norditropin® also received approval from the FDA for the treatment of children with short stature associated with Turner syndrome. This FDA approval gives physi-

Nordisk is currently the only company pursuing this indication.

Lower-dose HRT products

Sales of Novo Nordisk hormone replacement therapy (HRT) products showed solid growth in 2007. This is in contrast to the situation following the publication of results from the Women s Health Initiative in 2002, when sales of HRT products in general, including Novo Nordisk products, declined.

Novo Nordisk s position is that HRT should be prescribed at the lowest effective dose and for the shortest duration consistent with treatment goals and risks for the individual woman. To help meet patient needs, the company is complementing its

Back to Contents

An investment of 350 million Danish kroner Novo Nordisk s new pilot plant in Hillerød, Denmark.

Only girls have Turner syndrome.

existing portfolio of HRT products with lower-dose versions of Activelle® (Activella® in the US, where it was launched in 2007) and Vagifem®.

New pilot plant

Novo Nordisk is using its existing knowledge of proteins and autoim-mune diseases to build a presence within inflammation.

In 2007, Novo Nordisk boosted its potential to produce proteins for investigational clinical trials with the inauguration of a new pilot plant in Hillerød, Denmark, which over the next few years will double the company s capacity for producing investigational compounds for clinical trials and enable Novo Nordisk to move new biopharmaceutical candidates into its pipeline significantly faster. The new plant, a 350 million Danish kroner investment, will be used to develop and manufacture new biopharmaceutical products based on proteins produced in mammalian cells for use in haemostasis and inflammation.

Progress in new areas

Novo Nordisk is pursuing treatment of autoimmune inflammatory diseases such as rheumatoid arthritis, psoriasis, inflammatory bowel disease and systemic lupus erythematosus (SLE) because of large unmet medical needs for which the company s solid foundation of existing competences in proteins and delivery devices could offer therapeutic solutions. In type 1 diabetes, the body s immune system destroys the insulin-producing cells in the pancreas, and similar processes are the cause of other autoimmune diseases. The first projects to treat autoimmune diseases are ready to enter clinical trials during 2008.

The research and development strategy for the emerging biopharmaceuticals area has been updated. Based on an evaluation of the general competence level required, the level of investments needed and the likelihood of success, Novo Nordisk has decided to increase and focus activities on inflammatory diseases. As a consequence, research and development activities within oncology will be terminated and resources applied to the growing inflammation portfolio. Existing oncology projects, including the IL-21 programme and the anti-KIR project, are expected to be outlicensed. The ongoing development activities for these two projects will continue while discussions with potential new partners are taking place. The first two compounds targeting inflammatory diseases are expected to enter clinical development in 2008.

We are intent on addressing significant unmet medical needs wherever we have the competence to develop solutions.

Lars Rebien Sørensen
president and chief executive officer

Immunotherapy is an area where Novo Nordisk is working closely with partners. Partnerships can stimulate innovation for the benefit of patients and bridge gaps in fields where Novo Nordisk sees room to pursue business opportunities. In 2007, the company established a new website to set out the company s assets as a preferred biotech partner for firms with complementary skills.

See novonordisk.com/science. Click: Partnering

Back to Contents

corporate governance

Corporate governance refers to the way a company is managed and the major principles and frameworks that regulate interaction between the company s managerial bodies, its owners and other stakeholders.

Novo Nordisk's values are consistent with principles of good governance. The Novo Nordisk Way of Management forms the values-based governance framework for the company and is an integrated part of the company s corporate governance (see pp 6 7).

Governance structure

The company has a two-tier board structure consisting of the Board of Directors and Executive Management. The two bodies are separate, and no person serves as a member of both.

Shareholder rights

Novo Nordisk s share capital is divided between A shares and B shares. All A shares are held by Novo A/S, a Danish public limited liability company wholly-owned by the Novo Nordisk Foundation, which is a private, profit-making, self-governing institution. The B shares are traded on the stock exchanges in Copenhagen and London, and in the form of ADRs on the New York Stock Exchange. Each A share carries 10 votes, whereas each B share carries one vote (see p 50).

Special rights attached to A shares include preemptive subscription rights in case of an increase of the A share capital, and preemptive purchase rights in case of a sale of A shares and priority dividend if dividend is below 0.5%, while B shares take priority for dividend between 0.5% and 5% and B shares take priority for winding-up proceedings.

Novo Nordisk is of the opinion that the current share and ownership structure is appropriate and preferable for the long-term development

of the company. A study[11)] commissioned by the European Commission concluded in 2007 that control-enhancing mechanisms such as the A and B share structure are allowed in all European countries investigated and that they do not have a negative impact on shareholder value creation. Novo Nordisk believes that the transparency inherent in its share structure is to the benefit of shareholders, who know in advance the relative voting power of each share class. The current differentiation of voting rights cannot be revoked as this would violate the articles of association of the Foundation, which have been approved by the Danish authorities.

Novo Nordisk is not aware of the existence of any agreements between shareholders on the exercise of votes or control.

Shareholders have the ultimate authority over the company, and exercise their right to make decisions regarding Novo Nordisk at general meetings, either in person or by proxy. Resolutions can be passed by a simple majority, while resolutions to amend the articles are subject to adoption by at least two thirds of votes cast and capital represented unless stricter requirements are imposed by Danish company law. The annual general meeting approves the annual report and any amendments to the articles. The general meeting elects 4 10 directors plus the auditor. All shareholders may, no later than 1 February, request that proposals for resolution be included on the agenda. All shareholders may also ask questions at the general meetings. Simultaneous interpretation between English and Danish is available, and the meeting is webcast live.

The Board of Directors

On behalf of the shareholders, the Board determines the overall strategy and actively contributes to developing the company as a focused global pharmaceutical company. It supervises Executive Management in its decisions and operations. The Board may issue new shares or buy back shares in accordance with authorisations granted by the general meeting and recorded in the minutes.

The guiding principle in composing the Board is that it should comprise individuals whose particular knowledge and experience enables the Board as a whole to attend to the interests of shareholders, employees and other stakeholders.

New board members undergo an induction programme equivalent

Corporate governance benchmark 2007

In 2007, Novo Nordisk commissioned ISS Corporate Services Inc. (ISS) to appraise the company s corporate governance practices against those of its national, European and US peers as well as international best practice standards.

The ISS study confirmed Novo Nordisk s strong performance in its corporate governance disclosure practice. It also provided compelling evidence of Novo Nordisk s firm commitment to good corporate governance and to the maximisation of shareholder value.

ISS also revealed areas where Novo Nordisk could consider adjustments. Some adjustments have already been implemented and others will be considered in coming years.

Novo Nordisk remains committed to the general principles of good corporate govern ance and aims to enhance its culture so as to foster these principles at every level of the organisation.

One recommendation that will be put to the Annual General Meeting 2008 concerns an adjustment of the threshold for calling an extraordinary general meeting. So as to bring this procedure into line with best practice, it is proposed that the threshold be reduced from the current 10% of total share capital to 5%.

This would, naturally, simplify the process of calling an extraordinary general meeting and would give shareholders greater voice.

Another recommendation in the ISS report, which will also be put to the 2008 Annual General Meeting, concerns the Board s standing mandate to increase the share capital. Best practice in this regard is that a board s ability to issue B shares without preemptive subscription rights for current B shareholders is limited to a maximum of 20% of the share capital. Novo Nordisk s Board currently has the right to issue B shares without preemptive subscription rights to a value corresponding to 34.1% of the share capital. The proposal is to reduce this to approximately 20%.

Back to Contents

to two full days during their first year on the board and subsequently participate in educational activities as required.

The Board has 11 members, of whom seven are elected by shareholders at general meetings. Shareholder-elected board members serve a one-year term and can be re-elected at the general meeting. Board members must retire at the first general meeting after reaching the age of 70. A proposal for nomination of shareholder-elected board members is presented by the Chairmanship to the Board taking into account required competences and the result of the self-assessment process. In nominating candidates, the Chairmanship seeks to achieve a balance

---

Transparency, both in terms of corporate governance practices and the risk management process, should be viewed as a precondition for retaining shareholder confidence.

Jesper Brandgaard
executive vice president and chief financial officer

---

between renewal and continuity. Executive search has helped identify board members who meet such criteria.

Four of the shareholder-elected board members are independent as defined by the Danish Corporate Governance Recommendations, while three shareholder-elected board members are related to the majority shareholder through board or executive positions, and two of these have also previously been executives in Novo Nordisk (see pp 46 47).

Under Danish law, Novo Nordisk employees in Denmark are entitled to be represented by half of the total number of board members elected at the general meeting. Thus, in 2006, employees elected four board members from among themselves for a four-year term. Board members elected by the employees have the same rights, duties and responsibilities as shareholder-elected board members.

The Board has appointed a research & development facilitator to assist the Board and Executive Management in preparing the Board s discussions in the R&D area. The key tasks are reviewing R&D strategies

and evaluating the competitiveness of the R&D organisation, processes and projects.

Self-assessment

The Board conducts an annual self-assessment procedure to improve the performance of the Board and its cooperation with Executive Management. This process is directed by the Chairman and may be facilitated by an external consultant. Written questionnaires form the basis for the process, which evaluates whether each board member and executive participates actively in board discussions and contributes with independent judgement. It is further assessed whether the board member is inspirational and whether the environment encourages open discussion at board meetings. The Audit Committee also conducts an annual self-assessment based on written questionnaires. The performance of each executive is continuously assessed by the Board, and once a year the Chairman also conducts a formal interview with each executive.

Board meetings

The Board ordinarily meets seven times a year, including a strategic session over two to three days. In 2007, the Board met eight times and all board members attended all board meetings and the Annual General Meeting, with the exception of one member who was absent on one occasion. By means of a fixed annual calendar, the Board ensures that it addresses its main tasks in a timely manner. With the exception of agenda items reserved for the Board s internal discussion at each meeting, executives attend and may speak, without voting rights, at board meetings to ensure that the Board is adequately informed of the company s operations. Executives regular feedback from meetings with investors allows board members an insight into major shareholders views of Novo Nordisk.

Chairmanship

A chairman and a vice-chairman elected by the Board from among its members form the Chairmanship of the Board. They held eight meetings in 2007. The Chairmanship carries out administrative tasks, such as planning board meetings to ensure a balance between overall strat-

The Novo Nordisk model for corporate governance

The Novo Nordisk corporate governance model sets the direction and is the framework within which the company is managed (see also pp 6 7).

Corporate governance codes and practices

Novo Nordisk is in compliance with the Danish Corporate Governance Recommendations and is as a foreign-listed issuer in general compliance with the corporate governance standards of the stock exchanges in London and New York, where the Novo Nordisk B shares and ADRs respectively, are listed:

OMX Nordic Exchange Copenhagen
Danish Corporate Governance Recommendations (2005)
New York Stock Exchange
Corporate Governance Standards (2006)
London Stock Exchange
The Combined Code (2006)

The applicable codes and a detailed review of Novo Nordisk s compliance are available at novonordisk.com/about_us.
Click: Corporate_governance/compliance

Back to Contents

egy-setting and financial and managerial supervision of the company. It also reviews the fixed asset investment portfolio. Other tasks include recommending the remuneration of directors and executives and suggesting candidates for election by the general meeting. In practice, the Chairmanship has the role and responsibility of a nomination committee and a remuneration committee.

Audit Committee

The Audit Committee has three members elected by the Board from among its members. All members qualify as independent as defined by the US Securities and Exchange Commission (SEC). One member is designated as chairman and two members are designated as Audit Committee financial experts. One member is not regarded as independent under the Danish Corporate Governance Recommendations. In 2007, the Audit Committee held four meetings and all members participated in all meetings.

The Audit Committee assists the Board with oversight of a) the external auditor, b) the internal auditors, c) the procedure for handling complaints regarding accounting, internal controls, auditing or financial reporting matters (whistleblower function), d) the accounting policies and e) internal controls systems. The Audit Committee also undertakes

a post-completion review of fixed asset investments previously approved by the Board

Executive Management

Executive Management is responsible for the day-to-day management of the company. It consists of the president and chief executive officer, and four other executives (see p 48).

Executive Management s responsibilities include organisation of the company as well as allocation of resources, determination and imple-mentation of strategies and policies, direction-setting and ensuring timely reporting and provision of information to the Board and the stakeholders of Novo Nordisk. Executive Management meets regularly and at least once a month. The Board appoints Executive Management and determines its remuneration. The Chairmanship reviews the per-formance of the executives. As part of the Organisational Audit process the Chairmanship identifies successors to executives and presents the names of such candidates to the Board for approval.

Assurance

External audit and assurance The annual report and the internal

---

executive remuneration

Novo Nordisk s remuneration policy for its Board of Directors and Executive Management covers both fixed and incentive-based payment. It aims to attract, retain and motivate board members and executives.

Remuneration levels are designed to be competitive and to align the interests of the board members and executives with those of the shareholders. In light of recent changes in Danish legislation, Novo Nordisk will present its guidelines for incentive-based remuneration for approval at the Annual General Meeting 2008.

Board members

Remuneration of the Board of Directors is aligned with other major Danish companies, and the Board regularly reviews board fees based on recommendations from the Chairmanship. See board members fees for the year 2007 on p 81.

The remuneration of the board members is approved by the annual general meeting in connection with the approval of the annual report. Changes in the board fees will be announced at a general meeting in advance of being presented for approval.

Each board member receives a fixed fee per year. Ordinary board members receive a fixed amount (the base fee) while the Chairmanship receives a multiplier thereof: the chairman receives 2.5 times the base fee and the vice-chairman 1.5 times.

Service on the Audit Committee entitles members to additional payment: the Audit Committee chairman receives 1.25 times the base fee and Audit Committee members receive 0.5 times.

Individual board members may take on specific ad hoc tasks outside the normal duties assigned by the Board. In such cases the Board determines a fixed fee for the work.

Expenses, such as travel and accommodation in relation to board meetings as well as relevant training, are reimbursed. Board members are not offered stock options, warrants or other incentive schemes.

Executives

Executive remuneration is proposed by the Chairmanship and subsequently approved by the Board. See executive pay for 2007 on p 81.

Levels are evaluated annually against a Danish benchmark of large companies with international activities. This information is supplemented by information on remuneration levels for similar positions in the international pharmaceutical industry. To ensure comparability, executive positions are evaluated in accordance with an international position evaluation system which, among other parameters, includes and reflects the development of the company size measured in terms of company revenue and number of employees.

The remuneration package consists of a fixed base salary, a short-term cash bonus, a long-term share-based incentive, pensions and non-monetary benefits. For executives being expatriated at the request of the company, the remuneration package is based on current Danish remuneration levels, including pension entitlements, while a specific expatriation package is added for the period of expatriation.

The short-term incentive programme may result in a maximum payout per year equal to four months fixed base salary plus pension contribution. The long-term incentive programme may result in a maximum grant per year equal to eight months fixed base salary plus pension contribution. Consequently, the aggregate maximum amount that may be granted as incentives for a given year is equal to 12 months base salary plus pension contribution.

Fixed base salary

The fixed base salary for each executive accounts for between 40% and 60% of the total value of the remuneration package.

Short-term incentive programme

The short-term incentive programme consists of a cash bonus that is linked to the achievement of a number of predefined functional and in-

Back to Contents

controls over financial reporting processes are audited by an external auditor elected by the annual general meeting. The auditor acts in the interest of the shareholders, as well as the public (see auditor s report p 114). The auditor reports any significant findings regarding accounting matters and any significant internal control deficiencies via the Audit Committee to the Board and in the auditor s long-form report.

Furthermore, Novo Nordisk voluntarily includes an auditor assurance report for non-financial reporting in its annual report (see p115).

Internal audit

The internal audit function provides independent and objective assurance primarily within internal control and governance. To ensure that the function works independently of management, its charter, audit plan and budget are approved by the Audit Committee. The head of internal audit is appointed by and reports to the Audit Committee.

Risk management

Executive Management is responsible for the risk management process, including risk identification, assessment of likelihood and potential impact, and initiation of mitigating actions.

Assessing and articulating risks, whether financial or reputational, can improve decision-making. Novo Nordisk has developed an integrated and systematic risk reporting approach. To simplify the process it is aligned with existing reporting and recurs on a quarterly basis. It is designed to ensure that key business risks are identified, assessed and reported to Novo Nordisk s Executive Management and Board of Directors (see p 9).

Internal control

Novo Nordisk is in compliance with the Sarbanes Oxley Act section 404, which requires detailed documentation of the design and operation of financial reporting processes. Novo Nordisk must ensure that there are no material weaknesses in the internal controls that could lead to a material misstatement in its financial reporting. The company s conclusion and the auditor s evaluation of these processes are included in its Form 20-F filing to the US Securities and Exchange Commission.

See a description of other assurance mechanisms on pp 6 7.

---

dividual business targets for each executive. The targets for the chief executive officer are fixed by the chairman of the Board while the targets for the executive vice presidents are fixed by the chief executive officer. The chairman of the Board evaluates the degree of target achievement for each executive, and cash bonuses for a financial year if any are paid at the beginning of the subsequent financial year.

Long-term incentive programme

Each year in January the Board decides whether or not to establish a long-term incentive programme for that calendar year.

The long-term incentive programme is based on an annual calculation of shareholder value creation as compared to the budgeted performance for the year.

In line with Novo Nordisk s long-term financial targets, the calculation of shareholder value creation is based on reported operating profit after tax reduced by a WACC-based (weighted average cost of capital) return requirement on average invested capital.

A proportion of the calculated shareholder value creation is allocated to a joint pool for the participants, which in addition to Executive Management includes the other members of the Senior Management Board.

For executives the joint pool operates with a yearly maximum allocation per participant equal to eight months fixed base salary plus pension contribution.

The joint pool may, subject to the Board s assessment, be reduced in the event of a lower than planned performance in significant research and development projects and key sustainability projects. Targets for non-financial performance related to sustainability and research and development projects may include achievement of certain milestones within set dates.

Once the joint pool has been approved by the Board, the total cash amount is converted into Novo Nordisk B shares at market

price. The market price is calculated as the average trading price for Novo Nordisk B shares on the OMX Nordic Exchange Copenhagen in the open trading window following the release of financial results for the year prior to the bonus year.

The shares in the joint pool are allocated to the participants on a

pro rata basis: the chief executive officer participates with three units, executive vice presidents participate with two units each and other members of the Senior Management Board participate with one unit each. The shares in the joint pool for a given year are locked up for three years before they are transferred to the participants. Upon resignation during the lock-up period by a participant, the shares will remain in the joint pool to the benefit of the other participants.

In the lock-up period, the Board may remove shares from the joint pool in the event of lower than planned value creation in subsequent years if, for example, the economic profit falls below a predefined threshold compared to the budget for a particular year.

In the lock-up period the value of the joint pool will change dependent upon the development in the share price, and consequently the interests of the participants, including the members of Executive Management, are aligned with those of the shareholders.

Pension

The pension contribution is between 25% and 30% of the fixed base salary including bonus.

Non-monetary benefits

Non-monetary benefits such as company car, phone etc are negotiated with each executive individually.

Severance payment

In addition to their notice period executives are entitled, in the event of termination, whether by Novo Nordisk or by the individual due to a merger, acquisition or takeover of Novo Nordisk, to a severance payment of 36 months fixed base salary plus pension contribution. In the event of termination by Novo Nordisk for other reasons, the severance payment is three months fixed base salary plus pension contribution per year of employment as an executive, but in no event less than 12 and no more than 36 months fixed base salary plus pension contribution.

Back to Contents

Sten Scheibye

Chairman of the Board of Directors

Sten Scheibye is chairman of the Board of Directors of Novo Nordisk A/S. Since 1995, he has been president and CEO of Coloplast A/S, Denmark.

Besides being a member of the boards of various Coloplast companies, Mr Scheibye is a member of the Board of Danske Bank A/S, Denmark. Furthermore, he holds a seat on the Central Board and the Executive Committee of the Confederation of Danish Industries.

Mr Scheibye has an MSc in Chemistry and Physics from 1978 and a PhD in Organic Chemistry from 1981, both from the University of Aarhus, Denmark, and a BComm from the Copenhagen Business School, Denmark, from 1983. Mr Scheibye is also an adjunct professor of applied chemistry at the University of Aarhus.

Mr Scheibye was elected to the Board of Novo Nordisk A/S in 2003 and has been re-elected several times, most recently in 2007. His term as a board member expires in March 2008.

Mr Scheibye is regarded as an independent* board member.

Mr Scheibye is a Danish national, born on 3 October 1951.

Göran A Ando

Vice-chairman of the Board of Directors

Göran A Ando, MD, is vice-chairman of the Board of Directors of Novo Nordisk A/S. Dr Ando was CEO of Celltech Group plc, UK, until 2004. He joined Celltech from Pharmacia, now Pfizer, US, where he was executive vice president and president of R&D with additional responsibilities for manufacturing, IT, business development and M&A from 1995 to 2003.

From 1989 to 1995, Dr Ando was medical director, moving to deputy R&D director and then R&D director of Glaxo Group, UK. He was also a member of the Glaxo Group Executive Committee.

Dr Ando is a specialist in general medicine and a founding fellow of the American College of Rheumatology in the US. Dr Ando serves as chairman of the boards of Novexel SA, France, and Inion Oy, Finland, as vice-chairman of the Board of S*Bio Pte Ltd, Singapore, and as a board member of Novo A/S, Denmark, Bio*One Capital Pte Ltd, Singapore, A-Bio Pharma Pte Ltd, Singapore, NicOx SA, France, Enzon Pharmaceuticals, Inc, US, and EUSA Pharma, UK.

Dr Ando qualified as a medical doctor at Linköping Medical University, Sweden, in 1973 and as a specialist in general medicine at the same institution in 1978.

Dr Ando was elected to the Board of Novo Nordisk A/S in 2005 and re-elected in 2006 and 2007. His term as a board member expires in March 2008. Dr Ando is designated Research and Development Facilitator by the Board of Novo Nordisk A/S.

Dr Ando is not regarded as an independent* board member due to his membership of the Board of Novo A/S.

Dr Ando is a Swedish national, born on 6 March 1949.

Kurt Briner

Kurt Briner works as an independent consultant to the pharmaceutical and biotech industries and is a board member of OM Pharma, Switzerland, Progenics Pharmaceuticals Inc, US, and GALENICA SA, Switzerland. From 1988 to 1998, he was president and CEO of Sanofi Pharma, France. He has been chairman of the European Federation of Pharmaceutical Industries and Associations (EFPIA).

Mr Briner holds a Diploma of the Commercial Schools of Basel and Lausanne, Switzerland.

Mr Briner was elected to the Board of Novo Nordisk A/S in 2000 and has been re-elected several times, most recently in 2007. His term as a board member expires in March 2008.

Mr Briner is regarded as an independent* board member.

Mr Briner is a Swiss national, born on 18 July 1944.

Henrik Gürtler

Henrik Gürtler has been president and CEO of Novo A/S, Denmark, since 2000. He was employed by Novo Industri A/S, Denmark, as an R&D chemist in the Enzymes Division in 1977.

After a number of years in various specialist and managerial positions within this area, Mr Gürtler was appointed corporate vice president of Human Resource Development in Novo Nordisk A/S in 1991, and in 1993 he was appointed corporate vice president

of Health Care Production. In 1996, he became a member of Corporate Management of Novo Nordisk A/S with special responsibility for Corporate Staffs.

Mr Gürtler is chairman of the boards of Novozymes A/S and Copenhagen Airports A/S, both Denmark. He is vice-chairman of the Board of COWI A/S, Denmark, and a member of the Board of Brødrene Hartmanns Fond, Denmark.

Mr Gürtler has an MSc in Chemical Engineering from the Technical University of Denmark from 1976.

Mr Gürtler was elected to the Board of Novo Nordisk A/S in 2005 and reelected in 2006 and 2007. His term as a board member expires in March 2008.

Mr Gürtler is not regarded as an independent* board member due to his former position as an executive in Novo Nordisk A/S and his present position as president and CEO of Novo A/S.

Mr Gürtler is a Danish national, born on 11 August 1953.

Back to Contents

Johnny Henriksen

Johnny Henriksen has been an employee-elected member of the Board of Directors of Novo Nordisk A/S since 2002 and was re-elected in 2006. His term as a board member expires in March 2010.

He joined Novo Nordisk in January 1986 and currently works as an environmental adviser in Product Supply.

Mr Henriksen has an MSc in Biology from the University of Copenhagen, Denmark, from 1977.

Mr Henriksen is a Danish national, born on 19 April 1950.

Niels Jacobsen

Niels Jacobsen has been president and CEO of William Demant Holding A/S and Oticon A/S, both Denmark, since 1998.

Mr Jacobsen is a board member of A.P. Møller - Mærsk A/S, Denmark, and is also a board member of a number of companies wholly or partly owned by the William Demant Group, including Sennheiser Communications A/S, Himsa A/S (chairman), Himsa II A/S, Hearing Instrument Manufacturers Patent Partnership A/S (chairman), William Demant Invest A/S (chairman), all in Denmark, and Össur hf. (chairman), Iceland. Mr Jacobsen also holds a seat on the Central Board of the Confederation of Danish Industries.

Mr Jacobsen has an MSc in Business Administration from the University of Aarhus, Denmark, from 1983.

Mr Jacobsen was elected to the Board of Novo Nordisk A/S in 2000 and has been re-elected several times, most recently in 2007. His term as a board member expires in March 2008.

Mr Jacobsen is a member of the Audit Committee at Novo Nordisk A/S and is designated as Audit Committee financial expert.

Mr Jacobsen qualifies as an independent Audit Committee member as defined by the US Securities and Exchange Commission (SEC) and is regarded as an independent* board member under the Danish Corporate Governance recommendations.

Mr Jacobsen is a Danish national, born on 31 August 1957.

Anne Marie Kverneland

Anne Marie Kverneland has been an employee-elected member of the Board of Directors of Novo Nordisk A/S since 2000. She was re-elected by the employees in 2002 and in 2006. Her term as a board member expires in March 2010.

Ms Kverneland joined Novo Nordisk in July 1981. She works as a laboratory technician in R&D.

Ms Kverneland has a degree in medical laboratory technology from the Copenhagen University Hospital, Denmark, from 1980.

Ms Kverneland is a Danish national, born on 24 July 1956.

Kurt Anker Nielsen

Kurt Anker Nielsen is a former CFO and deputy CEO of Novo Nordisk A/S and a former CEO of Novo A/S. He serves as vice-chairman of the Board of Novozymes A/S and as a member of the Board of Directors of the Novo Nordisk Foundation, LifeCycle Pharma A/S, Denmark, and ZymoGenetics, Inc, US. He is chairman of the Board of Reliance A/S, Denmark, and a member of the boards of StatoilHydro ASA, Norway, and Vestas Wind Systems A/S, Denmark. In LifeCycle Pharma A/S, ZymoGenetics, Inc, StatoilHydro ASA and Vestas Wind Systems A/S he is also the elected Audit Committee chairman. Mr Nielsen serves as chairman of the Board of Directors of Collstrup s Mindelegat, Denmark.

Mr Nielsen has an MSc in Commerce and Business Administration from the Copenhagen Business School, Denmark, from 1972.

Mr Nielsen was elected to the Board of Novo Nordisk A/S in 2000 and has been re-elected several times, most recently in 2007. His term as a board member expires in March 2008.

Mr Nielsen is chairman of the Audit Committee at Novo Nordisk A/S and is also designated as Audit Committee financial expert.

Mr Nielsen qualifies as an independent Audit Committee member as defined by the US Securities and Exchange Commission (SEC). He is not regarded as an independent* board member under the Danish Corporate Governance Recommendations due to his former position as an executive in Novo Nordisk A/S and his membership of the Board of the Novo Nordisk Foundation.

Mr Nielsen is a Danish national, born on 8 August 1945.

Søren Thuesen Pedersen

Søren Thuesen Pedersen has been an employee-elected member of the Board of Directors of Novo Nordisk A/S since 2006 and a member of the Board of Directors of the Novo Nordisk Foundation since 2002. His term as a board member of Novo Nordisk A/S expires in March 2010.

Mr Pedersen is currently working as a specialist in Global Quality Development. He joined Novo Nordisk in January 1994.

Mr Pedersen has a BSc in Chemical Engineering from the Danish Academy of Engineers from 1988.

Mr Pedersen is a Danish national, born on 18 December 1964.

Stig Strøbæk

Stig Strøbæk has been an employee-elected member of the Board of Directors of Novo Nordisk A/S and of the Board of Directors of the Novo Nordisk Foundation since 1998. Mr Strøbæk was re-elected by the employees in 2002 and in 2006. His term as a board member expires in March 2010.

He is currently working in Product Supply as an electrician.

Mr Strøbæk has a diploma as an electrician. He also has a diploma in further training for board members from the Danish Employees Capital Pension Fund (LD) from 2003.

Mr Strøbæk is a Danish national, born on 24 January 1964.

Jørgen Wedel

Jørgen Wedel was executive vice president of the Gillette Company, US, until 2001. He was responsible for Commercial Operations, International, and was a member of Gillette s Corporate Management Group. Since 2004, he has been a board member of ELOPAK AS, Norway.

Mr Wedel has an MSc in Commerce and Business Administration from the Copenhagen Business School, Denmark, from 1972, and an MBA from the University of Wisconsin, US, from 1974.

Mr Wedel was elected to the Board of Novo Nordisk A/S in 2000 and has been re-elected several times, most recently in 2007. His term as a board member expires in March 2008. Mr Wedel is a member of the Audit Committee at Novo Nordisk A/S.

Mr Wedel qualifies as an independent Audit Committee member as defined by the US Securities and Exchange Commission (SEC) and is regarded as an independent* board member under the Danish Corporate Governance recommendations.

Mr Wedel is a Danish national, born on 10 August 1948.

---

* In accordance with Section V4 of *Recommendations for corporate governance* designated by the OMX Nordic Exchange Copenhagen.

Back to Contents

Lars Rebien Sørensen

President and chief executive officer (CEO)

Lars Rebien Sørensen joined Novo Nordisk s Enzymes Marketing in 1982. Over the years, he was stationed in several countries, including the Middle East and the US. Mr Sørensen was appointed member of Corporate Management in May 1994 and given special responsibility within Corporate Management for Health Care in December 1994. He was appointed president and CEO in November 2000.

Mr Sørensen is a member of the Board of ZymoGenetics, Inc, US, and DONG Energy A/S, Denmark, as well as a member of the Bertelsmann AG Supervisory Board, Germany. Mr Sørensen received the French award Chevalier de l Ordre National de la Légion d Honneur in 2005.

Mr Sørensen has an MSc in Forestry from the University of Copenhagen, Denmark, from 1981, and a BSc in International Economics from the Copenhagen Business School, Denmark, in 1983. Since October 2007, Mr Sørensen has been adjunct professor at the Life Sciences Faculty of the University of Copenhagen.

Mr Sørensen is a Danish national, born on 10 October 1954.

Jesper Brandgaard

Executive vice president and chief financial officer (CFO)

Jesper Brandgaard joined Novo Nordisk in 1999 as corporate vice president of Corporate Finance and was appointed CFO in November 2000. He serves as chairman of the boards of NNE Pharmaplan A/S and NNIT A/S, both Denmark, and is also vice-chairman of the Board of SimCorp A/S, Denmark.

Mr Brandgaard has an MSc in Economics and Auditing from 1990 as well as an MBA from 1995, both from the Copenhagen Business School, Denmark.

Mr Brandgaard is a Danish national, born on 12 October 1963.

Lise Kingo

Executive vice president and chief of staffs (COS)

Lise Kingo joined Novo Nordisk s Enzyme Promotion in 1988 and over the years worked to build up the company s Triple Bottom Line approach. In 1999, she was appointed corporate vice president, Stakeholder Relations. She was appointed executive vice president, Corporate Relations, in March 2002.

Ms Kingo is a member of the Board of GN Store Nord A/S, Denmark, and associate professor at the Medical Faculty, Vrije Universiteit, Amsterdam, the Netherlands.

Ms Kingo has a BA in Religions and a BA in Ancient Greek Art from the University of Aarhus, Denmark, from 1986, a BComm in Marketing Economics from the Copenhagen Business School, Denmark, from 1991, and an MSc in Responsibility and Business Practice from the University of Bath, UK, from 2000.

Ms Kingo is a Danish national, born on 3 August 1961.

Kåre Schultz

Executive vice president and chief operating officer (COO)

Kåre Schultz joined Novo Nordisk in 1989 as an economist in Health Care, Economy & Planning. In November 2000, he was appointed chief of staffs. In March 2002, he took over the responsibility of COO. Mr Schultz is a member of the Board of LEGO A/S, Denmark.

Mr Schultz has an MSc in Economics from the University of Copenhagen, Denmark, from 1987.

Mr Schultz is a Danish national, born on 21 May 1961.

Mads Krogsgaard Thomsen

Executive vice president and chief science officer (CSO)

Mads Krogsgaard Thomsen joined Novo Nordisk in 1991. He was appointed CSO in November 2000. He sits on the editorial boards of international journals and is a member of the Board of Governors of the Technical University of Denmark. He is also a non-executive director of the Board of Cellartis AB, Sweden.

Dr Thomsen has a DVM from the University of Copenhagen, Denmark, from 1986, where he also obtained a PhD in 1989 and a DSc in 1991, and became adjunct professor of pharmacology in 2000. He is a former president of the National Academy of

Technical Sciences (ATV), Denmark.
Dr Thomsen is a Danish national, born on 27 December 1960.

Other members of the Senior Management Board

Jesper Bøving CMC Supply
Kim Bundegaard Facilitation and Group Internal Audits
Mariann Strid Christensen Global Quality *)
Flemming Dahl DAPI Biopharmaceuticals
Claus Eilersen Japan & Oceania
Peter Bonne Eriksen Regulatory Affairs
Lars Green Corporate Finance

Jesper Høiland International Operations
Per Jansen NNS *)
Lars Fruergaard Jørgensen IT & Corporate Development
Terje Kalland Biopharmaceuticals Research Unit
Lars Guldbæk Karlsen Global Development **)
Jesper Kløve Devices & Sourcing
Per Kogut NNIT
Peter Kurtzhals Diabetes Research Unit
Lars Christian Lassen Corporate People & Organisation

Ole Ramsby Legal Affairs
Jakob Riis International Marketing **)
Martin Soeters North America **)
Kim Tosti Diabetes Finished Products
Per Valstorp Product Supply
Hans Ole Voigt NNE Pharmaplan

**) Until 31 December 2007.
**) Takes new position as of 1 January 2008.

Back to Contents

shares and capital structure

Novo Nordisk aims at communicating openly with stakeholders about the company s financial and business development as well as strategies and targets. Through active dialogue, the company seeks to ensure fair and efficient pricing of its shares.

To keep investors updated on financial and operating performance as well as the progress of clinical programmes, Executive Management and Investor Relations travel extensively to meet institutional investors and attend investor conferences after each quarterly financial announcement.

This ensures that all investors with a major holding of Novo Nordisk shares can attend meetings on a regular basis and that a high number of smaller investors or potential investors also have access. Roadshows are concentrated on, but not limited to, major European and North American financial centres.

A wide range of other investor activities are held during the year. Investors and financial analysts are welcome to visit Novo Nordisk at the headquarters in Bagsværd, Denmark, as well as at regional headquarters. In 2007, meetings with investor groups were held at regional headquarters in Princeton, US, in Bangalore, India, and in Moscow, Russia.

Furthermore, investors and analysts are invited every year to presentations of the most recent scientific results in connection with the two major medical diabetes conferences, ADA and EASD. In November 2007, a one-day tour of Novo Nordisk s largest production site was arranged. This visit to the Kalundborg site gave investors and analysts insight into the production processes of biologics and an understanding of ongoing efforts to optimise production processes.

Share price performance

In 2007, in line with share price appreciation and in order to enhance liquidity, Novo Nordisk s Board of Directors approved a stock split of the company s B shares. This 2:1 split took effect on 3 December for B shares traded on the OMX Nordic Exchange Copenhagen, and on the

London Stock Exchange. Novo Nordisk s ADRs listed on the New York Stock Exchange were split on 17 December.

Between the closing price of 2006 and 30 November 2007 (the last day of trading before the stock split), the price of the Novo Nordisk B share increased by 38% to DKK 647 from DKK 470.5. In December, following the stock split, the share price rose by 4%, thus the total increase for 2007 was 42%. This was significantly better than the 2007 performance of the OMX Copenhagen 20 Index, up 5%, and the MSCI Europe Health Care Index, down 11%, both measured in DKK. Measured in USD, the price of the Novo Nordisk B share increased by 58%, which compared favourably with a USD return of 5% for the MSCI US Health Care Index.

Novo Nordisk s positive share price development is perceived as a reflection of the company s position in a growth market, strong operating performance and ongoing progress in research and development. In 2007, operating performance was bolstered by solid sales growth (reported sales 8%; sales measured in local currencies 13%) driven by the strategically significant modern insulin products. Substantial productivity increases, achieved through the production efficiency improvement programme cLean®, also contributed. These factors led to an improvement in the gross margin of around 130 basis points in 2007.

Within research and development, the results of the phase 3 programme intended for regulatory filing outside Japan for the human GLP-1 analogue liraglutide are believed to have made a positive impact on the share price. Factors on the negative side were the NovoSeven® ICH phase 3 results, which did not support a filing for this indication, and unfavourable currency developments for some of Novo Nordisk s key invoicing currencies, including the US dollar.

Capital structure

The Board of Directors believes that the current capital and share structures of Novo Nordisk serve the interests of the shareholders and the company. In the event of excess capital after the funding of organic growth opportunities and potential acquisitions, Novo Nordisk s guiding policy is to return capital to investors through dividend payments and share repurchase programmes.

As decided at the Annual General Meeting 2007, a reduction of the company s B share capital, corresponding to approximately

4% of the total share capital, was effected in June 2007 by cancellation of treasury shares.

*) As disclosed by The Capital Group Companies on 10 December 2007.

Price development and monthly turnover of Novo Nordisk s B shares on the OMX Nordic Exchange Copenhagen 2007

* Historical prices in the graph are adjusted for the share split in December 2007.

Back to Contents

This enables Novo Nordisk to continue to buy back shares without exceeding the limit for total holding of treasury shares of 10% of the total capital. In 2007, Novo Nordisk repurchased shares worth DKK 4.8 billion, compared to DKK 3 billion in 2006. This is part of the ongoing share repurchase programme of DKK 16.5 billion for the period 2006 2009.

As part of the agenda for the Annual General Meeting 2008, the Board of Directors will propose a reduction of the company s B share capital, corresponding to approximately 2% of the total share capital, by cancelling treasury shares.

Share capital and ownership

Novo Nordisk s total share capital of DKK 646,960,000 is divided into A share capital of nominally DKK 107,487,200, and B share capital of nominally DKK 539,472,800 of which DKK 25,815,130 is held as trea -sury shares (figures as of 31 December 2007). Novo Nordisk s A shares (each DKK 1) are non-listed shares and held by Novo A/S, a Danish public limited liability company which is 100% owned by the Novo Nordisk Foundation. According to the Articles of Association of the Foundation, the A shares cannot be divested by Novo A/S or the Foundation.

In addition, as of 31 December 2007 Novo A/S held DKK 57,487,600 of B share capital. Each holding of DKK 1 of the A share capital carries 10 votes. Each holding of DKK 1 of the B share capital carries one vote. With 25.5% of the total share capital, Novo A/S controls 71% of the total number of votes, excluding treasury shares. The total market value of Novo Nordisk s B shares excluding treasury shares was DKK 172 billion at the end of 2007.

Novo Nordisk s B shares are quoted on the OMX Nordic Exchange Copenhagen and the London Stock Exchange, and on the New York Stock Exchange in the form of ADRs. The B shares are traded in units of DKK 1. The ratio of Novo Nordisk s B shares to ADRs is 1:1. The B shares are issued to the bearer but may, on request, be registered in the holder s name in Novo Nordisk s register of shareholders.

As Novo Nordisk B shares are in bearer form, no official record of all shareholders exists. Based on the available sources of information on the company s shareholders, it is estimated that Novo Nordisk s shares at the end of 2007 were distributed as shown in the charts on p 49. At the end of 2007 the free float was 71%.

Form 20-F

The Form 20-F Report for 2007 is expected to be filed with the United

States Securities and Exchange Commission in February 2008. The report can be downloaded from novonordisk.com/investors.

Payment of dividends

Shareholders enquiries concerning dividend payments, transfer of share certificates, consolidation of shareholder accounts and tracking of lost shares should be addressed to Novo Nordisk s transfer agents (see inside back cover).

For 2007, the proposed dividend payments for Novo Nordisk shares are illustrated in the table below. Novo Nordisk does not pay a dividend on its holding of treasury shares. The dividend for 2006 paid in March 2007 was DKK 7 per share of DKK 2, equivalent to DKK 3.50 a share, adjusted for the 2:1 share split of December 2007.

Proposed dividend payment for 2007

	A shares of DKK 1	B shares of DKK 1	ADRs
	DKK 4.50	DKK 4.50	DKK 4.50

Internet

Novo Nordisk s homepage for investors is novonordisk.com/investors. It includes historical and updated information about Novo Nordisk s activities: press releases from 1995 onwards, financial and non-financial results, a calendar of investor-relevant events, investor presentations, background information and recent annual reports.

Financial calendar 2008

Annual General Meeting	12 March 2008

Dividend	**B shares**	**ADRs**
Ex-dividend	13 March	13 March
Record date	17 March	17 March
Payment	18 March	25 March

Announcement of financial results 2008	
First three months	30 April
Half year	7 August
Nine months	30 October
Full year	29 January 2009

Price development of Novo Nordisk s B shares relative to the MSCI Europe Health Care Index measured in DKK

Price development of Novo Nordisk s B shares relative to the MSCI US Health Care Index measured in USD

Back to Contents

consolidated financial and non-financial statements 2007

Back to Contents

Sales

	2003	2004	2005	2006	**2007**	2006 2007	2006	2007
	DKK million	DKK million	DKK million	DKK million	DKK million	Change	EUR million	EUR million
Diabetes care:								
Modern insulins (insulin analogues)	2,553	4,507	7,298	10,825	**14,008**	29.4%	1,451	1,880
Human insulins	13,140	13,033	13,543	13,451	**12,572**	(6.5%)	1,804	1,687
Insulin-related sales	1,352	1,350	1,463	1,606	**1,749**	8.9%	215	235
Oral antidiabetic products (OAD)	1,430	1,643	1,708	1,984	**2,149**	8.3%	266	288
Diabetes care total	**18,475**	**20,533**	**24,012**	**27,866**	**30,478**	**9.4%**	**3,736**	**4,090**
Biopharmaceuticals:								

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
1. Business, Basis of Presentation and Summary of Significant Accounting Policies (continued)

In February 2016, the FASB issued new guidance on leasing transactions (ASU 2016-02, Leases - Topic 842). The new guidance is effective for the fiscal years beginning after December 15, 2018, including interim periods within those fiscal years, and requires a modified retrospective transition approach. Early adoption is permitted. The new guidance requires a lessee to recognize assets and liabilities for leases with lease terms of more than 12 months. Leases would be classified as finance or operating leases and both types of leases will be recognized on the balance sheet. Lessor accounting will remain largely unchanged from current guidance except for certain targeted changes. The new guidance will also require new qualitative and quantitative disclosures. The Company's implementation efforts are primarily focused on the review of its existing lease contracts, identification of other contracts that may fall under the scope of the new guidance, and performing a gap analysis on the current state of lease-related activities compared with the future state of lease-related activities. The Company is currently evaluating the impact of the new guidance on its consolidated financial statements.

2. Segment Information

MetLife is organized into five segments: U.S.; Asia; Latin America; EMEA; and MetLife Holdings. In addition, the Company reports certain of its results of operations in Corporate & Other.

U.S.

The U.S. segment offers a broad range of protection products and services aimed at serving the financial needs of customers throughout their lives. These products are sold to corporations and their respective employees, other institutions and their respective members, as well as individuals. The U.S. segment is organized into three businesses: Group Benefits, Retirement and Income Solutions and Property & Casualty.

- The Group Benefits business offers insurance products and services which include life, dental, group short- and long-term disability, individual disability, accidental death and dismemberment, vision and accident & health coverages, as well as prepaid legal plans. This business also sells administrative services-only arrangements to some employers.
- The Retirement and Income Solutions business offers a broad range of annuity and investment products, including stable value and pension risk transfer products, institutional income annuities, tort settlements, capital market investment products, as well as postretirement benefits and company-, bank- or trust-owned life insurance.
- The Property & Casualty business offers personal and commercial lines of property and casualty insurance, including private passenger automobile, homeowners' and personal excess liability insurance. In addition, Property & Casualty offers small business owners property, liability and business interruption insurance.

Asia

The Asia segment offers a broad range of products to both individuals and corporations, as well as other institutions and their respective employees, which include whole and term life, endowments, universal and variable life, accident & health insurance and fixed and variable annuities.

Latin America

The Latin America segment offers a broad range of products to both individuals and corporations, as well as other institutions and their respective employees, which include life insurance, retirement and savings products, accident & health insurance and credit insurance.

EMEA

The EMEA segment offers a broad range of products to both individuals and corporations, as well as other institutions and their respective employees, which include life insurance, accident & health insurance, retirement and savings products and credit insurance.

MetLife Holdings

The MetLife Holdings segment consists of operations relating to products and businesses no longer actively marketed by the Company in the United States, such as variable, universal, term and whole life insurance, variable, fixed and index-linked annuities, long-term care insurance, as well as the assumed variable annuity guarantees from the Company's former operating joint venture in Japan.

13

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
2. Segment Information (continued)

Corporate & Other
Corporate & Other contains the excess capital, as well as certain charges and activities, not allocated to the segments, including external integration and disposition costs, internal resource costs for associates committed to acquisitions and dispositions, enterprise-wide strategic initiative restructuring charges and various start-up businesses (including the investment management business through which the Company offers fee-based investment management services to institutional clients). Additionally, Corporate & Other includes run-off businesses such as the direct to consumer portion of the U.S. Direct business. Corporate & Other also includes interest expense related to the majority of the Company's outstanding debt, as well as expenses associated with certain legal proceedings and income tax audit issues. In addition, Corporate & Other includes the elimination of intersegment amounts, which generally relate to affiliated reinsurance and intersegment loans, which bear interest rates commensurate with related borrowings.
Financial Measures and Segment Accounting Policies
Adjusted earnings is used by management to evaluate performance and allocate resources. Consistent with GAAP guidance for segment reporting, adjusted earnings is also the Company's GAAP measure of segment performance and is reported below. Adjusted earnings should not be viewed as a substitute for income (loss) from continuing operations, net of income tax. The Company believes the presentation of adjusted earnings, as the Company measures it for management purposes, enhances the understanding of its performance by highlighting the results of operations and the underlying profitability drivers of the business.
Adjusted earnings is defined as adjusted revenues less adjusted expenses, net of income tax.
The financial measures of adjusted revenues and adjusted expenses focus on the Company's primary businesses principally by excluding the impact of market volatility, which could distort trends, and revenues and costs related to non-core products and certain entities required to be consolidated under GAAP. Also, these measures exclude results of discontinued operations under GAAP and other businesses that have been or will be sold or exited by MetLife but do not meet the discontinued operations criteria under GAAP and are referred to as divested businesses. Divested businesses also includes the net impact of transactions with exited businesses that have been eliminated in consolidation under GAAP and costs relating to businesses that have been or will be sold or exited by MetLife that do not meet the criteria to be included in results of discontinued operations under GAAP. Adjusted revenues also excludes net investment gains (losses) and net derivative gains (losses). Adjusted expenses also excludes goodwill impairments.
The following additional adjustments are made to revenues, in the line items indicated, in calculating adjusted revenues:

- Universal life and investment-type product policy fees excludes the amortization of unearned revenue related to net investment gains (losses) and net derivative gains (losses) and certain variable annuity guaranteed minimum income benefits ("GMIBs") fees ("GMIB Fees");
- Net investment income: (i) includes earned income on derivatives and amortization of premium on derivatives that are hedges of investments or that are used to replicate certain investments, but do not qualify for hedge accounting treatment, (ii) excludes post-tax adjusted earnings adjustments relating to insurance joint ventures accounted for under the equity method, (iii) excludes certain amounts related to contractholder-directed unit-linked investments, (iv) excludes certain amounts related to securitization entities that are VIEs consolidated under GAAP and (v) includes distributions of profits from certain other limited partnerships that were previously accounted for under the cost method, but are now accounted for at estimated fair value, where the change in fair value is recognized in net investment gains (losses) for GAAP; and
- Other revenues are adjusted for settlements of foreign currency earnings hedges and excludes fees received in association with services provided under transition service agreements ("TSA fees").

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
2. Segment Information (continued)

The following additional adjustments are made to expenses, in the line items indicated, in calculating adjusted expenses:

- Policyholder benefits and claims and policyholder dividends excludes: (i) changes in the policyholder dividend obligation related to net investment gains (losses) and net derivative gains (losses), (ii) inflation-indexed benefit adjustments associated with contracts backed by inflation-indexed investments and amounts associated with periodic crediting rate adjustments based on the total return of a contractually referenced pool of assets and other pass-through adjustments, (iii) benefits and hedging costs related to GMIBs ("GMIB Costs") and (iv) market value adjustments associated with surrenders or terminations of contracts ("Market Value Adjustments");
- Interest credited to policyholder account balances includes adjustments for earned income on derivatives and amortization of premium on derivatives that are hedges of policyholder account balances but do not qualify for hedge accounting treatment and excludes amounts related to net investment income earned on contractholder-directed unit-linked investments;
- Amortization of deferred policy acquisition costs ("DAC") and value of business acquired ("VOBA") excludes amounts related to: (i) net investment gains (losses) and net derivative gains (losses), (ii) GMIB Fees and GMIB Costs and (iii) Market Value Adjustments;
- Amortization of negative VOBA excludes amounts related to Market Value Adjustments;
- Interest expense on debt excludes certain amounts related to securitization entities that are VIEs consolidated under GAAP; and
- Other expenses excludes costs related to: (i) noncontrolling interests, (ii) implementation of new insurance regulatory requirements and (iii) acquisition, integration and other costs. Other expenses includes TSA fees.

Adjusted earnings also excludes the recognition of certain contingent assets and liabilities that could not be recognized at acquisition or adjusted for during the measurement period under GAAP business combination accounting guidance.

The tax impact of the adjustments mentioned above are calculated net of the U.S. or foreign statutory tax rate, which could differ from the Company's effective tax rate. Additionally, the provision for income tax (expense) benefit also includes the impact related to the timing of certain tax credits, as well as certain tax reforms.

Set forth in the tables below is certain financial information with respect to the Company's segments, as well as Corporate & Other, for the three months ended March 31, 2018 and 2017. The segment accounting policies are the same as those used to prepare the Company's consolidated financial statements, except for adjusted earnings adjustments as defined above. In addition, segment accounting policies include the method of capital allocation described below.

Economic capital is an internally developed risk capital model, the purpose of which is to measure the risk in the business and to provide a basis upon which capital is deployed. The economic capital model accounts for the unique and specific nature of the risks inherent in the Company's business.

The Company's economic capital model, coupled with considerations of local capital requirements, aligns segment allocated equity with emerging standards and consistent risk principles. The model applies statistics-based risk evaluation principles to the material risks to which the Company is exposed. These consistent risk principles include calibrating required economic capital shock factors to a specific confidence level and time horizon while applying an industry standard method for the inclusion of diversification benefits among risk types. The Company's management is responsible for the ongoing production and enhancement of the economic capital model and reviews its approach periodically to ensure that it remains consistent with emerging industry practice standards.

Segment net investment income is credited or charged based on the level of allocated equity; however, changes in allocated equity do not impact the Company's consolidated net investment income, income (loss) from continuing operations, net of income tax, or adjusted earnings.

Net investment income is based upon the actual results of each segment's specifically identifiable investment portfolios adjusted for allocated equity. Other costs are allocated to each of the segments based upon: (i) a review of the nature of such costs; (ii) time studies analyzing the amount of employee compensation costs incurred by each segment; and

(iii) cost estimates included in the Company's product pricing.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
2. Segment Information (continued)

Three Months Ended March 31, 2018	U.S.	Asia	Latin America	EMEA	MetLife Holdings	Corporate & Other	Total	Adjustments	Total Consolidated
	(In millions)								
Revenues									
Premiums	$5,217	$1,748	$699	$551	$950	$13	$9,178	$—	$9,178
Universal life and investment-type product policy fees	258	394	282	112	314	—	1,360	32	1,392
Net investment income	1,662	795	276	75	1,352	59	4,219	(474)	3,745
Other revenues	204	15	8	16	67	81	391	83	474
Net investment gains (losses)	—	—	—	—	—	—	—	(333)	(333)
Net derivative gains (losses)	—	—	—	—	—	—	—	349	349
Total revenues	7,341	2,952	1,265	754	2,683	153	15,148	(343)	14,805
Expenses									
Policyholder benefits and claims and policyholder dividends	5,138	1,343	646	294	1,550	(3)	8,968	47	9,015
Interest credited to policyholder account balances	407	351	98	25	236	—	1,117	(348)	769
Capitalization of DAC	(106)	(465)	(94)	(118)	(10)	(2)	(795)	(1)	(796)
Amortization of DAC and VOBA	115	314	60	106	100	2	697	(4)	693
Amortization of negative VOBA	—	(15)	—	(6)	—	—	(21)	(1)	(22)
Interest expense on debt	2	—	2	—	2	280	286	—	286
Other expenses	961	952	338	351	276	232	3,110	94	3,204
Total expenses	6,517	2,480	1,050	652	2,154	509	13,362	(213)	13,149
Provision for income tax expense (benefit)	171	145	75	21	104	(159)	357	42	399
Adjusted earnings	$653	$327	$140	$81	$425	$(197)	1,429		
Adjustments to:									
Total revenues							(343)		
Total expenses							213		
Provision for income tax (expense) benefit							(42)		
Income (loss) from continuing operations, net of income tax							$1,257		$1,257

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
2. Segment Information (continued)

Three Months Ended March 31, 2017	U.S.	Asia	Latin America	EMEA	MetLife Holdings	Corporate & Other	Total	Adjustments	Total Consolidated
	(In millions)								
Revenues									
Premiums	$5,185	$1,708	$647	$502	$1,059	$38	$9,139	$(174)	$8,965
Universal life and investment-type product policy fees	265	366	260	95	362	—	1,348	12	1,360
Net investment income	1,612	702	303	74	1,441	40	4,172	249	4,421
Other revenues	204	10	9	17	96	59	395	(53)	342
Net investment gains (losses)	—	—	—	—	—	—	—	88	88
Net derivative gains (losses)	—	—	—	—	—	—	—	(212)	(212)
Total revenues	7,266	2,786	1,219	688	2,958	137	15,054	(90)	14,964
Expenses									
Policyholder benefits and claims and policyholder dividends	5,244	1,315	633	269	1,733	25	9,219	(46)	9,173
Interest credited to policyholder account balances	351	321	82	24	257	1	1,036	415	1,451
Capitalization of DAC	(100)	(420)	(82)	(92)	(34)	(1)	(729)	16	(713)
Amortization of DAC and VOBA	114	291	78	87	74	1	645	18	663
Amortization of negative VOBA	—	(37)	—	(3)	—	—	(40)	(3)	(43)
Interest expense on debt	2	—	1	—	15	277	295	(12)	283
Other expenses	909	875	326	316	340	175	2,941	137	3,078
Total expenses	6,520	2,345	1,038	601	2,385	478	13,367	525	13,892
Provision for income tax expense (benefit)	249	146	38	12	186	(271)	360	(240)	120
Adjusted earnings	$497	$295	$143	$75	$387	$(70)	1,327		
Adjustments to:									
Total revenues							(90)		
Total expenses							(525)		
Provision for income tax (expense) benefit							240		
Income (loss) from continuing operations, net of income tax							$952		$952

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
2. Segment Information (continued)

The following table presents total assets with respect to the Company's segments, as well as Corporate & Other, at:

	March 31, 2018	December 31, 2017
	(In millions)	
U.S.	$251,496	$ 255,428
Asia	143,458	136,928
Latin America	78,638	79,670
EMEA	30,546	30,500
MetLife Holdings	175,817	183,160
Corporate & Other	32,629	34,206
Total	$712,584	$ 719,892

3. Dispositions
2018 Disposition
On February 20, 2018, the Company completed the sale of MetLife Afore, S.A. de C.V., its pension fund management business in Mexico. See Note 3 of the Notes to the Consolidated Financial Statement included in the 2017 Annual Report for further information.
2017 Separation of Brighthouse
On August 4, 2017, MetLife, Inc. completed the separation of Brighthouse. MetLife, Inc. retained the remaining ownership interest of 22,996,436 shares, or 19.2%, of Brighthouse Financial, Inc. common stock and recognized its investment in Brighthouse Financial, Inc. common stock based on the NASDAQ reported market price. The Company elected to record the investment under the FVO as an observable measure of estimated fair value that is aligned with the Company's intent to divest of the retained shares as soon as practicable. Subsequent changes in estimated fair value of the investment are recorded to net investment gains (losses). The estimated fair value of the Brighthouse Financial, Inc. common stock held by the Company ("FVO Brighthouse Common Stock") at March 31, 2018 and December 31, 2017 was $1.2 billion and $1.3 billion, respectively, reported within contractholder-directed equity securities and fair value option securities. In the first quarter of 2018, the Company recorded a $168 million mark-to-market loss on its retained investment in Brighthouse Financial, Inc. to net investment gains (losses).
The Company incurred pre-tax Separation-related transaction costs of $77 million for the three months ended March 31, 2017, primarily related to third party staffing costs. Separation-related transaction costs are recorded in other expenses and reported within continuing operations.
See Note 3 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report for further information regarding the Separation, including Separation-related agreements and ongoing transactions with Brighthouse.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
3. Dispositions (continued)

Agreements

Tax Agreements

Immediately prior to the Separation, MetLife entered into tax agreements with Brighthouse.

In accordance with the tax separation agreement, at both March 31, 2018 and December 31, 2017, the Company's current income tax receivable and corresponding payable to Brighthouse, reported in other liabilities, were $726 million.

As part of the tax receivable agreement, MetLife Inc. has the right to receive future payments from Brighthouse for a tax asset that Brighthouse received as a result of restructuring prior to the Separation. Included in other assets at both March 31, 2018 and December 31, 2017, is a receivable from Brighthouse of $333 million related to these future payments.

Ongoing Transactions with Brighthouse

The Company considered all of its continuing involvement with Brighthouse in determining whether to deconsolidate and present Brighthouse results as discontinued operations, including the agreements entered into between MetLife and Brighthouse and the ongoing transactions described below.

The Company entered into reinsurance, committed facility, structured settlement, and contract administrative services transactions with Brighthouse in the normal course of business and such transactions will continue based upon business needs. In addition, prior to and in connection with the Separation, the Company entered into various other agreements with Brighthouse for services necessary for both the Company and Brighthouse to conduct their activities. Intercompany transactions prior to the Separation between the Company and Brighthouse are eliminated and excluded from the interim condensed consolidated statements of operations and comprehensive income (loss). Transactions between the Company and Brighthouse that continue after the Separation are included on the Company's interim condensed consolidated statements of operations and comprehensive income (loss) and interim condensed consolidated balance sheets.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
3. Dispositions (continued)

Reinsurance
The Company entered into reinsurance transactions with Brighthouse in the normal course of business and such transactions will continue based upon business needs. Information regarding the significant effects of reinsurance transactions with Brighthouse was as follows:

	Included on Interim Condensed Consolidated Statements of Operations and Comprehensive Income (Loss)	Excluded from Interim Condensed Consolidated Statements of Operations and Comprehensive Income (Loss)
	Three Months Ended March 31,	
	2018	2017
	(In millions)	
Premiums		
Reinsurance assumed	$ 96	$ 97
Reinsurance ceded	(3)	(3)
Net premiums	$ 93	$ 94
Universal life and investment-type product policy fees		
Reinsurance assumed	$ 1	$ (4)
Reinsurance ceded	(24)	(24)
Net universal life and investment-type product policy fees	$ (23)	$ (28)
Policyholder benefits and claims		
Reinsurance assumed	$ 78	$ 75
Reinsurance ceded	(10)	(6)
Net policyholder benefits and claims	$ 68	$ 69
Interest credited to policyholder account balances		
Reinsurance assumed	$ 4	$ 4
Reinsurance ceded	(18)	(18)
Net interest credited to policyholder account balances	$ (14)	$ (14)
Other expenses		
Reinsurance assumed	$ 34	$ (30)
Reinsurance ceded	(14)	(21)
Net other expenses	$ 20	$ (51)

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
3. Dispositions (continued)

Information regarding the significant effects of reinsurance transactions with Brighthouse included on the interim condensed consolidated balance sheets was as follows at:

	March 31, 2018		December 31, 2017	
	Assumed	Ceded	Assumed	Ceded
	(In millions)			
Assets				
Premiums, reinsurance and other receivables	$154	$1,802	$167	$1,793
Deferred policy acquisition costs and value of business acquired	390	(40)	384	(40)
Total assets	$544	$1,762	$551	$1,753
Liabilities				
Future policy benefits	$1,788	$—	$1,734	$—
Other policy-related balances	116	25	119	28
Other liabilities	1,447	25	1,458	19
Total liabilities	$3,351	$50	$3,311	$47

Investment Management

In connection with the Separation, the Company entered into investment management services agreements with Brighthouse. During the three months ended March 31, 2018, the Company recognized $29 million in other revenues for services provided under such investment management services agreements. Prior to the Separation, during the three months ended March 31, 2017, the Company charged Brighthouse $25 million, for services provided under the agreements, which were intercompany transactions and eliminated and excluded from the interim condensed consolidated statements of operations and comprehensive income (loss).

Committed Facility

MetLife Reinsurance Company of Vermont and MetLife, Inc. have a $2.9 billion committed facility which is used as collateral for certain affiliated reinsurance liabilities. At March 31, 2018, Brighthouse was a beneficiary of $2.4 billion of letters of credit issued under this committed facility and, in consideration, Brighthouse reimbursed MetLife, Inc. for a portion of the letter of credit fees. Prior to the Separation, the Company entered into the committed facility with Brighthouse in the normal course of business and such transactions will continue based upon business needs.

Transition Services

In connection with the Separation, the Company entered into a transition services agreement with Brighthouse for services necessary for Brighthouse to conduct its activities. During the three months ended March 31, 2018, the Company recognized $79 million as other revenue for transitional services provided under the agreement. Prior to the Separation, during the three months ended March 31, 2017, the Company charged Brighthouse $81 million, for services provided under the agreement, which were intercompany transactions and eliminated and excluded from the interim condensed consolidated statements of operations and comprehensive income (loss).

Other

The Company has existing assumed structured settlement claim obligations as an assignment company for Brighthouse. These liabilities are measured at the present value of the periodic claims to be provided and reported as other policy-related balances. The Company receives a fee for assuming these claim obligations and, as the assignee of the claim, is legally obligated to ensure periodic payments are made to the claimant. The Company purchased annuities from Brighthouse to fund these obligations and designates payments to be made directly to the claimant by Brighthouse as the annuity writer. The aggregate contract values of annuities funding structured settlement claims are recorded as an asset for which the Company has also recorded an unpaid claim obligation reported in other policy-related balances. Such aggregated contract values were $1.3 billion at both March 31, 2018 and December 31, 2017. The Company entered into these transactions with Brighthouse in the normal course of business and such

transactions will continue based upon business needs.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
3. Dispositions (continued)

The Company provides services necessary for Brighthouse to conduct its business, which primarily include contract administrative services for certain Brighthouse investment-type products. During the three months ended March 31, 2018, the Company recognized revenue of $32 million for administrative services provided to Brighthouse. Prior to the Separation, during the three months ended March 31, 2017, the Company provided administrative services to Brighthouse for $31 million, which were intercompany transactions and eliminated and excluded from the interim condensed consolidated statements of operations and comprehensive income (loss). The Company entered into these transactions with Brighthouse in the normal course of business and such transactions will continue based upon business needs.

In connection with the Separation, the Company entered into an employee matters agreement with Brighthouse to allocate obligations and responsibilities relating to employee compensation and benefit plans and other related matters. The employee matters agreement provides that MetLife will reimburse Brighthouse for certain pension benefit payments, retiree health and life benefit payments and deferred compensation payments. Included in other liabilities at both March 31, 2018 and December 31, 2017, is a payable to Brighthouse of $186 million related to these future payments.

At March 31, 2018, the Company had a receivable from Brighthouse of $87 million related to services provided and a payable to Brighthouse of $48 million related to services received. At December 31, 2017, the Company had a receivable from Brighthouse of $97 million related to services provided and a payable to Brighthouse of $50 million related to services received.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
3. Dispositions (continued)

Discontinued Operations
The following table presents the amounts related to the operations of Brighthouse that have been reflected in discontinued operations:

	Three Months Ended March 31, 2017 (In millions)
Revenues	
Premiums	$ 350
Universal life and investment-type product policy fees	942
Net investment income	775
Other revenues	32
Total net investment gains (losses)	(50)
Net derivative gains (losses)	(700)
Total revenues	1,349
Expenses	
Policyholder benefits and claims	1,002
Interest credited to policyholder account balances	261
Policyholder dividends	7
Goodwill impairment	—
Other expenses	261
Total expenses	1,531
Income (loss) from discontinued operations before provision for income tax	(182)
Provision for income tax expense (benefit)	(106)
Income (loss) from discontinued operations, net of income tax	$ (76)

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
3. Dispositions (continued)

In the interim condensed consolidated statements of cash flows, the cash flows from discontinued operations are not separately classified. The following table presents selected financial information regarding cash flows of the discontinued operations.

	Three Months Ended March 31, 2017 (In millions)
Net cash provided by (used in):	
Operating activities	$ 302
Investing activities	$ 16
Financing activities	$ 266

4. Insurance Guarantees

As discussed in Notes 1 and 4 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report, the Company issues directly and assumes through reinsurance variable annuity products with guaranteed minimum benefits. Guaranteed minimum accumulation benefits (“GMABs”) and the portions of both non-life-contingent guaranteed minimum withdrawal benefits (“GMWBs”) and the GMIBs that do not require annuitization are accounted for as embedded derivatives in policyholder account balances and are further discussed in Note 7.

The Company also issues other annuity contracts that apply a lower rate on funds deposited if the contractholder elects to surrender the contract for cash and a higher rate if the contractholder elects to annuitize. These guarantees include benefits that are payable in the event of death, maturity or at annuitization. Certain other annuity contracts contain guaranteed annuitization benefits that may be above what would be provided by the current account value of the contract. Additionally, the Company issues universal and variable life contracts where the Company contractually guarantees to the contractholder a secondary guarantee or a guaranteed paid-up benefit.

Information regarding the Company’s guarantee exposure, which includes direct and assumed business, but excludes offsets from hedging or ceded reinsurance, if any, was as follows at:

	March 31, 2018		December 31, 2017	
	In the Event of Death	At Annuitization	In the Event of Death	At Annuitization
	(Dollars in millions)			
Annuity Contracts:				
Variable Annuity Guarantees:				
Total account value (1), (2), (3)	$64,728	$ 25,169	$66,724	$ 26,223
Separate account value (1)	$43,714	$ 23,302	$45,431	$ 24,336
Net amount at risk (2)	$1,587 (4)	$ 510 (5)	$1,238 (4)	$ 525 (5)
Average attained age of contractholders	66 years	66 years	65 years	65 years
Other Annuity Guarantees:				
Total account value (1), (3)	N/A	$ 1,437	N/A	$ 1,424
Net amount at risk	N/A	$ 559 (6)	N/A	$ 569 (6)
Average attained age of contractholders	N/A	50 years	N/A	50 years

24

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
4. Insurance (continued)

	March 31, 2018		December 31, 2017	
	Secondary Guarantees	Paid-Up Guarantees	Secondary Guarantees	Paid-Up Guarantees
	(Dollars in millions)			
Universal and Variable Life Contracts:				
Total account value (1), (3)	$9,089	$ 3,171	$9,036	$ 3,207
Net amount at risk (7)	$66,762	$ 16,332	$66,956	$ 16,615
Average attained age of policyholders	57 years	63 years	56 years	63 years

(1) The Company's annuity and life contracts with guarantees may offer more than one type of guarantee in each contract. Therefore, the amounts listed above may not be mutually exclusive.

(2) Includes amounts, which are not reported on the interim condensed consolidated balance sheets, from assumed variable annuity guarantees from the Company's former operating joint venture in Japan.

(3) Includes the contractholder's investments in the general account and separate account, if applicable.

(4) Defined as the death benefit less the total account value, as of the balance sheet date. It represents the amount of the claim that the Company would incur if death claims were filed on all contracts on the balance sheet date and includes any additional contractual claims associated with riders purchased to assist with covering income taxes payable upon death.

(5) Defined as the amount (if any) that would be required to be added to the total account value to purchase a lifetime income stream, based on current annuity rates, equal to the minimum amount provided under the guaranteed benefit. This amount represents the Company's potential economic exposure to such guarantees in the event all contractholders were to annuitize on the balance sheet date, even though the contracts contain terms that allow annuitization of the guaranteed amount only after the 10th anniversary of the contract, which not all contractholders have achieved.

(6) Defined as either the excess of the upper tier, adjusted for a profit margin, less the lower tier, as of the balance sheet date or the amount (if any) that would be required to be added to the total account value to purchase a lifetime income stream, based on current annuity rates, equal to the minimum amount provided under the guaranteed benefit. These amounts represent the Company's potential economic exposure to such guarantees in the event all contractholders were to annuitize on the balance sheet date.

(7) Defined as the guarantee amount less the account value, as of the balance sheet date. It represents the amount of the claim that the Company would incur if death claims were filed on all contracts on the balance sheet date.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
4. Insurance (continued)

Liabilities for Unpaid Claims and Claim Expenses
Rollforward of Claims and Claim Adjustment Expenses
Information regarding the liabilities for unpaid claims and claim adjustment expenses was as follows:

	Three Months Ended March 31,	
	2018	2017 (1)
	(In millions)	
Balance, beginning of period	$17,094	$16,157
Less: Reinsurance recoverables	2,198	1,968
Net balance, beginning of period	14,896	14,189
Incurred related to:		
Current period	6,504	6,637
Prior periods (2)	(148)	(127)
Total incurred	6,356	6,510
Paid related to:		
Current period	(3,339)	(3,723)
Prior periods	(2,719)	(2,604)
Total paid	(6,058)	(6,327)
Net balance, end of period	15,194	14,372
Add: Reinsurance recoverables	2,237	2,123
Balance, end of period (included in future policy benefits and other policy-related balances)	$17,431	$16,495

(1) As discussed in Note 4 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report, at December 31, 2016, the Net balance decreased and the Reinsurance recoverables increased from those amounts previously reported. Additionally, at March 31, 2017, the Net balance decreased by $131 million and the Reinsurance recoverables increased by $144 million from those amounts previously reported in MetLife, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2017. These adjustments to the Net balance and the Reinsurance recoverables, at both periods, are primarily to correct for improper classification of reinsurance recoverables.

(2) During both the three months ended March 31, 2018 and 2017, as a result of changes in estimates of insured events in the respective prior periods, the claims and claim adjustment expenses associated with prior periods decreased due to favorable claims experience.

5. Closed Block

On April 7, 2000 (the "Demutualization Date"), Metropolitan Life Insurance Company ("MLIC") converted from a mutual life insurance company to a stock life insurance company and became a wholly-owned subsidiary of MetLife, Inc. The conversion was pursuant to an order by the New York Superintendent of Insurance approving MLIC's plan of reorganization, as amended (the "Plan of Reorganization"). On the Demutualization Date, MLIC established a closed block for the benefit of holders of certain individual life insurance policies of MLIC.

Experience within the closed block, in particular mortality and investment yields, as well as realized and unrealized gains and losses, directly impact the policyholder dividend obligation. Amortization of the closed block DAC, which resides outside of the closed block, is based upon cumulative actual and expected earnings within the closed block. Accordingly, the Company's net income continues to be sensitive to the actual performance of the closed block.

Closed block assets, liabilities, revenues and expenses are combined on a line-by-line basis with the assets, liabilities, revenues and expenses outside the closed block based on the nature of the particular item.

26

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
5. Closed Block (continued)

Information regarding the closed block liabilities and assets designated to the closed block was as follows at:

	March 31, 2018	December 31, 2017
	(In millions)	
Closed Block Liabilities		
Future policy benefits	$40,285	$ 40,463
Other policy-related balances	213	222
Policyholder dividends payable	462	437
Policyholder dividend obligation	1,277	2,121
Other liabilities	285	212
Total closed block liabilities	42,522	43,455
Assets Designated to the Closed Block		
Investments:		
Fixed maturity securities available-for-sale, at estimated fair value	26,815	27,904
Equity securities, at estimated fair value	68	70
Mortgage loans	6,040	5,878
Policy loans	4,532	4,548
Real estate and real estate joint ventures	595	613
Other invested assets	607	731
Total investments	38,657	39,744
Accrued investment income	475	477
Premiums, reinsurance and other receivables; cash and cash equivalents	208	14
Current income tax recoverable	40	35
Deferred income tax assets	23	36
Total assets designated to the closed block	39,403	40,306
Excess of closed block liabilities over assets designated to the closed block	3,119	3,149
Amounts included in AOCI:		
Unrealized investment gains (losses), net of income tax	1,711	1,863
Unrealized gains (losses) on derivatives, net of income tax	(57)	(7)
Allocated to policyholder dividend obligation, net of income tax	(1,009)	(1,379)
Total amounts included in AOCI	645	477
Maximum future earnings to be recognized from closed block assets and liabilities	$3,764	$ 3,626

See Note 1 for discussion of new accounting guidance related to U.S. Tax Reform.

Information regarding the closed block policyholder dividend obligation was as follows:

	Three Months Ended March 31, 2018	Year Ended December 31, 2017
	(In millions)	
Balance, beginning of period	$2,121	$ 1,931
Change in unrealized investment and derivative gains (losses)	(844)	190
Balance, end of period	$1,277	$ 2,121

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
5. Closed Block (continued)

Information regarding the closed block revenues and expenses was as follows:

	Three Months Ended March 31,	
	2018	2017
	(In millions)	
Revenues		
Premiums	$387	$402
Net investment income	444	466
Net investment gains (losses)	(29)	(8)
Net derivative gains (losses)	(3)	(8)
Total revenues	799	852
Expenses		
Policyholder benefits and claims	571	568
Policyholder dividends	244	250
Other expenses	29	32
Total expenses	844	850
Revenues, net of expenses before provision for income tax expense (benefit)	(45)	2
Provision for income tax expense (benefit)	(10)	—
Revenues, net of expenses and provision for income tax expense (benefit)	$(35)	$2

MLIC charges the closed block with federal income taxes, state and local premium taxes and other state or local taxes, as well as investment management expenses relating to the closed block as provided in the Plan of Reorganization. MLIC also charges the closed block for expenses of maintaining the policies included in the closed block.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)

6. Investments
Fixed Maturity Securities Available-for-Sale
Fixed Maturity Securities Available-for-Sale by Sector
The following table presents the fixed maturity securities AFS by sector. Redeemable preferred stock is reported within U.S. corporate and foreign corporate fixed maturity securities. Included within fixed maturity securities AFS are structured securities including residential mortgage-backed securities ("RMBS"), asset-backed securities ("ABS") and commercial mortgage-backed securities ("CMBS") (collectively, "Structured Securities").

	March 31, 2018					December 31, 2017				
		Gross Unrealized					Gross Unrealized			
	Amortized Cost	Gains	Temporary Losses	OTTI Losses (1)	Estimated Fair Value	Amortized Cost	Gains	Temporary Losses	OTTI Losses (1)	Estimated Fair Value
	(In millions)									
Fixed maturity securities:										
U.S. corporate	$77,786	$5,105	$ 1,057	$—	$81,834	$76,005	$7,007	$ 351	$—	$82,661
Foreign government	58,423	6,484	397	—	64,510	55,351	6,495	312	—	61,534
Foreign corporate	52,894	3,366	797	—	55,463	52,409	3,836	676	—	55,569
U.S. government and agency	40,989	3,395	557	—	43,827	43,446	4,227	279	—	47,394
RMBS	26,858	999	481	(35)	27,411	27,846	1,145	233	(42)	28,800
State and political subdivision	10,762	1,473	43	—	12,192	10,752	1,717	13	1	12,455
ABS	11,695	111	41	1	11,764	12,213	116	39	(1)	12,291
CMBS	7,692	112	94	—	7,710	8,047	222	42	—	8,227
Total fixed maturity securities	$287,099	$21,045	$ 3,467	$(34)	$304,711	$286,069	$24,765	$ 1,945	$(42)	$308,931

(1) Noncredit OTTI losses included in AOCI in an unrealized gain position are due to increases in estimated fair value subsequent to initial recognition of noncredit losses on such securities. See also "— Net Unrealized Investment Gains (Losses)."

The Company held non-income producing fixed maturity securities with an estimated fair value of $24 million and $6 million, and unrealized gains (losses) of ($1) million and ($4) million, at March 31, 2018 and December 31, 2017, respectively.

Maturities of Fixed Maturity Securities
The amortized cost and estimated fair value of fixed maturity securities, by contractual maturity date, were as follows at March 31, 2018:

	Due in One Year or Less	Due After One Year Through Five Years	Due After Five Years Through Ten Years	Due After Ten Years	Structured Securities	Total Fixed Maturity Securities
	(In millions)					
Amortized cost	$12,620	$60,639	$61,373	$106,222	$ 46,245	$287,099
Estimated fair value	$12,674	$62,809	$63,919	$118,424	$ 46,885	$304,711

Actual maturities may differ from contractual maturities due to the exercise of call or prepayment options. Fixed maturity securities not due at a single maturity date have been presented in the year of final contractual maturity. Structured Securities are shown separately, as they are not due at a single maturity.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
6. Investments (continued)

Continuous Gross Unrealized Losses for Fixed Maturity Securities AFS by Sector
The following table presents the estimated fair value and gross unrealized losses of fixed maturity securities AFS in an unrealized loss position, aggregated by sector and by length of time that the securities have been in a continuous unrealized loss position at:

	March 31, 2018				December 31, 2017			
	Less than 12 Months		Equal to or Greater than 12 Months		Less than 12 Months		Equal to or Greater than 12 Months	
	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses
	(Dollars in millions)							
Fixed maturity securities:								
U.S. corporate	$20,465	$ 642	$4,426	$ 415	$5,604	$ 92	$4,115	$ 259
Foreign government	4,510	137	3,297	260	4,234	83	3,251	229
Foreign corporate	8,932	259	5,835	538	4,422	99	6,802	577
U.S. government and agency	19,105	224	3,378	333	18,273	93	3,560	186
RMBS	10,855	237	3,713	209	6,359	50	4,159	141
State and political subdivision	774	24	302	19	182	2	346	12
ABS	2,593	15	551	27	1,695	7	729	31
CMBS	3,069	48	478	46	1,174	9	413	33
Total fixed maturity securities	$70,303	$ 1,586	$21,980	$ 1,847	$41,943	$ 435	$23,375	$ 1,468
Total number of securities in an unrealized loss position	5,111		1,887		2,598		1,955	

Evaluation of AFS Securities for OTTI and Evaluating Temporarily Impaired AFS Securities
As described more fully in Notes 1 and 8 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report, the Company performs a regular evaluation of all investment classes for impairment, including fixed maturity securities and perpetual hybrid securities, in accordance with its impairment policy, in order to evaluate whether such investments are other-than-temporarily impaired.
Current Period Evaluation
Based on the Company's current evaluation of its AFS securities in an unrealized loss position in accordance with its impairment policy, and the Company's current intentions and assessments (as applicable to the type of security) about holding, selling and any requirements to sell these securities, the Company concluded that these securities were not other-than-temporarily impaired at March 31, 2018. Future OTTI will depend primarily on economic fundamentals, issuer performance (including changes in the present value of future cash flows expected to be collected), changes in credit ratings, collateral valuation, interest rates and credit spreads. If economic fundamentals deteriorate or if there are adverse changes in the above factors, OTTI may be incurred in upcoming periods.
Gross unrealized losses on fixed maturity securities increased $1.5 billion during the three months ended March 31, 2018 to $3.4 billion. The increase in gross unrealized losses for the three months ended March 31, 2018 was primarily attributable to widening credit spreads and increases in interest rates, partially offset by strengthening foreign currencies on non-functional currency denominated fixed maturity securities.
At March 31, 2018, $85 million of the total $3.4 billion of gross unrealized losses were from 28 fixed maturity securities with an unrealized loss position of 20% or more of amortized cost for six months or greater.
Investment Grade Fixed Maturity Securities
Of the $85 million of gross unrealized losses on fixed maturity securities with an unrealized loss of 20% or more of amortized cost for six months or greater, $40 million, or 47%, were related to gross unrealized losses on 11 investment grade fixed maturity securities. Unrealized losses on investment grade fixed maturity securities are

principally related to widening credit spreads since purchase and, with respect to fixed-rate fixed maturity securities, rising interest rates since purchase.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
6. Investments (continued)

Below Investment Grade Fixed Maturity Securities
Of the $85 million of gross unrealized losses on fixed maturity securities with an unrealized loss of 20% or more of amortized cost for six months or greater, $45 million, or 53%, were related to gross unrealized losses on 17 below investment grade fixed maturity securities. Unrealized losses on below investment grade fixed maturity securities are principally related to U.S. and foreign corporate securities (primarily industrial and utility securities) and CMBS and are the result of significantly wider credit spreads resulting from higher risk premiums since purchase, largely due to economic and market uncertainty including concerns over lower oil prices in the energy sector. Management evaluates U.S. and foreign corporate securities based on factors such as expected cash flows and the financial condition and near-term and long-term prospects of the issuers and evaluates CMBS based on actual and projected cash flows after considering the quality of underlying collateral, expected prepayment speeds, current and forecasted loss severity, the payment terms of the underlying assets backing a particular security and the payment priority within the tranche structure of the security.
Equity Securities
Equity securities are summarized as follows at:

	March 31, 2018		December 31, 2017	
	Estimated Fair Value	% of Total	Estimated Fair Value	% of Total
	(Dollars in millions)			
Equity securities:				
Common stock	$1,046	67.7 %	$2,035	81.0 %
Non-redeemable preferred stock	498	32.3	478	19.0
Total equity securities	$1,544	100.0%	$2,513	100.0%

In connection with the adoption of new guidance related to the recognition and measurement of financial instruments (see Note 1), effective January 1, 2018, the Company has reclassified its investment in common stock in regional banks of the Federal Home Loan Bank (“FHLB”) system from equity securities to other invested assets. These investments are carried at redemption value and are considered restricted investments until redeemed by the respective FHLB regional banks. The carrying value of these investments at December 31, 2017 was $791 million.
Contractholder-Directed Equity Securities and Fair Value Option Securities
Contractholder-directed equity securities and fair value option securities (collectively, “Unit-linked and FVO Securities”), are investments for which the FVO has been elected, or are otherwise required to be carried at estimated fair value, and include:

- contractholder-directed investments supporting unit-linked variable annuity type liabilities which do not qualify for presentation and reporting as separate account summary total assets and liabilities. These investments are primarily equity securities (including mutual funds) and, to a lesser extent, fixed maturity securities, short-term investments and cash and cash equivalents. The investment returns on these investments inure to contractholders and are offset by a corresponding change in policyholder account balances through interest credited to policyholder account balances (“Unit-linked investments”);
- FVO Brighthouse Common Stock (see Note 3);
- fixed maturity and equity securities held-for-investment by the general account to support asset and liability management strategies for certain insurance products and investments in certain separate accounts (“FVO general account securities”); and
- FVO securities held by consolidated securitization entities.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
6. Investments (continued)

Mortgage Loans
Mortgage Loans by Portfolio Segment
Mortgage loans are summarized as follows at:

	March 31, 2018		December 31, 2017	
	Carrying Value	% of Total	Carrying Value	% of Total
	(Dollars in millions)			
Mortgage loans:				
Commercial	$46,690	65.7 %	$44,375	64.6 %
Agricultural	13,098	18.4	13,014	18.9
Residential	11,156	15.7	11,136	16.2
Subtotal (1)	70,944	99.8	68,525	99.7
Valuation allowances	(327)	(0.4)	(314)	(0.5)
Subtotal mortgage loans, net	70,617	99.4	68,211	99.2
Residential — FVO	438	0.6	520	0.8
Total mortgage loans, net	$71,055	100.0 %	$68,731	100.0 %

(1) Purchases of mortgage loans, primarily residential mortgage loans, were $307 million and $762 million for the three months ended March 31, 2018 and 2017, respectively.

Information on commercial, agricultural and residential mortgage loans is presented in the tables below. Information on residential mortgage loans — FVO is presented in Note 8. The Company elects the FVO for certain residential mortgage loans that are managed on a total return basis.

Mortgage Loans, Valuation Allowance and Impaired Loans by Portfolio Segment

Mortgage loans by portfolio segment, by method of evaluation of credit loss, impaired mortgage loans including those modified in a troubled debt restructuring, and the related valuation allowances, were as follows at:

	Evaluated Individually for Credit Losses					Evaluated Collectively for Credit Losses		Impaired Loans
	Impaired Loans with a Valuation Allowance			Impaired Loans without a Valuation Allowance				
	Unpaid Principal Balance	Recorded Investment	Valuation Allowances	Unpaid Principal Balance	Recorded Investment	Recorded Investment	Valuation Allowances	Carrying Value
	(In millions)							
March 31, 2018								
Commercial	$—	$ —	$ —	$—	$ —	$46,690	$ 228	$ —
Agricultural	22	21	2	101	100	12,977	39	119
Residential	—	—	—	376	339	10,817	58	339
Total	$22	$ 21	$ 2	$477	$ 439	$70,484	$ 325	$ 458
December 31, 2017								
Commercial	$—	$ —	$ —	$—	$ —	$44,375	$ 214	$ —
Agricultural	22	21	2	27	27	12,966	39	46
Residential	—	—	—	358	324	10,812	59	324

Total	$22	$ 21	$ 2	$385	$ 351	$68,153	$ 312	$ 370

The average recorded investment for impaired commercial, agricultural and residential mortgage loans was $0, $84 million and $331 million, respectively, for the three months ended March 31, 2018; and $12 million, $25 million and $253 million, respectively, for the three months ended March 31, 2017.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
6. Investments (continued)

Valuation Allowance Rollforward by Portfolio Segment
The changes in the valuation allowance, by portfolio segment, were as follows:

	Three Months Ended March 31, 2018				2017			
	Commercial	Agricultural	Residential	Total	Commercial	Agricultural	Residential	Total
	(In millions)							
Balance, beginning of period	$214	$ 41	$ 59	$314	$202	$ 39	$ 63	$304
Provision (release)	14	—	—	14	5	—	5	10
Charge-offs, net of recoveries	—	—	(1)	(1)	—	—	(4)	(4)
Balance, end of period	$228	$ 41	$ 58	$327	$207	$ 39	$ 64	$310

Credit Quality of Commercial Mortgage Loans
The credit quality of commercial mortgage loans was as follows at:

	Recorded Investment Debt Service Coverage Ratios					Estimated Fair Value	% of Total
	> 1.20x	1.00x - 1.20x	< 1.00x	Total	% of Total		
	(Dollars in millions)						
March 31, 2018							
Loan-to-value ratios:							
Less than 65%	$39,705	$ 1,023	$ 186	$40,914	87.6 %	$ 41,327	87.9 %
65% to 75%	4,280	98	143	4,521	9.7	4,504	9.6
76% to 80%	265	210	126	601	1.3	574	1.2
Greater than 80%	401	176	77	654	1.4	613	1.3
Total	$44,651	$ 1,507	$ 532	$46,690	100.0%	$ 47,018	100.0%
December 31, 2017							
Loan-to-value ratios:							
Less than 65%	$37,073	$ 1,483	$ 201	$38,757	87.4 %	$ 39,528	87.7 %
65% to 75%	4,183	98	119	4,400	9.9	4,408	9.8
76% to 80%	235	210	57	502	1.1	476	1.0
Greater than 80%	401	168	147	716	1.6	672	1.5
Total	$41,892	$ 1,959	$ 524	$44,375	100.0%	$ 45,084	100.0%

Credit Quality of Agricultural Mortgage Loans
The credit quality of agricultural mortgage loans was as follows at:

	March 31, 2018		December 31, 2017	
	Recorded Investment	% of Total	Recorded Investment	% of Total
	(Dollars in millions)			
Loan-to-value ratios:				
Less than 65%	$12,433	94.9 %	$12,347	94.9 %
65% to 75%	616	4.7	618	4.7
76% to 80%	40	0.3	40	0.3
Greater than 80%	9	0.1	9	0.1
Total	$13,098	100.0%	$13,014	100.0%

33

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
6. Investments (continued)

The estimated fair value of agricultural mortgage loans was $13.0 billion and $13.1 billion at March 31, 2018 and December 31, 2017, respectively.

Credit Quality of Residential Mortgage Loans

The credit quality of residential mortgage loans was as follows at:

	March 31, 2018		December 31, 2017	
	Recorded Investment	% of Total	Recorded Investment	% of Total
	(Dollars in millions)			
Performance indicators:				
Performing	$10,748	96.3 %	$10,622	95.4 %
Nonperforming	408	3.7	514	4.6
Total	$11,156	100.0%	$11,136	100.0%

The estimated fair value of residential mortgage loans was $11.8 billion and $11.6 billion at March 31, 2018 and December 31, 2017, respectively.

Past Due and Nonaccrual Mortgage Loans

The Company has a high quality, well performing mortgage loan portfolio, with 99% of all mortgage loans classified as performing at both March 31, 2018 and December 31, 2017. The Company defines delinquency consistent with industry practice, when mortgage loans are past due as follows: commercial and residential mortgage loans — 60 days and agricultural mortgage loans — 90 days. The past due and nonaccrual mortgage loans at recorded investment, prior to valuation allowances, by portfolio segment, were as follows at:

	Past Due		Greater than 90 Days Past Due and Still Accruing Interest		Nonaccrual	
	March 31, 2018	December 31, 2017	March 31, 2018	December 31, 2017	March 31, 2018	December 31, 2017
	(In millions)					
Commercial	$1	$ —	$—	$ —	$1	$ —
Agricultural	219	134	114	125	106	36
Residential	408	514	42	33	366	481
Total	$628	$ 648	$156	$ 158	$473	$ 517

Cash Equivalents

The carrying value of cash equivalents, which includes securities and other investments with an original or remaining maturity of three months or less at the time of purchase, was $6.3 billion and $6.2 billion at March 31, 2018 and December 31, 2017, respectively.

Net Unrealized Investment Gains (Losses)

Unrealized investment gains (losses) on fixed maturity securities AFS and equity securities and the effect on DAC, VOBA, deferred sales inducements ("DSI"), future policy benefits and the policyholder dividend obligation, that would result from the realization of the unrealized gains (losses), are included in net unrealized investment gains (losses) in AOCI.

The components of net unrealized investment gains (losses), included in AOCI, were as follows:

	March 31, 2018	December 31, 2017
	(In millions)	
Fixed maturity securities	$17,545	$ 22,645

Fixed maturity securities with noncredit OTTI losses included in AOCI	35	41
Total fixed maturity securities	17,580	22,686
Equity securities	—	421
Derivatives	936	1,453
Other	136	46
Subtotal	18,652	24,606
Amounts allocated from:		
Future policy benefits	(138)	(77)
DAC, VOBA and DSI	(1,304)	(1,768)
Policyholder dividend obligation	(1,277)	(2,121)
Subtotal	(2,719)	(3,966)
Deferred income tax benefit (expense) related to noncredit OTTI losses recognized in AOCI	(5)	(12)
Deferred income tax benefit (expense)	(4,372)	(6,958)
Net unrealized investment gains (losses)	11,556	13,670
Net unrealized investment gains (losses) attributable to noncontrolling interests	(9)	(8)
Net unrealized investment gains (losses) attributable to MetLife, Inc.	$11,547	$ 13,662

The changes in net unrealized investment gains (losses) were as follows:

	Three Months Ended March 31, 2018
	(In millions)
Balance, beginning of period	$ 13,662
Cumulative effects of changes in accounting principles, net of income tax (Note 1)	1,258
Fixed maturity securities on which noncredit OTTI losses have been recognized	(6)
Unrealized investment gains (losses) during the period	(5,523)
Unrealized investment gains (losses) relating to:	
Future policy benefits	(61)
DAC, VOBA and DSI	464
Policyholder dividend obligation	844
Deferred income tax benefit (expense) related to noncredit OTTI losses recognized in AOCI	7
Deferred income tax benefit (expense)	903
Net unrealized investment gains (losses)	11,548
Net unrealized investment gains (losses) attributable to noncontrolling interests	(1)
Balance, end of period	$ 11,547
Change in net unrealized investment gains (losses)	$ (2,114)
Change in net unrealized investment gains (losses) attributable to noncontrolling interests	(1)
Change in net unrealized investment gains (losses) attributable to MetLife, Inc.	$ (2,115)

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
6. Investments (continued)

Concentrations of Credit Risk
Investments in any counterparty that were greater than 10% of the Company's equity, other than the U.S. government and its agencies, were in fixed income securities of the Japanese government and its agencies with an estimated fair value of $30.7 billion and $27.5 billion at March 31, 2018 and December 31, 2017, respectively, and in fixed income securities of the South Korean government and its agencies with an estimated fair value of $6.4 billion and $6.5 billion at March 31, 2018 and December 31, 2017, respectively.
Securities Lending
Elements of the Company's securities lending program are presented below at:

	March 31, 2018	December 31, 2017
	(In millions)	
Securities on loan: (1)		
Amortized cost	$17,047	$ 17,801
Estimated fair value	$17,812	$ 19,028
Cash collateral received from counterparties (2)	$18,111	$ 19,417
Security collateral received from counterparties (3)	$41	$ 19
Reinvestment portfolio — estimated fair value	$18,149	$ 19,508

(1) Included within fixed maturity securities.
(2) Included within payables for collateral under securities loaned and other transactions.
(3) Security collateral received from counterparties may not be sold or re-pledged, unless the counterparty is in default, and is not reflected on the consolidated financial statements.

The cash collateral liability by loaned security type and remaining tenor of the agreements was as follows at:

	March 31, 2018 Remaining Tenor of Securities Lending Agreements				December 31, 2017 Remaining Tenor of Securities Lending Agreements			
	Open (1)	1 Month or Less	Over 1 to 6 Months	Total	Open (1)	1 Month or Less	Over 1 to 6 Months	Total
	(In millions)							
Cash collateral liability by loaned security type:								
U.S. government and agency	$3,493	$6,282	$7,269	$17,044	$3,753	$6,031	$8,607	$18,391
Foreign government	—	312	755	1,067	—	192	834	1,026
Total	$3,493	$6,594	$8,024	$18,111	$3,753	$6,223	$9,441	$19,417

(1) The related loaned security could be returned to the Company on the next business day which would require the Company to immediately return the cash collateral.

If the Company is required to return significant amounts of cash collateral on short notice and is forced to sell securities to meet the return obligation, it may have difficulty selling such collateral that is invested in securities in a timely manner, be forced to sell securities in a volatile or illiquid market for less than what otherwise would have been realized under normal market conditions, or both. The estimated fair value of the securities on loan related to the cash collateral on open at March 31, 2018 was $3.4 billion, all of which were U.S. government and agency securities which, if put back to the Company, could be immediately sold to satisfy the cash requirement.

35

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
6. Investments (continued)

The reinvestment portfolio acquired with the cash collateral consisted principally of fixed maturity securities (including U.S. government and agency securities, agency RMBS, ABS and U.S. corporate securities) and short-term investments, with 60% invested in U.S. government and agency securities, agency RMBS, short-term investments, cash equivalents or held in cash. If the securities on loan or the reinvestment portfolio become less liquid, the Company has the liquidity resources of most of its general account available to meet any potential cash demands when securities on loan are put back to the Company.

Repurchase Agreements

Elements of the Company's short-term repurchase agreements are presented below at:

	March 31, 2018	December 31, 2017
	(In millions)	
Securities on loan: (1)		
Amortized cost	$2,796	$ 994
Estimated fair value	$2,927	$ 1,141
Cash collateral received from counterparties (2)	$2,861	$ 1,102
Reinvestment portfolio — estimated fair value	$2,854	$ 1,102

(1) Included within fixed maturity securities, cash equivalents and short-term investments.
(2) Included within payables for collateral under securities loaned and other transactions and other liabilities.

The cash collateral liability by loaned security type and remaining tenor of the agreements was as follows at:

	March 31, 2018			December 31, 2017		
	Remaining Tenor of Repurchase Agreements			Remaining Tenor of Repurchase Agreements		
	1 Month or Less	Over 1 to 6 Months	Total	1 Month or Less	Over 1 to 6 Months	Total
	(In millions)					
Cash collateral liability by loaned security type:						
U.S. government and agency	$2,760	$ 5	$2,765	$1,005	$ —	$1,005
All other corporate and government	—	96	96	44	53	97
Total	$2,760	$ 101	$2,861	$1,049	$ 53	$1,102

The reinvestment portfolio acquired with the cash collateral consisted principally of fixed maturity securities (including U.S. government and agency securities, agency RMBS, ABS and U.S. corporate securities) and short-term investments, with 64% invested in U.S. government and agency securities, agency RMBS, short-term investments, cash equivalents or held in cash. If the securities on loan or the reinvestment portfolio become less liquid, the Company has the liquidity resources of most of its general account available to meet any potential cash demands when securities on loan are put back to the Company.

FHLB of Boston Advance Agreements

At March 31, 2018 and December 31, 2017, a subsidiary of the Company had pledged fixed maturity securities with an estimated fair value of $1.3 billion and $564 million, respectively, as collateral and received $800 million and $300 million, respectively, in cash advances under short-term advance agreements with the FHLB of Boston. The liability to return the cash advances is included within payables for collateral under securities loaned and other transactions. The estimated fair value of the reinvestment portfolio acquired with the cash advances was $804 million and $300 million at March 31, 2018 and December 31, 2017, respectively, and consisted primarily of U.S. government and

agency fixed maturity securities and Structured Securities. The subsidiary is permitted to withdraw any portion of the pledged collateral over the minimum collateral requirement at any time, other than in the event of a default by the subsidiary.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
6. Investments (continued)

The cash advance liability by loaned security type and remaining tenor of the agreements was as follows at:

	March 31, 2018				December 31, 2017			
	Remaining Tenor of Advance Agreements				Remaining Tenor of Advance Agreements			
	1 Month or Less	Over 1 to 6 Months	6 Months to 1 Year	Total	1 Month or Less	Over 1 to 6 Months	6 Months to 1 Year	Total
	(In millions)							
Cash advance liability by loaned security type:								
State and political subdivision	$100	$ 625	$ 75	$800	$—	$ 300	$ —	$300

Invested Assets on Deposit, Held in Trust and Pledged as Collateral

Invested assets on deposit, held in trust and pledged as collateral are presented below at estimated fair value for all asset classes, except mortgage loans, which are presented at carrying value, at:

	March 31, 2018	December 31, 2017
	(In millions)	
Invested assets on deposit (regulatory deposits)	$2,079	$ 1,879
Invested assets held in trust (collateral financing arrangement and reinsurance agreements)	2,586	2,490
Invested assets pledged as collateral	25,198	24,174
Total invested assets on deposit, held in trust and pledged as collateral	$29,863	$ 28,543

The Company has pledged invested assets in connection with various agreements and transactions, including funding agreements (see Note 4 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report) and derivative transactions (see Note 7). Amounts in the table above include invested assets and cash and cash equivalents.

See “— Securities Lending” and “— Repurchase Agreements” for information regarding securities on loan, Note 5 for information regarding investments designated to the closed block and “— Equity Securities” for information on common stock holdings in regional banks of the FHLB system, which are considered restricted investments.

Variable Interest Entities

The Company has invested in legal entities that are VIEs. In certain instances, the Company holds both the power to direct the most significant activities of the entity, as well as an economic interest in the entity and, as such, is deemed to be the primary beneficiary or consolidator of the entity. The determination of the VIE’s primary beneficiary requires an evaluation of the contractual and implied rights and obligations associated with each party’s relationship with or involvement in the entity, an estimate of the entity’s expected losses and expected residual returns and the allocation of such estimates to each party involved in the entity.

Consolidated VIEs

Creditors or beneficial interest holders of VIEs where the Company is the primary beneficiary have no recourse to the general credit of the Company, as the Company’s obligation to the VIEs is limited to the amount of its committed investment.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
6. Investments (continued)

The following table presents the total assets and total liabilities relating to investment-related VIEs for which the Company has concluded that it is the primary beneficiary and which are consolidated at:

	March 31, 2018		December 31, 2017	
	Total Assets	Total Liabilities	Total Assets	Total Liabilities
	(In millions)			
Renewable energy partnership (1)	$109	$ 1	$ 116	$ 3
Other investments	32	6	32	6
Total	$141	$ 7	$ 148	$ 9

(1) Assets of the renewable energy partnership primarily consisted of other invested assets.

Unconsolidated VIEs

The carrying amount and maximum exposure to loss relating to VIEs in which the Company holds a significant variable interest but is not the primary beneficiary and which have not been consolidated were as follows at:

	March 31, 2018		December 31, 2017	
	Carrying Amount	Maximum Exposure to Loss (1)	Carrying Amount	Maximum Exposure to Loss (1)
	(In millions)			
Fixed maturity securities AFS:				
Structured Securities (2)	$45,555	$ 45,555	$47,614	$ 47,614
U.S. and foreign corporate	1,355	1,355	1,560	1,560
Other limited partnership interests	4,941	9,187	4,834	8,543
Other invested assets	2,300	2,557	2,291	2,625
Other investments	41	46	82	87
Total	$54,192	$ 58,700	$56,381	$ 60,429

(1) The maximum exposure to loss relating to fixed maturity securities AFS is equal to their carrying amounts or the carrying amounts of retained interests. The maximum exposure to loss relating to other limited partnership interests and real estate joint ventures is equal to the carrying amounts plus any unfunded commitments. For certain of its investments in other invested assets, the Company's return is in the form of income tax credits which are guaranteed by creditworthy third parties. For such investments, the maximum exposure to loss is equal to the carrying amounts plus any unfunded commitments, reduced by income tax credits guaranteed by third parties of $113 million and $117 million at March 31, 2018 and December 31, 2017, respectively. Such a maximum loss would be expected to occur only upon bankruptcy of the issuer or investee.

(2) For these variable interests, the Company's involvement is limited to that of a passive investor in mortgage-backed or asset-backed securities issued by trusts that do not have substantial equity.

As described in Note 14, the Company makes commitments to fund partnership investments in the normal course of business. Excluding these commitments, the Company did not provide financial or other support to investees designated as VIEs during both the three months ended March 31, 2018 and 2017.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
6. Investments (continued)

Net Investment Income
The components of net investment income were as follows:

	Three Months Ended March 31,	
	2018	2017
	(In millions)	
Investment income:		
Fixed maturity securities	$2,896	$2,825
Equity securities	16	31
FVO general account securities (1)	6	29
Mortgage loans	792	736
Policy loans	124	127
Real estate and real estate joint ventures	168	153
Other limited partnership interests	207	240
Cash, cash equivalents and short-term investments	72	51
Operating joint ventures	13	2
Other	106	72
Subtotal	4,400	4,266
Less: Investment expenses	302	261
Subtotal, net	4,098	4,005
Unit-linked investments (1)	(353)	416
Net investment income	$3,745	$4,421

(1) Changes in estimated fair value subsequent to purchase for investments still held as of the end of the respective periods included in net investment income were principally from Unit-linked investments, and were ($373) million and $340 million for the three months ended March 31, 2018 and 2017, respectively.

Table of Contents

MetLife, Inc.

Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)

6. Investments (continued)

Net Investment Gains (Losses)

Components of Net Investment Gains (Losses)

The components of net investment gains (losses) were as follows:

	Three Months Ended March 31,	
	2018	2017
	(In millions)	
Total gains (losses) on fixed maturity securities:		
OTTI losses on fixed maturity securities recognized in earnings	$ —	$ —
Fixed maturity securities — net gains (losses) on sales and disposals	(95)	(2)
Total gains (losses) on fixed maturity securities	(95)	(2)
Total gains (losses) on equity securities:		
OTTI losses recognized — by security type:		
Common stock	—	(7)
Non-redeemable preferred stock	—	(1)
Total OTTI losses on equity securities recognized in earnings	—	(8)
Equity securities — net gains (losses) on sales and disposals	102	43
Change in estimated fair value of equity securities (1)	(133)	—
Total gains (losses) on equity securities	(31)	35
Mortgage loans	(21)	(12)
Real estate and real estate joint ventures	25	(3)
Other limited partnership interests	—	(7)
Other	(130)	(26)
Subtotal	(252)	(15)
Change in estimated fair value of other limited partnership interests and	(5)	—

real estate joint ventures					
Non-investment portfolio gains (losses) (2)	(76		)	103	
Subtotal	(81		)	103	
Total net investment gains (losses)	$	(333	)	$	88

_____

(1) Changes in estimated fair value subsequent to purchase for equity securities still held as of the end of the period included in net investment gains (losses) were ($37) million for the three months ended March 31, 2018. See Note 1.

(2) Non-investment portfolio gains (losses) for the three months ended March 31, 2018 includes a loss of $168 million which represents the change in estimated fair value of FVO Brighthouse Common Stock held by the Company. See Note 3.

Gains (losses) from foreign currency transactions included within net investment gains (losses) were $65 million and $80 million for the three months ended March 31, 2018 and 2017, respectively.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
6. Investments (continued)

Sales or Disposals and Impairments of Fixed Maturity Securities AFS
Investment gains and losses on sales of securities are determined on a specific identification basis. Proceeds from sales or disposals of fixed maturity securities AFS and the components of fixed maturity securities AFS net investment gains (losses) were as shown in the table below:

	Three Months Ended March 31,	
	2018	2017
	Fixed Maturity Securities	
	(In millions)	
Proceeds	$ 19,070	$ 14,461
Gross investment gains	$ 106	$ 142
Gross investment losses	(201)	(144)
OTTI losses	—	—
Net investment gains (losses)	$ (95)	$ (2)

Credit Loss Rollforward
The table below presents a rollforward of the cumulative credit loss component of OTTI loss recognized in earnings on fixed maturity securities still held for which a portion of the OTTI loss was recognized in other comprehensive income (loss) (“OCI”):

	Three Months Ended March 31,	
	2018	2017
	(In millions)	
Balance, beginning of period	$138	$187
Sales (maturities, pay downs or prepayments) of securities previously impaired as credit loss OTTI	(9)	(17)
Increase in cash flows — accretion of previous credit loss OTTI	(1)	—
Balance, end of period	$128	$170

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)

7. Derivatives

Accounting for Derivatives

Freestanding Derivatives

Freestanding derivatives are carried on the Company's balance sheet either as assets within other invested assets or as liabilities within other liabilities at estimated fair value. The Company does not offset the estimated fair value amounts recognized for derivatives executed with the same counterparty under the same master netting agreement.

Accruals on derivatives are generally recorded in accrued investment income or within other liabilities. However, accruals that are not scheduled to settle within one year are included with the derivative's carrying value in other invested assets or other liabilities.

If a derivative is not designated as an accounting hedge or its use in managing risk does not qualify for hedge accounting, changes in the estimated fair value of the derivative are reported in net derivative gains (losses) except as follows:

Statement of Operations Presentation:	Derivative:
Policyholder benefits and claims	• Economic hedges of variable annuity guarantees included in future policy benefits
Net investment income	• Economic hedges of equity method investments in joint ventures • Derivatives held within Unit-linked investments

Hedge Accounting

To qualify for hedge accounting, at the inception of the hedging relationship, the Company formally documents its risk management objective and strategy for undertaking the hedging transaction, as well as its designation of the hedge. Hedge designation and financial statement presentation of changes in estimated fair value of the hedging derivatives are as follows:

- Fair value hedge (a hedge of the estimated fair value of a recognized asset or liability) - in net derivative gains (losses), consistent with the change in estimated fair value of the hedged item attributable to the designated risk being hedged.
- Cash flow hedge (a hedge of a forecasted transaction or of the variability of cash flows to be received or paid related to a recognized asset or liability) - effectiveness in OCI (deferred gains or losses on the derivative are reclassified into the statement of operations when the Company's earnings are affected by the variability in cash flows of the hedged item); ineffectiveness in net derivative gains (losses).
- Net investment in a foreign operation hedge - effectiveness in OCI, consistent with the translation adjustment for the hedged net investment in the foreign operation; ineffectiveness in net derivative gains (losses).

The changes in estimated fair values of the hedging derivatives are exclusive of any accruals that are separately reported on the statement of operations within interest income or interest expense to match the location of the hedged item. Accruals on derivatives in net investment hedges are recognized in OCI.

In its hedge documentation, the Company sets forth how the hedging instrument is expected to hedge the designated risks related to the hedged item and sets forth the method that will be used to retrospectively and prospectively assess the hedging instrument's effectiveness and the method that will be used to measure ineffectiveness. A derivative designated as a hedging instrument must be assessed as being highly effective in offsetting the designated risk of the hedged item. Hedge effectiveness is formally assessed at inception and at least quarterly throughout the life of the designated hedging relationship. Assessments of hedge effectiveness and measurements of ineffectiveness are also subject to interpretation and estimation and different interpretations or estimates may have a material effect on the amount reported in net income.

The Company discontinues hedge accounting prospectively when: (i) it is determined that the derivative is no longer highly effective in offsetting changes in the estimated fair value or cash flows of a hedged item; (ii) the derivative expires, is sold, terminated, or exercised; (iii) it is no longer probable that the hedged forecasted transaction will occur; or (iv) the derivative is de-designated as a hedging instrument.

42

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
7. Derivatives (continued)

When hedge accounting is discontinued because it is determined that the derivative is not highly effective in offsetting changes in the estimated fair value or cash flows of a hedged item, the derivative continues to be carried on the balance sheet at its estimated fair value, with changes in estimated fair value recognized in net derivative gains (losses). The carrying value of the hedged recognized asset or liability under a fair value hedge is no longer adjusted for changes in its estimated fair value due to the hedged risk, and the cumulative adjustment to its carrying value is amortized into income over the remaining life of the hedged item. Provided the hedged forecasted transaction is still probable of occurrence, the changes in estimated fair value of derivatives recorded in OCI related to discontinued cash flow hedges are released into the statement of operations when the Company's earnings are affected by the variability in cash flows of the hedged item.

When hedge accounting is discontinued because it is no longer probable that the forecasted transactions will occur on the anticipated date or within two months of that date, the derivative continues to be carried on the balance sheet at its estimated fair value, with changes in estimated fair value recognized currently in net derivative gains (losses). Deferred gains and losses of a derivative recorded in OCI pursuant to the discontinued cash flow hedge of a forecasted transaction that is no longer probable are recognized immediately in net derivative gains (losses).

In all other situations in which hedge accounting is discontinued, the derivative is carried at its estimated fair value on the balance sheet, with changes in its estimated fair value recognized in the current period as net derivative gains (losses).

Embedded Derivatives

The Company sells variable annuities and issues certain insurance products and investment contracts and is a party to certain reinsurance agreements that have embedded derivatives. The Company assesses each identified embedded derivative to determine whether it is required to be bifurcated. The embedded derivative is bifurcated from the host contract and accounted for as a freestanding derivative if:

- the combined instrument is not accounted for in its entirety at estimated fair value with changes in estimated fair value recorded in earnings;
- the terms of the embedded derivative are not clearly and closely related to the economic characteristics of the host contract; and
- a separate instrument with the same terms as the embedded derivative would qualify as a derivative instrument.

Such embedded derivatives are carried on the balance sheet at estimated fair value with the host contract and changes in their estimated fair value are generally reported in net derivative gains (losses). If the Company is unable to properly identify and measure an embedded derivative for separation from its host contract, the entire contract is carried on the balance sheet at estimated fair value, with changes in estimated fair value recognized in the current period in net investment gains (losses) or net investment income. Additionally, the Company may elect to carry an entire contract on the balance sheet at estimated fair value, with changes in estimated fair value recognized in the current period in net investment gains (losses) or net investment income if that contract contains an embedded derivative that requires bifurcation. At inception, the Company attributes to the embedded derivative a portion of the projected future guarantee fees to be collected from the policyholder equal to the present value of projected future guaranteed benefits. Any additional fees represent "excess" fees and are reported in universal life and investment-type product policy fees.

See Note 8 for information about the fair value hierarchy for derivatives.

Derivative Strategies

The Company is exposed to various risks relating to its ongoing business operations, including interest rate, foreign currency exchange rate, credit and equity market. The Company uses a variety of strategies to manage these risks, including the use of derivatives.

Derivatives are financial instruments with values derived from interest rates, foreign currency exchange rates, credit spreads and/or other financial indices. Derivatives may be exchange-traded or contracted in the over-the-counter ("OTC") market. Certain of the Company's OTC derivatives are cleared and settled through central

clearing counterparties (“OTC-cleared”), while others are bilateral contracts between two counterparties (“OTC-bilateral”). The types of derivatives the Company uses include swaps, forwards, futures and option contracts. To a lesser extent, the Company uses credit default swaps and structured interest rate swaps to synthetically replicate investment risks and returns which are not readily available in the cash markets.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
7. Derivatives (continued)

Interest Rate Derivatives

The Company uses a variety of interest rate derivatives to reduce its exposure to changes in interest rates, including interest rate swaps, interest rate total return swaps, caps, floors, swaptions, futures and forwards.

Interest rate swaps are used by the Company primarily to reduce market risks from changes in interest rates and to alter interest rate exposure arising from mismatches between assets and liabilities (duration mismatches). In an interest rate swap, the Company agrees with another party to exchange, at specified intervals, the difference between fixed rate and floating rate interest amounts as calculated by reference to an agreed notional amount. The Company utilizes interest rate swaps in fair value, cash flow and nonqualifying hedging relationships.

The Company uses structured interest rate swaps to synthetically create investments that are either more expensive to acquire or otherwise unavailable in the cash markets. These transactions are a combination of a derivative and a cash instrument such as a U.S. government and agency, or other fixed maturity security. Structured interest rate swaps are included in interest rate swaps and are not designated as hedging instruments.

Interest rate total return swaps are swaps whereby the Company agrees with another party to exchange, at specified intervals, the difference between the economic risk and reward of an asset or a market index and the London Interbank Offered Rate (“LIBOR”), calculated by reference to an agreed notional amount. No cash is exchanged at the outset of the contract. Cash is paid and received over the life of the contract based on the terms of the swap. These transactions are entered into pursuant to master agreements that provide for a single net payment to be made by the counterparty at each due date. Interest rate total return swaps are used by the Company to reduce market risks from changes in interest rates and to alter interest rate exposure arising from mismatches between assets and liabilities (duration mismatches). The Company utilizes interest rate total return swaps in nonqualifying hedging relationships.

The Company purchases interest rate caps primarily to protect its floating rate liabilities against rises in interest rates above a specified level, and against interest rate exposure arising from mismatches between assets and liabilities, and interest rate floors primarily to protect its minimum rate guarantee liabilities against declines in interest rates below a specified level. In certain instances, the Company locks in the economic impact of existing purchased caps and floors by entering into offsetting written caps and floors. The Company utilizes interest rate caps and floors in nonqualifying hedging relationships.

In exchange-traded interest rate (Treasury and swap) futures transactions, the Company agrees to purchase or sell a specified number of contracts, the value of which is determined by the different classes of interest rate securities, to post variation margin on a daily basis in an amount equal to the difference in the daily market values of those contracts and to pledge initial margin based on futures exchange requirements. The Company enters into exchange-traded futures with regulated futures commission merchants that are members of the exchange. Exchange-traded interest rate (Treasury and swap) futures are used primarily to hedge mismatches between the duration of assets in a portfolio and the duration of liabilities supported by those assets, to hedge against changes in value of securities the Company owns or anticipates acquiring, to hedge against changes in interest rates on anticipated liability issuances by replicating Treasury or swap curve performance, and to hedge minimum guarantees embedded in certain variable annuity products offered by the Company. The Company utilizes exchange-traded interest rate futures in nonqualifying hedging relationships.

Swaptions are used by the Company to hedge interest rate risk associated with the Company’s long-term liabilities and invested assets. A swaption is an option to enter into a swap with a forward starting effective date. In certain instances, the Company locks in the economic impact of existing purchased swaptions by entering into offsetting written swaptions. The Company pays a premium for purchased swaptions and receives a premium for written swaptions. The Company utilizes swaptions in nonqualifying hedging relationships. Swaptions are included in interest rate options.

The Company enters into interest rate forwards to buy and sell securities. The price is agreed upon at the time of the contract and payment for such a contract is made at a specified future date. The Company utilizes interest rate forwards in cash flow and nonqualifying hedging relationships.

A synthetic guaranteed interest contract (“GIC”) is a contract that simulates the performance of a traditional GIC through the use of financial instruments. Under a synthetic GIC, the contractholder owns the underlying assets. The Company guarantees a rate of return on those assets for a premium. Synthetic GICs are not designated as hedging instruments.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
7. Derivatives (continued)

Foreign Currency Exchange Rate Derivatives

The Company uses foreign currency exchange rate derivatives, including foreign currency swaps, foreign currency forwards, currency options and exchange-traded currency futures, to reduce the risk from fluctuations in foreign currency exchange rates associated with its assets and liabilities denominated in foreign currencies. The Company also uses foreign currency derivatives to hedge the foreign currency exchange rate risk associated with certain of its net investments in foreign operations.

In a foreign currency swap transaction, the Company agrees with another party to exchange, at specified intervals, the difference between one currency and another at a fixed exchange rate, generally set at inception, calculated by reference to an agreed upon notional amount. The notional amount of each currency is exchanged at the inception and termination of the currency swap by each party. The Company utilizes foreign currency swaps in fair value, cash flow and nonqualifying hedging relationships.

In a foreign currency forward transaction, the Company agrees with another party to deliver a specified amount of an identified currency at a specified future date. The price is agreed upon at the time of the contract and payment for such a contract is made at the specified future date. The Company utilizes foreign currency forwards in fair value, net investment in foreign operations and nonqualifying hedging relationships.

The Company enters into currency options that give it the right, but not the obligation, to sell the foreign currency amount in exchange for a functional currency amount within a limited time at a contracted price. The contracts may also be net settled in cash, based on differentials in the foreign currency exchange rate and the strike price. The Company uses currency options to hedge against the foreign currency exposure inherent in certain of its variable annuity products. The Company also uses currency options as an economic hedge of foreign currency exposure related to the Company's international subsidiaries. The Company utilizes currency options in net investment in foreign operations and nonqualifying hedging relationships.

To a lesser extent, the Company uses exchange-traded currency futures to hedge currency mismatches between assets and liabilities, and to hedge minimum guarantees embedded in certain variable annuity products offered by the Company. The Company utilizes exchange-traded currency futures in nonqualifying hedging relationships.

Credit Derivatives

The Company enters into purchased credit default swaps to hedge against credit-related changes in the value of its investments. In a credit default swap transaction, the Company agrees with another party to pay, at specified intervals, a premium to hedge credit risk. If a credit event occurs, as defined by the contract, the contract may be cash settled or it may be settled gross by the delivery of par quantities of the referenced investment equal to the specified swap notional amount in exchange for the payment of cash amounts by the counterparty equal to the par value of the investment surrendered. Credit events vary by type of issuer but typically include bankruptcy, failure to pay debt obligations and involuntary restructuring for corporate obligors, as well as repudiation, moratorium or governmental intervention for sovereign obligors. In each case, payout on a credit default swap is triggered only after the Credit Derivatives Determinations Committee of the International Swaps and Derivatives Association, Inc. ("ISDA") deems that a credit event has occurred. The Company utilizes credit default swaps in nonqualifying hedging relationships.

The Company enters into written credit default swaps to synthetically create credit investments that are either more expensive to acquire or otherwise unavailable in the cash markets. These transactions are a combination of a derivative and one or more cash instruments, such as U.S. government and agency securities, or other fixed maturity securities. These credit default swaps are not designated as hedging instruments.

The Company enters into forwards to lock in the price to be paid for forward purchases of certain securities. The price is agreed upon at the time of the contract and payment for the contract is made at a specified future date. When the primary purpose of entering into these transactions is to hedge against the risk of changes in purchase price due to changes in credit spreads, the Company designates these transactions as credit forwards. The Company utilizes credit forwards in cash flow hedging relationships.

Equity Derivatives

The Company uses a variety of equity derivatives to reduce its exposure to equity market risk, including equity index options, equity variance swaps, exchange-traded equity futures and equity total return swaps.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
7. Derivatives (continued)

Equity index options are used by the Company primarily to hedge minimum guarantees embedded in certain variable annuity products offered by the Company. To hedge against adverse changes in equity indices, the Company enters into contracts to sell the underlying equity index within a limited time at a contracted price. The contracts will be net settled in cash based on differentials in the indices at the time of exercise and the strike price. Certain of these contracts may also contain settlement provisions linked to interest rates. In certain instances, the Company may enter into a combination of transactions to hedge adverse changes in equity indices within a pre-determined range through the purchase and sale of options. The Company utilizes equity index options in nonqualifying hedging relationships.
Equity variance swaps are used by the Company primarily to hedge minimum guarantees embedded in certain variable annuity products offered by the Company. In an equity variance swap, the Company agrees with another party to exchange amounts in the future, based on changes in equity volatility over a defined period. The Company utilizes equity variance swaps in nonqualifying hedging relationships.
In exchange-traded equity futures transactions, the Company agrees to purchase or sell a specified number of contracts, the value of which is determined by the different classes of equity securities, to post variation margin on a daily basis in an amount equal to the difference in the daily market values of those contracts and to pledge initial margin based on futures exchange requirements. The Company enters into exchange-traded futures with regulated futures commission merchants that are members of the exchange. Exchange-traded equity futures are used primarily to hedge minimum guarantees embedded in certain variable annuity products offered by the Company. The Company utilizes exchange-traded equity futures in nonqualifying hedging relationships.
In an equity total return swap, the Company agrees with another party to exchange, at specified intervals, the difference between the economic risk and reward of an asset or a market index and LIBOR, calculated by reference to an agreed notional amount. No cash is exchanged at the outset of the contract. Cash is paid and received over the life of the contract based on the terms of the swap. The Company uses equity total return swaps to hedge its equity market guarantees in certain of its insurance products. Equity total return swaps can be used as hedges or to synthetically create investments. The Company utilizes equity total return swaps in nonqualifying hedging relationships.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
7. Derivatives (continued)

Primary Risks Managed by Derivatives
The following table presents the primary underlying risk exposure, gross notional amount, and estimated fair value of the Company's derivatives, excluding embedded derivatives, held at:

		March 31, 2018			December 31, 2017		
	Primary Underlying Risk Exposure	Gross Notional Amount	Estimated Fair Value		Gross Notional Amount	Estimated Fair Value	
			Assets	Liabilities		Assets	Liabilities
		(In millions)					
Derivatives Designated as Hedging Instruments:							
Fair value hedges:							
Interest rate swaps	Interest rate	$2,521	$ 2,111	$ 2	$3,843	$ 2,289	$ 3
Foreign currency swaps	Foreign currency exchange rate	1,146	65	36	1,116	50	18
Foreign currency forwards	Foreign currency exchange rate	3,477	97	4	3,253	2	37
Subtotal		7,144	2,273	42	8,212	2,341	58
Cash flow hedges:							
Interest rate swaps	Interest rate	3,580	158	14	3,584	235	4
Interest rate forwards	Interest rate	3,143	—	218	3,332	—	128
Foreign currency swaps	Foreign currency exchange rate	33,236	1,210	1,778	32,152	1,142	1,665
Subtotal		39,959	1,368	2,010	39,068	1,377	1,797
Foreign operations hedges:							
Foreign currency forwards	Foreign currency exchange rate	458	2	5	332	2	5
Currency options	Foreign currency exchange rate	8,587	19	263	9,408	44	163
Subtotal		9,045	21	268	9,740	46	168
Total qualifying hedges		56,148	3,662	2,320	57,020	3,764	2,023
Derivatives Not Designated or Not Qualifying as Hedging Instruments:							
Interest rate swaps	Interest rate	52,610	1,597	279	60,485	2,203	576
Interest rate floors	Interest rate	7,201	66	—	7,201	92	—
Interest rate caps	Interest rate	46,020	221	2	53,079	78	2
Interest rate futures	Interest rate	2,991	2	3	4,366	2	4
Interest rate options	Interest rate	14,816	575	—	12,009	656	11
Interest rate forwards	Interest rate	217	—	51	217	—	42
Interest rate total return swaps	Interest rate	1,048	14	25	1,048	8	2
Synthetic GICs	Interest rate	11,720	—	—	11,318	—	—
Foreign currency swaps	Foreign currency exchange rate	10,773	580	461	9,902	693	506
Foreign currency forwards	Foreign currency exchange rate	13,803	295	67	12,238	79	190
Currency futures	Foreign currency exchange rate	900	—	8	846	2	—
Currency options	Foreign currency exchange rate	2,391	9	—	3,123	55	6

Credit default swaps — purchased	Credit	1,888	5	41	2,020	7	43
Credit default swaps — written	Credit	11,421	210	2	11,375	271	—
Equity futures	Equity market	3,088	7	19	4,005	18	4
Equity index options	Equity market	19,509	594	603	19,886	569	690
Equity variance swaps	Equity market	4,661	52	194	4,661	54	199
Equity total return swaps	Equity market	1,012	35	—	1,117	—	41
Total non-designated or nonqualifying derivatives		206,069	4,262	1,755	218,896	4,787	2,316
Total		$262,217	$ 7,924	$ 4,075	$275,916	$ 8,551	$ 4,339

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
7. Derivatives (continued)

Based on gross notional amounts, a substantial portion of the Company's derivatives was not designated or did not qualify as part of a hedging relationship at both March 31, 2018 and December 31, 2017. The Company's use of derivatives includes (i) derivatives that serve as macro hedges of the Company's exposure to various risks and that generally do not qualify for hedge accounting due to the criteria required under the portfolio hedging rules; (ii) derivatives that economically hedge insurance liabilities that contain mortality or morbidity risk and that generally do not qualify for hedge accounting because the lack of these risks in the derivatives cannot support an expectation of a highly effective hedging relationship; (iii) derivatives that economically hedge embedded derivatives that do not qualify for hedge accounting because the changes in estimated fair value of the embedded derivatives are already recorded in net income; and (iv) written credit default swaps and interest rate swaps that are used to synthetically create investments and that do not qualify for hedge accounting because they do not involve a hedging relationship. For these nonqualified derivatives, changes in market factors can lead to the recognition of fair value changes on the statement of operations without an offsetting gain or loss recognized in earnings for the item being hedged.

Net Derivative Gains (Losses)

The components of net derivative gains (losses) were as follows:

	Three Months Ended March 31,	
	2018	2017
	(In millions)	
Freestanding derivatives and hedging gains (losses) (1)	$312	$(369)
Embedded derivatives gains (losses)	37	157
Total net derivative gains (losses)	$349	$(212)

(1) Includes foreign currency transaction gains (losses) on hedged items in cash flow and nonqualifying hedging relationships, which are not presented elsewhere in this note.

The following table presents earned income on derivatives:

	Three Months Ended March 31,	
	2018	2017
	(In millions)	
Qualifying hedges:		
Net investment income	$81	$75
Interest credited to policyholder account balances	(23)	(6)
Other expenses	(2)	(3)
Nonqualifying hedges:		
Net derivative gains (losses)	133	168
Policyholder benefits and claims	2	2
Total	$191	$236

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
7. Derivatives (continued)

Nonqualifying Derivatives and Derivatives for Purposes Other Than Hedging
The following table presents the amount and location of gains (losses) recognized in income for derivatives that were not designated or not qualifying as hedging instruments:

	Net Derivative Gains (Losses)	Net Investment Income (1)	Policyholder Benefits and Claims (2)
	(In millions)		
Three Months Ended March 31, 2018			
Interest rate derivatives	$(235)	$ 4	$ (7)
Foreign currency exchange rate derivatives	387	—	2
Credit derivatives — purchased	(3)	—	—
Credit derivatives — written	(44)	—	—
Equity derivatives	98	1	12
Total	$203	$ 5	$ 7
Three Months Ended March 31, 2017			
Interest rate derivatives	$(390)	$ 2	$ 2
Foreign currency exchange rate derivatives	363	—	—
Credit derivatives — purchased	(8)	—	—
Credit derivatives — written	32	—	—
Equity derivatives	(354)	(3)	(72)
Total	$(357)	$ (1)	$ (70)

(1) Changes in estimated fair value related to economic hedges of equity method investments in joint ventures and derivatives held within Unit-linked investments.

(2) Changes in estimated fair value related to economic hedges of variable annuity guarantees included in future policy benefits.

Fair Value Hedges
The Company designates and accounts for the following as fair value hedges when they have met the requirements of fair value hedging: (i) interest rate swaps to convert fixed rate assets and liabilities to floating rate assets and liabilities; (ii) foreign currency swaps to hedge the foreign currency fair value exposure of foreign currency denominated assets and liabilities; and (iii) foreign currency forwards to hedge the foreign currency fair value exposure of foreign currency denominated investments.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
7. Derivatives (continued)

The Company recognizes gains and losses on derivatives and the related hedged items in fair value hedges within net derivative gains (losses). The following table presents the amount of such net derivative gains (losses):

Derivatives in Fair Value Hedging Relationships	Hedged Items in Fair Value Hedging Relationships	Net Derivative Gains (Losses) Recognized for Derivatives	Net Derivative Gains (Losses) Recognized for Hedged Items	Ineffectiveness Recognized in Net Derivative Gains (Losses)
		(In millions)		
Three Months Ended March 31, 2018				
Interest rate swaps:	Fixed maturity securities	$3	$ (2)	$ 1
	Policyholder liabilities (1)	(213)	212	(1)
Foreign currency swaps:	Foreign-denominated fixed maturity securities and mortgage loans	(27)	27	—
	Foreign-denominated policyholder account balances (2)	18	(18)	—
Foreign currency forwards:	Foreign-denominated fixed maturity securities	179	(168)	11
Total		$(40)	$ 51	$ 11
Three Months Ended March 31, 2017				
Interest rate swaps:	Fixed maturity securities	$1	$ (1)	$ —
	Policyholder liabilities (1)	(51)	50	(1)
Foreign currency swaps:	Foreign-denominated fixed maturity securities	(3)	3	—
	Foreign-denominated policyholder account balances (2)	1	2	3
Foreign currency forwards:	Foreign-denominated fixed maturity securities	45	(41)	4
Total		$(7)	$ 13	$ 6

(1) Fixed rate liabilities reported in policyholder account balances or future policy benefits.
(2) Fixed rate or floating rate liabilities.

For the Company's foreign currency forwards, the change in the estimated fair value of the derivative related to the changes in the difference between the spot price and the forward price is excluded from the assessment of hedge effectiveness. For all other derivatives, all components of each derivative's gain or loss were included in the assessment of hedge effectiveness. For the three months ended March 31, 2018 and 2017, the component of the change in estimated fair value of derivatives that was excluded from the assessment of hedge effectiveness was ($8) million and ($7) million, respectively.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
7. Derivatives (continued)

Cash Flow Hedges
The Company designates and accounts for the following as cash flow hedges when they have met the requirements of cash flow hedging: (i) interest rate swaps to convert floating rate assets and liabilities to fixed rate assets and liabilities; (ii) foreign currency swaps to hedge the foreign currency cash flow exposure of foreign currency denominated assets and liabilities; (iii) interest rate forwards and credit forwards to lock in the price to be paid for forward purchases of investments; (iv) interest rate swaps and interest rate forwards to hedge the forecasted purchases of fixed-rate investments; and (v) interest rate swaps and interest rate forwards to hedge forecasted fixed-rate borrowings.
In certain instances, the Company discontinued cash flow hedge accounting because the forecasted transactions were no longer probable of occurring. Because certain of the forecasted transactions also were not probable of occurring within two months of the anticipated date, the Company reclassified amounts from AOCI into net derivative gains (losses). These amounts were less than $1 million and $20 million for the three months ended March 31, 2018 and 2017, respectively.
At March 31, 2018 and December 31, 2017, the maximum length of time over which the Company was hedging its exposure to variability in future cash flows for forecasted transactions did not exceed four years and five years, respectively.
At March 31, 2018 and December 31, 2017, the balance in AOCI associated with cash flow hedges was $936 million and $1.5 billion, respectively. For the three months ended March 31, 2017, the amount of deferred gains (losses) in AOCI related to Brighthouse derivatives was ($19) million and the amount of income reclassified from AOCI into income (loss) from discontinued operations was $12 million.
The following table presents the effects of derivatives in cash flow hedging relationships on the interim condensed consolidated statements of operations and comprehensive income (loss) and the interim condensed consolidated statements of equity. The table excludes the effects of Brighthouse derivatives prior to the Separation.

Derivatives in Cash Flow Hedging Relationships	Amount of Gains (Losses) Deferred in AOCI on Derivatives (Effective Portion)	Amount and Location of Gains (Losses) Reclassified from AOCI into Income (Loss) (Effective Portion)			Amount and Location of Gains (Losses) Recognized in Income (Loss) on Derivatives (Ineffective Portion)
		Net Derivative Gains (Losses)	Net Investment Income	Other Expenses	Net Derivative Gains (Losses)
	(In millions)				
Three Months Ended March 31, 2018					
Interest rate swaps	$(173)	$16	$ 3	$ —	$ (2)
Interest rate forwards	(104)	5	1	—	—
Foreign currency swaps	(75)	139	—	1	1
Total	$(352)	$160	$ 4	$ 1	$ (1)
Three Months Ended March 31, 2017					
Interest rate swaps	$5	$8	$ 4	$ —	$ 1
Interest rate forwards	44	(4)	—	—	—
Foreign currency swaps	180	208	—	1	2

Total	$229	$212	$ 4	$ 1	$ 3

All components of each derivative's gain or loss were included in the assessment of hedge effectiveness.

At March 31, 2018, the Company expected to reclassify ($17) million of deferred net gains (losses) on derivatives in AOCI, included in the table above, to earnings within the next 12 months.

Hedges of Net Investments in Foreign Operations

The Company uses foreign currency exchange rate derivatives, which may include foreign currency forwards and currency options, to hedge portions of its net investments in foreign operations against adverse movements in exchange rates. The Company measures ineffectiveness on these derivatives based upon the change in forward rates.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
7. Derivatives (continued)

When net investments in foreign operations are sold or substantially liquidated, the amounts in AOCI are reclassified to the statement of operations.

The following table presents the effects of derivatives in net investment hedging relationships on the interim condensed consolidated statements of operations and comprehensive income (loss) and the interim condensed consolidated statements of equity:

Derivatives in Net Investment Hedging Relationships (1)	Amount of Gains (Losses) Deferred in AOCI (Effective Portion) (In millions)
Three Months Ended March 31, 2018	
Foreign currency forwards	$ (8)
Currency options	(149)
Total	$ (157)
Three Months Ended March 31, 2017	
Foreign currency forwards	$ (95)
Currency options	(231)
Total	$ (326)

(1) There was no ineffectiveness recognized for the Company's hedges of net investments in foreign operations. All components of each derivative's gain or loss were included in the assessment of hedge effectiveness.

At March 31, 2018 and December 31, 2017, the cumulative foreign currency translation gain (loss) recorded in AOCI related to hedges of net investments in foreign operations was $152 million and $309 million, respectively.

Credit Derivatives

In connection with synthetically created credit investment transactions, the Company writes credit default swaps for which it receives a premium to insure credit risk. Such credit derivatives are included within the nonqualifying derivatives and derivatives for purposes other than hedging table. If a credit event occurs, as defined by the contract, the contract may be cash settled or it may be settled gross by the Company paying the counterparty the specified swap notional amount in exchange for the delivery of par quantities of the referenced credit obligation. The Company's maximum amount at risk, assuming the value of all referenced credit obligations is zero, was $11.4 billion at both March 31, 2018 and December 31, 2017. The Company can terminate these contracts at any time through cash settlement with the counterparty at an amount equal to the then current estimated fair value of the credit default swaps. At March 31, 2018 and December 31, 2017, the Company would have received $208 million and $271 million, respectively, to terminate all of these contracts.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
7. Derivatives (continued)

The following table presents the estimated fair value, maximum amount of future payments and weighted average years to maturity of written credit default swaps at:

	March 31, 2018			December 31, 2017		
Rating Agency Designation of Referenced Credit Obligations (1)	Estimated Fair Value of Credit Default Swaps	Maximum Amount of Future Payments under Credit Default Swaps	Weighted Average Years to Maturity (2)	Estimated Fair Value of Credit Default Swaps	Maximum Amount of Future Payments under Credit Default Swaps	Weighted Average Years to Maturity (2)
	(Dollars in millions)					
Aaa/Aa/A						
Single name credit default swaps (3)	$7	$ 381	2.4	$7	$ 375	2.6
Credit default swaps referencing indices	40	2,267	2.5	44	2,268	2.7
Subtotal	47	2,648	2.5	51	2,643	2.7
Baa						
Single name credit default swaps (3)	7	656	1.9	7	605	1.8
Credit default swaps referencing indices	132	7,747	5.2	183	7,662	5.0
Subtotal	139	8,403	5.0	190	8,267	4.8
Ba						
Single name credit default swaps (3)	—	20	1.2	1	115	3.4
Credit default swaps referencing indices	—	—	—	—	—	—
Subtotal	—	20	1.2	1	115	3.4
B						
Single name credit default swaps (3)	2	20	3.2	2	20	3.5
Credit default swaps referencing indices	20	330	5.2	27	330	5.0
Subtotal	22	350	5.1	29	350	4.9
Total	$208	$ 11,421	4.4	$271	$ 11,375	4.3

(1) The rating agency designations are based on availability and the midpoint of the applicable ratings among Moody's Investors Service ("Moody's"), Standard & Poor's Global Ratings ("S&P") and Fitch Ratings. If no rating is available from a rating agency, then an internally developed rating is used.

(2) The weighted average years to maturity of the credit default swaps is calculated based on weighted average gross notional amounts.

(3) Single name credit default swaps may be referenced to the credit of corporations, foreign governments, or state and political subdivisions.

The Company has also entered into credit default swaps to purchase credit protection on certain of the referenced credit obligations in the table above. As a result, the maximum amount of potential future recoveries available to offset the $11.4 billion of future payments under credit default provisions at both March 31, 2018 and December 31, 2017 set forth in the table above were $16 million and $27 million at March 31, 2018 and December 31, 2017, respectively.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
7. Derivatives (continued)

Credit Risk on Freestanding Derivatives

The Company may be exposed to credit-related losses in the event of nonperformance by its counterparties to derivatives. Generally, the current credit exposure of the Company's derivatives is limited to the net positive estimated fair value of derivatives at the reporting date after taking into consideration the existence of master netting or similar agreements and any collateral received pursuant to such agreements.

The Company manages its credit risk related to derivatives by entering into transactions with creditworthy counterparties and establishing and monitoring exposure limits. The Company's OTC-bilateral derivative transactions are governed by ISDA Master Agreements which provide for legally enforceable set-off and close-out netting of exposures to specific counterparties in the event of early termination of a transaction, which includes, but is not limited to, events of default and bankruptcy. In the event of an early termination, the Company is permitted to set off receivables from the counterparty against payables to the same counterparty arising out of all included transactions. Substantially all of the Company's ISDA Master Agreements also include Credit Support Annex provisions which require both the pledging and accepting of collateral in connection with its OTC-bilateral derivatives.

The Company's OTC-cleared derivatives are effected through central clearing counterparties and its exchange-traded derivatives are effected through regulated exchanges. Such positions are marked to market and margined on a daily basis (both initial margin and variation margin), and the Company has minimal exposure to credit-related losses in the event of nonperformance by counterparties to such derivatives.

See Note 8 for a description of the impact of credit risk on the valuation of derivatives.

The estimated fair values of the Company's net derivative assets and net derivative liabilities after the application of master netting agreements and collateral were as follows at:

	March 31, 2018		December 31, 2017	
Derivatives Subject to a Master Netting Arrangement or a Similar Arrangement	Assets	Liabilities	Assets	Liabilities
	(In millions)			
Gross estimated fair value of derivatives:				
OTC-bilateral (1)	$7,733	$ 3,948	$7,955	$ 4,059
OTC-cleared (1), (6)	230	47	649	223
Exchange-traded	9	30	22	8
Total gross estimated fair value of derivatives (1)	7,972	4,025	8,626	4,290
Amounts offset on the interim condensed consolidated balance sheets	—	—	—	—
Estimated fair value of derivatives presented on the interim condensed consolidated balance sheets (1), (6)	7,972	4,025	8,626	4,290
Gross amounts not offset on the interim condensed consolidated balance sheets:				
Gross estimated fair value of derivatives: (2)				
OTC-bilateral	(2,376)	(2,376)	(2,528)	(2,528)
OTC-cleared	(21)	(21)	(35)	(35)
Exchange-traded	(1)	(1)	(1)	(1)
Cash collateral: (3), (4)				
OTC-bilateral	(4,082)	—	(4,169)	—
OTC-cleared	(194)	(9)	(584)	(179)
Exchange-traded	—	(21)	—	(5)
Securities collateral: (5)				
OTC-bilateral	(981)	(1,519)	(1,004)	(1,474)
OTC-cleared	—	(17)	—	(9)

Exchange-traded	—	(8)	—	(2)
Net amount after application of master netting agreements and collateral	$317	$53	$305	$57

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
7. Derivatives (continued)

(1) At March 31, 2018 and December 31, 2017, derivative assets included income or (expense) accruals reported in accrued investment income or in other liabilities of $48 million and $75 million, respectively, and derivative liabilities included (income) or expense accruals reported in accrued investment income or in other liabilities of ($50) million and ($49) million, respectively.

(2) Estimated fair value of derivatives is limited to the amount that is subject to set-off and includes income or expense accruals.

(3) Cash collateral received by the Company for OTC-bilateral and OTC-cleared derivatives is included in cash and cash equivalents, short-term investments or in fixed maturity securities, and the obligation to return it is included in payables for collateral under securities loaned and other transactions on the balance sheet.

(4) The receivable for the return of cash collateral provided by the Company is inclusive of initial margin on exchange-traded and OTC-cleared derivatives and is included in premiums, reinsurance and other receivables on the balance sheet. The amount of cash collateral offset in the table above is limited to the net estimated fair value of derivatives after application of netting agreements. At March 31, 2018 and December 31, 2017, the Company received excess cash collateral of $204 million and $253 million, respectively, and provided excess cash collateral of $263 million and $272 million, respectively, which is not included in the table above due to the foregoing limitation.

(5) Securities collateral received by the Company is held in separate custodial accounts and is not recorded on the balance sheet. Subject to certain constraints, the Company is permitted by contract to sell or re-pledge this collateral, but at March 31, 2018, none of the collateral had been sold or re-pledged. Securities collateral pledged by the Company is reported in fixed maturity securities on the balance sheet. Subject to certain constraints, the counterparties are permitted by contract to sell or re-pledge this collateral. The amount of securities collateral offset in the table above is limited to the net estimated fair value of derivatives after application of netting agreements and cash collateral. At March 31, 2018 and December 31, 2017, the Company received excess securities collateral with an estimated fair value of $74 million and $108 million, respectively, for its OTC-bilateral derivatives, which are not included in the table above due to the foregoing limitation. At March 31, 2018 and December 31, 2017, the Company provided excess securities collateral with an estimated fair value of $301 million and $305 million, respectively, for its OTC-bilateral derivatives, and $507 million and $522 million, respectively, for its OTC-cleared derivatives, and $77 million and $89 million, respectively, for its exchange-traded derivatives, which are not included in the table above due to the foregoing limitation.

(6) Effective January 16, 2018, the LCH amended its rulebook, resulting in the characterization of variation margin transfers as settlement payments, as opposed to adjustments to collateral. See Note 1 for further information on the LCH amendments.

The Company’s collateral arrangements for its OTC-bilateral derivatives generally require the counterparty in a net liability position, after considering the effect of netting agreements, to pledge collateral when the collateral amount owed by that counterparty reaches a minimum transfer amount. A small number of these arrangements also include credit-contingent provisions that include a threshold above which collateral must be posted. Such agreements provide for a reduction of these thresholds (on a sliding scale that converges toward zero) in the event of downgrades in the credit ratings of MetLife, Inc. and/or the counterparty. In addition, substantially all of the Company’s netting agreements for derivatives contain provisions that require both the Company and the counterparty to maintain a specific investment grade credit rating from each of Moody’s and S&P. If a party’s credit or financial strength rating, as applicable, were to fall below that specific investment grade credit rating, that party would be in violation of these provisions, and the other party to the derivatives could terminate the transactions and demand immediate settlement and payment based on such party’s reasonable valuation of the derivatives.

The following table presents the estimated fair value of the Company’s OTC-bilateral derivatives that were in a net liability position after considering the effect of netting agreements, together with the estimated fair value and balance sheet location of the collateral pledged. The table also presents the incremental collateral that MetLife, Inc. would be

required to provide if there was a one-notch downgrade in MetLife, Inc.’s senior unsecured debt rating at the reporting date or if the Company’s credit or financial strength rating, as applicable, at the reporting date sustained a downgrade to a level that triggered full overnight collateralization or termination of the derivative position. OTC-bilateral derivatives that are not subject to collateral agreements are excluded from this table.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
7. Derivatives (continued)

	March 31, 2018			December 31, 2017		
	Derivatives Subject to Credit-Contingent Provisions	Derivatives Not Subject to Credit-Contingent Provisions	Total	Derivatives Subject to Credit-Contingent Provisions	Derivatives Not Subject to Credit-Contingent Provisions	Total
	(In millions)					
Estimated Fair Value of Derivatives in a Net Liability Position (1)	$1,533	$ 39	$1,572	$1,508	$ 24	$1,532
Estimated Fair Value of Collateral Provided:						
Fixed maturity securities	$1,734	$ 50	$1,784	$1,675	$ 26	$1,701
Cash	$—	$ —	$—	$—	$ —	$—
Estimated Fair Value of Incremental Collateral Provided Upon:						
One-notch downgrade in the Company’s credit or financial strength rating, as applicable	$14	$ —	$14	$15	$ —	$15
Downgrade in the Company’s credit or financial strength rating, as applicable, to a level that triggers full overnight collateralization or termination of the derivative position	$15	$ —	$15	$20	$ —	$20

(1) After taking into consideration the existence of netting agreements.

Embedded Derivatives

The Company issues certain products or purchases certain investments that contain embedded derivatives that are required to be separated from their host contracts and accounted for as freestanding derivatives. These host contracts principally include: variable annuities with guaranteed minimum benefits, including GMWBs, GMABs and certain GMIBs; ceded reinsurance of guaranteed minimum benefits related to certain GMIBs; assumed reinsurance of guaranteed minimum benefits related to GMWBs and GMABs; funding agreements with equity or bond indexed crediting rates; funds withheld on ceded reinsurance; fixed annuities with equity-indexed returns; and certain debt and equity securities.

The following table presents the estimated fair value and balance sheet location of the Company’s embedded derivatives that have been separated from their host contracts at:

	Balance Sheet Location	March 31, 2018	December 31, 2017
		(In millions)	
Embedded derivatives within asset host contracts:			
Ceded guaranteed minimum benefits	Premiums, reinsurance and other receivables	$157	$ 144
Options embedded in debt or equity securities (1)	Investments	—	(132)
Embedded derivatives within asset host contracts		$157	$ 12
Embedded derivatives within liability host contracts:			
Direct guaranteed minimum benefits	Policyholder account balances	$23	$ 32
Assumed guaranteed minimum benefits	Policyholder account balances	392	291
Funds withheld on ceded reinsurance	Other liabilities	2	25
Fixed annuities with equity indexed returns	Policyholder account balances	68	70
Embedded derivatives within liability host contracts		$485	$ 418

(1) In connection with the adoption of new guidance related to the recognition and measurement of financial instruments (see Note 1), effective January 1, 2018, the Company is no longer required to bifurcate and account separately for derivatives embedded in equity securities. Beginning January 1, 2018, the entire change in fair value of equity securities is recognized as a component of net investment gains and losses.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
7. Derivatives (continued)

The following table presents changes in estimated fair value related to embedded derivatives:

	Three Months Ended March 31,	
	2018	2017
	(In millions)	
Net derivative gains (losses) (1)	$ 37	$ 157

(1) The valuation of guaranteed minimum benefits includes a nonperformance risk adjustment. The amounts included in net derivative gains (losses) in connection with this adjustment were $20 million and ($52) million for the three months ended March 31, 2018 and 2017, respectively.

8. Fair Value

When developing estimated fair values, considerable judgment is often required in interpreting market data to develop estimates of fair value, and the use of different assumptions or valuation methodologies may have a material effect on the estimated fair value amounts.

Recurring Fair Value Measurements

The assets and liabilities measured at estimated fair value on a recurring basis and their corresponding placement in the fair value hierarchy, including those items for which the Company has elected the FVO, are presented below at:

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
8. Fair Value (continued)

	March 31, 2018 Fair Value Hierarchy			
	Level 1	Level 2	Level 3	Total Estimated Fair Value
	(In millions)			
Assets				
Fixed maturity securities:				
U.S. corporate	$—	$77,597	$4,237	$81,834
Foreign government	—	64,331	179	64,510
Foreign corporate	—	48,890	6,573	55,463
U.S. government and agency	22,873	20,954	—	43,827
RMBS	—	24,155	3,256	27,411
State and political subdivision	—	12,192	—	12,192
ABS	—	10,739	1,025	11,764
CMBS	—	7,409	301	7,710
Total fixed maturity securities	22,873	266,267	15,571	304,711
Equity securities	909	213	422	1,544
Unit-linked and FVO Securities (1)	13,705	2,453	286	16,444
Other limited partnership interests	—	—	194	194
Short-term investments (2)	2,845	990	615	4,450
Residential mortgage loans — FVO	—	—	438	438
Other investments	83	90	—	173
Derivative assets: (3)				
Interest rate	2	4,728	14	4,744
Foreign currency exchange rate	—	2,120	157	2,277
Credit	—	180	35	215
Equity market	7	603	78	688
Total derivative assets	9	7,631	284	7,924
Embedded derivatives within asset host contracts (4)	—	—	157	157
Separate account assets (5)	88,618	106,511	1,229	196,358
Total assets	$129,042	$384,155	$19,196	$532,393
Liabilities				
Derivative liabilities: (3)				
Interest rate	$3	$348	$243	$594
Foreign currency exchange rate	8	2,585	29	2,622
Credit	—	43	—	43
Equity market	19	603	194	816
Total derivative liabilities	30	3,579	466	4,075
Embedded derivatives within liability host contracts (4)	—	—	485	485
Separate account liabilities (5)	—	12	5	17
Total liabilities	$30	$3,591	$956	$4,577

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
8. Fair Value (continued)

	December 31, 2017 Fair Value Hierarchy			
	Level 1	Level 2	Level 3	Total Estimated Fair Value
	(In millions)			
Assets				
Fixed maturity securities:				
U.S. corporate	$—	$78,171	$4,490	$82,661
Foreign government	—	61,325	209	61,534
Foreign corporate	—	48,840	6,729	55,569
U.S. government and agency	26,052	21,342	—	47,394
RMBS	—	25,339	3,461	28,800
State and political subdivision	—	12,455	—	12,455
ABS	—	11,204	1,087	12,291
CMBS	—	7,934	293	8,227
Total fixed maturity securities	26,052	266,610	16,269	308,931
Equity securities	1,104	981	428	2,513
Unit-linked and FVO Securities (1)	14,028	2,355	362	16,745
Short-term investments (2)	3,001	1,252	33	4,286
Residential mortgage loans — FVO	—	—	520	520
Other investments	81	84	—	165
Derivative assets: (3)				
Interest rate	2	5,553	8	5,563
Foreign currency exchange rate	2	1,954	113	2,069
Credit	—	240	38	278
Equity market	18	548	75	641
Total derivative assets	22	8,295	234	8,551
Embedded derivatives within asset host contracts (4)	—	—	144	144
Separate account assets (5)	89,916	114,124	961	205,001
Total assets	$134,204	$393,701	$18,951	$546,856
Liabilities				
Derivative liabilities: (3)				
Interest rate	$4	$638	$130	$772
Foreign currency exchange rate	—	2,553	37	2,590
Credit	—	43	—	43
Equity market	4	731	199	934
Total derivative liabilities	8	3,965	366	4,339
Embedded derivatives within liability host contracts (4)	—	—	418	418
Separate account liabilities (5)	—	7	2	9
Total liabilities	$8	$3,972	$786	$4,766

(1) Unit-linked and FVO Securities were comprised of over 85% Unit-linked investments at both March 31, 2018 and December 31, 2017.

(2)

Short-term investments as presented in the tables above differ from the amounts presented on the consolidated balance sheets because certain short-term investments are not measured at estimated fair value on a recurring basis.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
8. Fair Value (continued)

(3) Derivative assets are presented within other invested assets on the interim condensed consolidated balance sheets and derivative liabilities are presented within other liabilities on the interim condensed consolidated balance sheets. The amounts are presented gross in the tables above to reflect the presentation on the interim condensed consolidated balance sheets, but are presented net for purposes of the rollforward in the Fair Value Measurements Using Significant Unobservable Inputs (Level 3) tables.

(4) Embedded derivatives within asset host contracts are presented within premiums, reinsurance and other receivables and other invested assets on the interim condensed consolidated balance sheets. Embedded derivatives within liability host contracts are presented within policyholder account balances and other liabilities on the interim condensed consolidated balance sheets. At March 31, 2018 and December 31, 2017, debt and equity securities also included embedded derivatives of $0 and ($132) million, respectively.

(5) Investment performance related to separate account assets is fully offset by corresponding amounts credited to contractholders whose liability is reflected within separate account liabilities. Separate account liabilities are set equal to the estimated fair value of separate account assets. Separate account liabilities presented in the tables above represent derivative liabilities.

The following describes the valuation methodologies used to measure assets and liabilities at fair value. The description includes the valuation techniques and key inputs for each category of assets or liabilities that are classified within Level 2 and Level 3 of the fair value hierarchy.

Investments

Valuation Controls and Procedures

On behalf of the Company's Chief Investment Officer and Chief Financial Officer ("CFO"), a pricing and valuation committee that is independent of the trading and investing functions and comprised of senior management, provides oversight of control systems and valuation policies for securities, mortgage loans and derivatives. On a quarterly basis, this committee reviews and approves new transaction types and markets, ensures that observable market prices and market-based parameters are used for valuation, wherever possible, and determines that judgmental valuation adjustments, when applied, are based upon established policies and are applied consistently over time. This committee also provides oversight of the selection of independent third-party pricing providers and the controls and procedures to evaluate third-party pricing. Periodically, the Chief Accounting Officer reports to the Audit Committee of MetLife, Inc.'s Board of Directors regarding compliance with fair value accounting standards.

The Company reviews its valuation methodologies on an ongoing basis and revises those methodologies when necessary based on changing market conditions. Assurance is gained on the overall reasonableness and consistent application of input assumptions, valuation methodologies and compliance with fair value accounting standards through controls designed to ensure valuations represent an exit price. Several controls are utilized, including certain monthly controls, which include, but are not limited to, analysis of portfolio returns to corresponding benchmark returns, comparing a sample of executed prices of securities sold to the fair value estimates, comparing fair value estimates to management's knowledge of the current market, reviewing the bid/ask spreads to assess activity, comparing prices from multiple independent pricing services and ongoing due diligence to confirm that independent pricing services use market-based parameters. The process includes a determination of the observability of inputs used in estimated fair values received from independent pricing services or brokers by assessing whether these inputs can be corroborated by observable market data. The Company ensures that prices received from independent brokers, also referred to herein as "consensus pricing," represent a reasonable estimate of fair value by considering such pricing relative to the Company's knowledge of the current market dynamics and current pricing for similar financial instruments. While independent non-binding broker quotations are utilized, they are not used for a significant portion of the portfolio. For example, fixed maturity securities priced using independent non-binding broker quotations represent less than 1% of the total estimated fair value of fixed maturity securities and 2% of the total estimated fair value of Level 3 fixed maturity securities at March 31, 2018.

60

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
8. Fair Value (continued)

The Company also applies a formal process to challenge any prices received from independent pricing services that are not considered representative of estimated fair value. If prices received from independent pricing services are not considered reflective of market activity or representative of estimated fair value, independent non-binding broker quotations are obtained, or an internally developed valuation is prepared. Internally developed valuations of current estimated fair value, which reflect internal estimates of liquidity and nonperformance risks, compared with pricing received from the independent pricing services, did not produce material differences in the estimated fair values for the majority of the portfolio; accordingly, overrides were not material. This is, in part, because internal estimates of liquidity and nonperformance risks are generally based on available market evidence and estimates used by other market participants. In the absence of such market-based evidence, management's best estimate is used.

Securities, Short-term Investments and Other Investments

When available, the estimated fair value of these financial instruments is based on quoted prices in active markets that are readily and regularly obtainable. Generally, these are the most liquid of the Company's securities holdings and valuation of these securities does not involve management's judgment.

When quoted prices in active markets are not available, the determination of estimated fair value is based on market standard valuation methodologies, giving priority to observable inputs. The significant inputs to the market standard valuation methodologies for certain types of securities with reasonable levels of price transparency are inputs that are observable in the market or can be derived principally from, or corroborated by, observable market data. When observable inputs are not available, the market standard valuation methodologies rely on inputs that are significant to the estimated fair value that are not observable in the market or cannot be derived principally from, or corroborated by, observable market data. These unobservable inputs can be based in large part on management's judgment or estimation and cannot be supported by reference to market activity. Even though these inputs are unobservable, management believes they are consistent with what other market participants would use when pricing such securities and are considered appropriate given the circumstances.

The estimated fair value of Unit-linked and FVO Securities and other investments is determined on a basis consistent with the methodologies described herein for securities.

Other Limited Partnership Interests

The estimated fair values of other limited partnership interests are generally based on the Company's share of the net asset value ("NAV") of the other limited partnership interests as provided on the financial statements of the investee. In certain circumstances, management may adjust the NAV when it has sufficient evidence to support applying such adjustments.

Table of Contents

MetLife, Inc.

Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)

8. Fair Value (continued)

The valuation of most instruments listed below is determined using independent pricing sources, matrix pricing, discounted cash flow methodologies or other similar techniques that use either observable market inputs or unobservable inputs.

Instrument	Level 2 Observable Inputs	Level 3 Unobservable Inputs
Fixed maturity securities		
U.S. corporate and Foreign corporate securities		
	Valuation Approaches: Principally the market and income approaches.	Valuation Approaches: Principally the market approach.
	Key Inputs: •quoted prices in markets that are not active •benchmark yields; spreads off benchmark yields; new issuances; issuer rating •trades of identical or comparable securities; duration •Privately-placed securities are valued using the additional key inputs: •market yield curve; call provisions •observable prices and spreads for similar public or private securities that incorporate the credit quality and industry sector of the issuer •delta spread adjustments to reflect specific credit-related issues	Key Inputs: •illiquidity premium •delta spread adjustments to reflect specific credit-related issues •credit spreads •quoted prices in markets that are not active for identical or similar securities that are less liquid and based on lower levels of trading activity than securities classified in Level 2 •independent non-binding broker quotations
Foreign government, U.S. government and agency and State and political subdivision securities		
	Valuation Approaches: Principally the market approach.	Valuation Approaches: Principally the market approach.
	Key Inputs: •quoted prices in markets that are not active •benchmark U.S. Treasury yield or other yields •the spread off the U.S. Treasury yield curve for the identical security •issuer ratings and issuer spreads; broker-dealer quotes •comparable securities that are actively traded	Key Inputs: •independent non-binding broker quotations •quoted prices in markets that are not active for identical or similar securities that are less liquid and based on lower levels of trading activity than securities classified in Level 2 •credit spreads
Structured Securities		
	Valuation Approaches: Principally the market and income approaches.	Valuation Approaches: Principally the market and income approaches.
	Key Inputs: •quoted prices in markets that are not active •spreads for actively traded securities; spreads off benchmark yields •expected prepayment speeds and volumes •	Key Inputs: •credit spreads •quoted prices in markets that are not active for identical or similar securities that are less liquid and based on lower levels of trading activity than securities classified in Level 2 •independent non-binding broker quotations

current and forecasted loss severity; ratings; geographic region
- weighted average coupon and weighted average maturity
- average delinquency rates; debt-service coverage ratios
- issuance-specific information, including, but not limited to:
- collateral type; structure of the security; vintage of the loans
- payment terms of the underlying assets
- payment priority within the tranche; deal performance

Table of Contents

MetLife, Inc.

Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)

8. Fair Value (continued)

Instrument	Level 2 Observable Inputs	Level 3 Unobservable Inputs
Equity securities		
	Valuation Approaches: Principally the market approach.	Valuation Approaches: Principally the market and income approaches.
	Key Input: • quoted prices in markets that are not considered active	Key Inputs: •credit ratings; issuance structures •quoted prices in markets that are not active for identical or similar securities that are less liquid and based on lower levels of trading activity than securities classified in Level 2 •independent non-binding broker quotations
Unit-linked and FVO Securities, Short-term investments, Other limited partnership interests and Other investments		
	• Unit-linked and FVO Securities include mutual fund interests without readily determinable fair values given prices are not published publicly. Valuation of these mutual funds is based upon quoted prices or reported NAV provided by	•Unit-linked and FVO Securities and short-term investments are of a similar nature and class to the fixed maturity and equity securities described above; accordingly, the valuation approaches and unobservable inputs used in their valuation are also similar to those described above.

		the fund managers, which were based on observable inputs. All other investments are of a similar nature and class to the fixed maturity and equity securities described above; accordingly, the valuation approaches and observable inputs used in their valuation are also similar to those described above.	
	•		• Valuation approaches for other limited partnership interests are discussed below.
Residential mortgage loans — FVO			
	• N/A	Valuation Approaches: Principally the market approach. Valuation Techniques and Key Inputs: These investments are based primarily on matrix pricing or other similar techniques that utilize inputs from mortgage servicers that are unobservable or cannot be derived principally from, or corroborated by, observable market data.	
Separate account assets and Separate account liabilities (1)			
Mutual funds and hedge funds without readily determinable fair values as prices are not published publicly			
	Key Input: quoted prices or reported		• N/A
	• NAV provided by the fund managers		
Other limited partnership interests			
	• N/A	• Valued giving consideration to the underlying holdings of the partnerships and adjusting, if appropriate.	

Key Inputs:
•liquidity; bid/ask spreads; performance record of the fund manager
•other relevant variables that may impact the exit value of the particular partnership interest

(1) Estimated fair value equals carrying value, based on the value of the underlying assets, including: mutual fund interests, fixed maturity securities, equity securities, derivatives, hedge funds, other limited partnership interests, short-term investments and cash and cash equivalents. Fixed maturity securities, equity securities, derivatives, short-term investments and cash and cash equivalents are similar in nature to the instruments described under "— Securities, Short-term Investments and Other Investments," "— Other Limited Partnership Interests" and "— Derivative Freestanding Derivatives."

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
8. Fair Value (continued)

Derivatives
The estimated fair value of derivatives is determined through the use of quoted market prices for exchange-traded derivatives, or through the use of pricing models for OTC-bilateral and OTC-cleared derivatives. The determination of estimated fair value, when quoted market values are not available, is based on market standard valuation methodologies and inputs that management believes are consistent with what other market participants would use when pricing such instruments. Derivative valuations can be affected by changes in interest rates, foreign currency exchange rates, financial indices, credit spreads, default risk, nonperformance risk, volatility, liquidity and changes in estimates and assumptions used in the pricing models. The valuation controls and procedures for derivatives are described in "— Investments."
The significant inputs to the pricing models for most OTC-bilateral and OTC-cleared derivatives are inputs that are observable in the market or can be derived principally from, or corroborated by, observable market data. Certain OTC-bilateral and OTC-cleared derivatives may rely on inputs that are significant to the estimated fair value that are not observable in the market or cannot be derived principally from, or corroborated by, observable market data. 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 management believes they are consistent with what other market participants would use when pricing such instruments.
Most inputs for OTC-bilateral and OTC-cleared derivatives are mid-market inputs but, in certain cases, liquidity adjustments are made when they are deemed more representative of exit value. Market liquidity, as well as the use of different methodologies, assumptions and inputs, may have a material effect on the estimated fair values of the Company's derivatives and could materially affect net income.
The credit risk of both the counterparty and the Company are considered in determining the estimated fair value for all OTC-bilateral and OTC-cleared derivatives, and any potential credit adjustment is based on the net exposure by counterparty after taking into account the effects of netting agreements and collateral arrangements. The Company values its OTC-bilateral and OTC-cleared derivatives using standard swap curves which may include a spread to the risk-free rate, depending upon specific collateral arrangements. This credit spread is appropriate for those parties that execute trades at pricing levels consistent with similar collateral arrangements. As the Company and its significant derivative counterparties generally execute trades at such pricing levels and hold sufficient collateral, additional credit risk adjustments are not currently required in the valuation process. The Company's ability to consistently execute at such pricing levels is in part due to the netting agreements and collateral arrangements that are in place with all of its significant derivative counterparties. An evaluation of the requirement to make additional credit risk adjustments is performed by the Company each reporting period.
Freestanding Derivatives
Level 2 Valuation Approaches and Key Inputs:
This level includes all types of derivatives utilized by the Company with the exception of exchange-traded derivatives included within Level 1 and those derivatives with unobservable inputs as described in Level 3.
Level 3 Valuation Approaches and Key Inputs:
These valuation methodologies generally use the same inputs as described in the corresponding sections for Level 2 measurements of derivatives. However, these derivatives result in Level 3 classification because one or more of the significant inputs are not observable in the market or cannot be derived principally from, or corroborated by, observable market data.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
8. Fair Value (continued)

Freestanding derivatives are principally valued using the income approach. Valuations of non-option-based derivatives utilize present value techniques, whereas valuations of option-based derivatives utilize option pricing models. Key inputs are as follows:

Instrument	Interest Rate	Foreign Currency Exchange Rate	Credit	Equity Market
Inputs common to Level 2 and Level 3 by instrument type	• swap yield curves • basis curves • interest rate volatility (1)	• swap yield curves • basis curves • currency spot rates • cross currency basis curves • currency volatility (1)	• swap yield curves • credit curves • recovery rates	• swap yield curves • spot equity index levels • dividend yield curves • equity volatility (1)
Level 3	• swap yield curves (2) • basis curves (2) • repurchase rates	• swap yield curves (2) • basis curves (2) • cross currency basis curves (2) • currency correlation • currency volatility (1)	• swap yield curves (2) • credit curves (2) • credit spreads • repurchase rates • independent non-binding broker quotations	• dividend yield curves (2) • equity volatility (1), (2) • correlation between model inputs (1)

(1) Option-based only.
(2) Extrapolation beyond the observable limits of the curve(s).

Embedded Derivatives

Embedded derivatives principally include certain direct, assumed and ceded variable annuity guarantees, equity or bond indexed crediting rates within certain funding agreements and annuity contracts, and those related to funds withheld on ceded reinsurance agreements. Embedded derivatives are recorded at estimated fair value with changes in estimated fair value reported in net income.

The Company issues certain variable annuity products with guaranteed minimum benefits. GMWBs, GMABs and certain GMIBs contain embedded derivatives, which are measured at estimated fair value separately from the host variable annuity contract, with changes in estimated fair value reported in net derivative gains (losses). These embedded derivatives are classified within policyholder account balances on the consolidated balance sheets.

The Company's actuarial department calculates the fair value of these embedded derivatives, which are estimated as the present value of projected future benefits minus the present value of projected future fees using actuarial and capital market assumptions including expectations concerning policyholder behavior. The calculation is based on in-force business, and is performed using standard actuarial valuation software which projects future cash flows from the embedded derivative over multiple risk neutral stochastic scenarios using observable risk-free rates.

Capital market assumptions, such as risk-free rates and implied volatilities, are based on market prices for publicly traded instruments to the extent that prices for such instruments are observable. Implied volatilities beyond the observable period are extrapolated based on observable implied volatilities and historical volatilities. Actuarial assumptions, including mortality, lapse, withdrawal and utilization, are unobservable and are reviewed at least annually based on actuarial studies of historical experience.

The valuation of these guarantee liabilities includes nonperformance risk adjustments and adjustments for a risk margin related to non-capital market inputs. The nonperformance adjustment is determined by taking into consideration publicly available information relating to spreads in the secondary market for MetLife, Inc.'s debt, including related credit default swaps. These observable spreads are then adjusted, as necessary, to reflect the priority of these liabilities and the claims paying ability of the issuing insurance subsidiaries as compared to MetLife, Inc.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
8. Fair Value (continued)

Risk margins are established to capture the non-capital market risks of the instrument which represent the additional compensation a market participant would require to assume the risks related to the uncertainties of such actuarial assumptions as annuitization, premium persistency, partial withdrawal and surrenders. The establishment of risk margins requires the use of significant management judgment, including assumptions of the amount and cost of capital needed to cover the guarantees. These guarantees may be more costly than expected in volatile or declining equity markets. Market conditions including, but not limited to, changes in interest rates, equity indices, market volatility and foreign currency exchange rates; changes in nonperformance risk; and variations in actuarial assumptions regarding policyholder behavior, mortality and risk margins related to non-capital market inputs, may result in significant fluctuations in the estimated fair value of the guarantees that could materially affect net income.

The Company ceded the risk associated with certain of the GMIBs previously described. These reinsurance agreements contain embedded derivatives which are included within premiums, reinsurance and other receivables on the consolidated balance sheets with changes in estimated fair value reported in net derivative gains (losses) or policyholder benefits and claims depending on the statement of operations classification of the direct risk. The value of the embedded derivatives on the ceded risk is determined using a methodology consistent with that described previously for the guarantees directly written by the Company with the exception of the input for nonperformance risk that reflects the credit of the reinsurer.

The estimated fair value of the embedded derivatives within funds withheld related to certain ceded reinsurance is determined based on the change in estimated fair value of the underlying assets held by the Company in a reference portfolio backing the funds withheld liability. The estimated fair value of the underlying assets is determined as described in "— Investments — Securities, Short-term Investments and Other Investments." The estimated fair value of these embedded derivatives is included, along with their funds withheld hosts, in other liabilities on the consolidated balance sheets with changes in estimated fair value recorded in net derivative gains (losses). Changes in the credit spreads on the underlying assets, interest rates and market volatility may result in significant fluctuations in the estimated fair value of these embedded derivatives that could materially affect net income.

The estimated fair value of the embedded equity and bond indexed derivatives contained in certain funding agreements is determined using market standard swap valuation models and observable market inputs, including a nonperformance risk adjustment. The estimated fair value of these embedded derivatives are included, along with their funding agreements host, within policyholder account balances with changes in estimated fair value recorded in net derivative gains (losses). Changes in equity and bond indices, interest rates and the Company's credit standing may result in significant fluctuations in the estimated fair value of these embedded derivatives that could materially affect net income.

The Company issues certain annuity contracts which allow the policyholder to participate in returns from equity indices. These equity indexed features are embedded derivatives which are measured at estimated fair value separately from the host fixed annuity contract, with changes in estimated fair value reported in net derivative gains (losses). These embedded derivatives are classified within policyholder account balances on the consolidated balance sheets. The estimated fair value of the embedded equity indexed derivatives, based on the present value of future equity returns to the policyholder using actuarial and present value assumptions including expectations concerning policyholder behavior, is calculated by the Company's actuarial department. The calculation is based on in-force business and uses standard capital market techniques, such as Black-Scholes, to calculate the value of the portion of the embedded derivative for which the terms are set. The portion of the embedded derivative covering the period beyond where terms are set is calculated as the present value of amounts expected to be spent to provide equity indexed returns in those periods. The valuation of these embedded derivatives also includes the establishment of a risk margin, as well as changes in nonperformance risk.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
8. Fair Value (continued)

Embedded Derivatives Within Asset and Liability Host Contracts
Level 3 Valuation Approaches and Key Inputs:
Direct and assumed guaranteed minimum benefits
These embedded derivatives are principally valued using the income approach. Valuations are based on option pricing techniques, which utilize significant inputs that may include swap yield curves, currency exchange rates and implied volatilities. These embedded derivatives result in Level 3 classification because one or more of the significant inputs are not observable in the market or cannot be derived principally from, or corroborated by, observable market data. Significant unobservable inputs generally include: the extrapolation beyond observable limits of the swap yield curves and implied volatilities, actuarial assumptions for policyholder behavior and mortality and the potential variability in policyholder behavior and mortality, nonperformance risk and cost of capital for purposes of calculating the risk margin.
Reinsurance ceded on certain guaranteed minimum benefits
These embedded derivatives are principally valued using the income approach. The valuation techniques and significant market standard unobservable inputs used in their valuation are similar to those described above in "— Direct and assumed guaranteed minimum benefits" and also include counterparty credit spreads.
Transfers between Levels
Overall, transfers between levels occur when there are changes in the observability of inputs and market activity. Transfers into or out of any level are assumed to occur at the beginning of the period.
Transfers between Levels 1 and 2:
There were no transfers between Levels 1 and 2 for assets and liabilities measured at estimated fair value and still held at March 31, 2018 and December 31, 2017.
Transfers into or out of Level 3:
Assets and liabilities are transferred into Level 3 when a significant input cannot be corroborated with market observable data. This occurs when market activity decreases significantly and underlying inputs cannot be observed, current prices are not available, and/or when there are significant variances in quoted prices, thereby affecting transparency. Assets and liabilities are transferred out of Level 3 when circumstances change such that a significant input can be corroborated with market observable data. This may be due to a significant increase in market activity, a specific event, or one or more significant input(s) becoming observable.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
8. Fair Value (continued)

Assets and Liabilities Measured at Fair Value Using Significant Unobservable Inputs (Level 3)
The following table presents certain quantitative information about the significant unobservable inputs used in the fair value measurement, and the sensitivity of the estimated fair value to changes in those inputs, for the more significant asset and liability classes measured at fair value on a recurring basis using significant unobservable inputs (Level 3) at:

			March 31, 2018			December 31, 2017			
	Valuation Techniques	Significant Unobservable Inputs	Range		Weighted Average (1)	Range		Weighted Average (1)	Impact of Increase in Input on Estimated Fair Value (2)
Fixed maturity securities (3)									
U.S. corporate and foreign corporate	• Matrix pricing	• Offered quotes (4)	89	- 139	107	83	- 142	110	Increase
	• Market pricing	• Quoted prices (4)	25	- 846	124	10	- 443	121	Increase
	• Consensus pricing	• Offered quotes (4)	97	- 104	102	97	- 104	101	Increase
RMBS	• Market pricing	• Quoted prices (4)	—	- 109	94	—	- 126	94	Increase (5)
ABS	• Market pricing	• Quoted prices (4)	3	- 117	100	5	- 117	100	Increase (5)
	• Consensus pricing	• Offered quotes (4)	99	- 102	100	100	- 103	100	Increase (5)
Derivatives									
Interest rate	• Present value techniques	• Swap yield (6)	277	- 313		200	- 300		Increase (7)
		• Repurchase rates (8)	(4)	- 6		(5)	- 5		Decrease (7)
Foreign currency exchange rate	• Present value techniques	• Swap yield (6)	(19)	- 328		(14)	- 309		Increase (7)
Credit	• Present value techniques	• Credit spreads (9)	97	- 100		—	- —		Decrease (7)
	• Consensus pricing	• Offered quotes (10)							
Equity market	• Present value techniques or option pricing models	• Volatility (11)	20%	- 31%		11%	- 31%		Increase (7)
		• Correlation (12)	10%	- 30%		10%	- 30%		
Embedded derivatives									
	•	• Mortality rates:							

Direct, assumed and ceded guaranteed minimum benefits	Option pricing techniques				
		Ages 0 - 40	0% - 0.21%	0% - 0.21%	Decrease (13)
		Ages 41 - 60	0.03% - 0.75%	0.03% - 0.75%	Decrease (13)
		Ages 61 - 115	0.15% - 100%	0.15% - 100%	Decrease (13)
		•Lapse rates:			
		Durations 1 - 10	0.25% - 100%	0.25% - 100%	Decrease (14)
		Durations 11 - 20	2% - 100%	2% - 100%	Decrease (14)
		Durations 21 - 116	1.25% - 100%	1.25% - 100%	Decrease (14)
		•Utilization rates	0% - 25%	0% - 25%	Increase (15)
		•Withdrawal rates	0% - 20%	0% - 20%	(16)
		•Long-term equity volatilities	9.04% - 33%	8.25% - 33%	Increase (17)
		•Nonperformance risk spread	0.03% - 1.75%	0.02% - 1.32%	Decrease (18)

(1) The weighted average for fixed maturity securities is determined based on the estimated fair value of the securities.

(2) The impact of a decrease in input would have the opposite impact on estimated fair value. For embedded derivatives, changes to direct and assumed guaranteed minimum benefits are based on liability positions; changes to ceded guaranteed minimum benefits are based on asset positions.

(3) Significant increases (decreases) in expected default rates in isolation would result in substantially lower (higher) valuations.

(4) Range and weighted average are presented in accordance with the market convention for fixed maturity securities of dollars per hundred dollars of par.

(5) Changes in the assumptions used for the probability of default are accompanied by a directionally similar change in the assumption used for the loss severity and a directionally opposite change in the assumptions used for prepayment rates.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
8. Fair Value (continued)

(6) Ranges represent the rates across different yield curves and are presented in basis points. The swap yield curves are utilized among different types of derivatives to project cash flows, as well as to discount future cash flows to present value. Since this valuation methodology uses a range of inputs across a yield curve to value the derivative, presenting a range is more representative of the unobservable input used in the valuation.

(7) Changes in estimated fair value are based on long U.S. dollar net asset positions and will be inversely impacted for short U.S. dollar net asset positions.

(8) Ranges represent different repurchase rates utilized as components within the valuation methodology and are presented in basis points.

(9) Represents the risk quoted in basis points of a credit default event on the underlying instrument. Credit derivatives with significant unobservable inputs are primarily comprised of written credit default swaps.

(10) At both March 31, 2018 and December 31, 2017, independent non-binding broker quotations were used in the determination of less than 1% of the total net derivative estimated fair value.

(11) Ranges represent the underlying equity volatility quoted in percentage points. Since this valuation methodology uses a range of inputs across multiple volatility surfaces to value the derivative, presenting a range is more representative of the unobservable input used in the valuation.

(12) Ranges represent the different correlation factors utilized as components within the valuation methodology. Presenting a range of correlation factors is more representative of the unobservable input used in the valuation. Increases (decreases) in correlation in isolation will increase (decrease) the significance of the change in valuations.

(13) Mortality rates vary by age and by demographic characteristics such as gender. Mortality rate assumptions are based on company experience. A mortality improvement assumption is also applied. For any given contract, mortality rates vary throughout the period over which cash flows are projected for purposes of valuing the embedded derivative.

(14) Base lapse rates are adjusted at the contract level based on a comparison of the actuarially calculated guaranteed values and the current policyholder account value, as well as other factors, such as the applicability of any surrender charges. A dynamic lapse function reduces the base lapse rate when the guaranteed amount is greater than the account value as in the money contracts are less likely to lapse. Lapse rates are also generally assumed to be lower in periods when a surrender charge applies. For any given contract, lapse rates vary throughout the period over which cash flows are projected for purposes of valuing the embedded derivative.

(15) The utilization rate assumption estimates the percentage of contractholders with a GMIB or lifetime withdrawal benefit who will elect to utilize the benefit upon becoming eligible. The rates may vary by the type of guarantee, the amount by which the guaranteed amount is greater than the account value, the contract's withdrawal history and by the age of the policyholder. For any given contract, utilization rates vary throughout the period over which cash flows are projected for purposes of valuing the embedded derivative.

(16) The withdrawal rate represents the percentage of account balance that any given policyholder will elect to withdraw from the contract each year. The withdrawal rate assumption varies by age and duration of the contract, and also by other factors such as benefit type. For any given contract, withdrawal rates vary throughout the period over which cash flows are projected for purposes of valuing the embedded derivative. For GMWBs, any increase (decrease) in withdrawal rates results in an increase (decrease) in the estimated fair value of the guarantees. For GMABs and GMIBs, any increase (decrease) in withdrawal rates results in a decrease (increase) in the estimated fair value.

(17) Long-term equity volatilities represent equity volatility beyond the period for which observable equity volatilities are available. For any given contract, long-term equity volatility rates vary throughout the period over which cash flows are projected for purposes of valuing the embedded derivative.

(18)

Nonperformance risk spread varies by duration and by currency. For any given contract, multiple nonperformance risk spreads will apply, depending on the duration of the cash flow being discounted for purposes of valuing the embedded derivative.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
8. Fair Value (continued)

The following is a summary of the valuation techniques and significant unobservable inputs used in the fair value measurement of assets and liabilities classified within Level 3 that are not included in the preceding table. Generally, all other classes of securities classified within Level 3, including those within separate account assets, and embedded derivatives within funds withheld related to certain ceded reinsurance, use the same valuation techniques and significant unobservable inputs as previously described for Level 3 securities. This includes matrix pricing and discounted cash flow methodologies, inputs such as quoted prices for identical or similar securities that are less liquid and based on lower levels of trading activity than securities classified in Level 2, as well as independent non-binding broker quotations. The residential mortgage loans — FVO are valued using independent non-binding broker quotations and internal models including matrix pricing and discounted cash flow methodologies using current interest rates. Other limited partnership interests valuations are generally based on the Company's share of the NAV as provided on the financial statements of the investees. In certain circumstances, management may adjust the NAV when it has sufficient evidence to support applying such adjustments. The sensitivity of the estimated fair value to changes in the significant unobservable inputs for these other assets and liabilities is similar in nature to that described in the preceding table.

The following tables summarize the change of all assets (liabilities) measured at estimated fair value on a recurring basis using significant unobservable inputs (Level 3):

	Fair Value Measurements Using Significant Unobservable Inputs (Level 3)					
	Fixed Maturity Securities					
	Corporate (1)	Foreign Government	Structured Securities	State and Political Subdivision	Equity Securities	Unit-linked and FVO Securities
	(In millions)					
Three Months Ended March 31, 2018						
Balance, beginning of period	$11,219	$ 209	$ 4,841	$ —	$ 428	$ 362
Total realized/unrealized gains (losses) included in net income (loss) (2), (3)	7	1	23	—	(6)	5
Total realized/unrealized gains (losses) included in AOCI	(68)	(3)	24	—	—	—
Purchases (4)	512	2	657	—	1	27
Sales (4)	(542)	(2)	(324)	—	(1)	(59)
Issuances (4)	—	—	—	—	—	—
Settlements (4)	—	—	—	—	—	—
Transfers into Level 3 (5)	46	—	45	—	—	—
Transfers out of Level 3 (5)	(364)	(28)	(684)	—	—	(49)
Balance, end of period	$10,810	$ 179	$ 4,582	$ —	$ 422	$ 286
Three Months Ended March 31, 2017						
Balance, beginning of period	$11,537	$ 289	$ 5,215	$ 10	$ 468	$ 287
Total realized/unrealized gains (losses) included in net income (loss) (2), (3)	4	3	32	—	(10)	7
Total realized/unrealized gains (losses) included in AOCI	231	6	48	—	22	—
Purchases (4)	941	12	1,020	—	1	69
Sales (4)	(418)	(17)	(400)	—	(1)	(17)
Issuances (4)	—	—	—	—	—	—
Settlements (4)	—	—	—	—	—	—

Transfers into Level 3 (5)	79	4	23	—	—	2
Transfers out of Level 3 (5)	(1,406)	(8)	(233)	(10)	—	(13)
Balance, end of period	$10,968	$ 289	$5,705	$ —	$ 480	$ 335
Changes in unrealized gains (losses) included in net income (loss) for the instruments still held at March 31, 2018 (6)	$1	$ 1	$21	$ —	$ —	$ 4
Changes in unrealized gains (losses) included in net income (loss) for the instruments still held at March 31, 2017 (6)	$4	$ 2	$24	$ —	$ (10)	$ 7

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
8. Fair Value (continued)

	Fair Value Measurements Using Significant Unobservable Inputs (Level 3)					
	Other Limited Partnership Interests	Short-term Investments	Residential Mortgage Loans — FVO	Net Derivatives (7)	Net Embedded Derivatives (8)	Separate Accounts (9)
	(In millions)					
Three Months Ended March 31, 2018						
Balance, beginning of period	$—	$ 33	$ 520	$ (132)	$ (274)	$ 959
Total realized/unrealized gains (losses) included in net income (loss) (2), (3)	(5)	—	2	11	36	2
Total realized/unrealized gains (losses) included in AOCI	2	—	—	(104)	(16)	—
Purchases (4)	—	605	—	—	—	409
Sales (4)	(19)	(3)	(64)	—	—	(124)
Issuances (4)	—	—	—	—	—	1
Settlements (4)	—	—	(20)	43	(74)	(1)
Transfers into Level 3 (5)	216	—	—	—	—	53
Transfers out of Level 3 (5)	—	(20)	—	—	—	(75)
Balance, end of period	$194	$ 615	$ 438	$ (182)	$ (328)	$ 1,224
Three Months Ended March 31, 2017						
Balance, beginning of period	$—	$ 46	$ 566	$ (562)	$ (729)	$ 1,141
Total realized/unrealized gains (losses) included in net income (loss) (2), (3)	—	—	(3)	33	169	(24)
Total realized/unrealized gains (losses) included in AOCI	—	—	—	44	(59)	—
Purchases (4)	—	776	135	—	—	136
Sales (4)	—	(3)	(33)	—	—	(42)
Issuances (4)	—	—	—	(7)	—	39
Settlements (4)	—	—	(26)	95	(76)	(33)
Transfers into Level 3 (5)	—	—	—	—	—	69
Transfers out of Level 3 (5)	—	(40)	—	—	—	(102)
Balance, end of period	$—	$ 779	$ 639	$ (397)	$ (695)	$ 1,184
Changes in unrealized gains (losses) included in net income (loss) for the instruments still held at March 31, 2018 (6)	$(5)	$ —	$ (8)	$ 48	$ 31	$ —
Changes in unrealized gains (losses) included in net income (loss) for the instruments still held at March 31, 2017 (6)	$—	$ —	$ (3)	$ 26	$ 167	$ —

(1) Comprised of U.S. and foreign corporate securities.

(2) Amortization of premium/accretion of discount is included within net investment income. Impairments charged to net income (loss) on securities are included in net investment gains (losses), while changes in estimated fair value of residential mortgage loans — FVO are included in net investment income. Lapses associated with net embedded

derivatives are included in net derivative gains (losses). Substantially all realized/unrealized gains (losses) included in net income (loss) for net derivatives and net embedded derivatives are reported in net derivative gains (losses).

(3) Interest and dividend accruals, as well as cash interest coupons and dividends received, are excluded from the rollforward.

(4) Items purchased/issued and then sold/settled in the same period are excluded from the rollforward. Fees attributed to embedded derivatives are included in settlements.

(5) Gains and losses, in net income (loss) and OCI, are calculated assuming transfers into and/or out of Level 3 occurred at the beginning of the period. Items transferred into and then out of Level 3 in the same period are excluded from the rollforward.

(6) Changes in unrealized gains (losses) included in net income (loss) relate to assets and liabilities still held at the end of the respective periods. Substantially all changes in unrealized gains (losses) included in net income (loss) for net derivatives and net embedded derivatives are reported in net derivative gains (losses).

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
8. Fair Value (continued)

(7) Freestanding derivative assets and liabilities are presented net for purposes of the rollforward.
(8) Embedded derivative assets and liabilities are presented net for purposes of the rollforward.
(9) Investment performance related to separate account assets is fully offset by corresponding amounts credited to contractholders within separate account liabilities. Therefore, such changes in estimated fair value are not recorded in net income (loss). For the purpose of this disclosure, these changes are presented within net investment gains (losses). Separate account assets and liabilities are presented net for the purposes of the rollforward.

Fair Value Option

The Company elects the FVO for certain residential mortgage loans that are managed on a total return basis. The following table presents information for residential mortgage loans, which are accounted for under the FVO and were initially measured at fair value.

	March 31, 2018	December 31, 2017
	(In millions)	
Unpaid principal balance	$544	$ 650
Difference between estimated fair value and unpaid principal balance	(106)	(130)
Carrying value at estimated fair value	$438	$ 520
Loans in nonaccrual status	$159	$ 198
Loans more than 90 days past due	$78	$ 94
Loans in nonaccrual status or more than 90 days past due, or both — difference between aggregate estimated fair value and unpaid principal balance	$(82)	$ (102)

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
8. Fair Value (continued)

Fair Value of Financial Instruments Carried at Other Than Fair Value
The following tables provide fair value information for financial instruments that are carried on the balance sheet at amounts other than fair value. These tables exclude the following financial instruments: cash and cash equivalents, accrued investment income, payables for collateral under securities loaned and other transactions, short-term debt and those short-term investments that are not securities, such as time deposits, and therefore are not included in the three level hierarchy table disclosed in the "— Recurring Fair Value Measurements" section. The estimated fair value of the excluded financial instruments, which are primarily classified in Level 2, approximates carrying value as they are short-term in nature such that the Company believes there is minimal risk of material changes in interest rates or credit quality. All remaining balance sheet amounts excluded from the tables below are not considered financial instruments subject to this disclosure.
The carrying values and estimated fair values for such financial instruments, and their corresponding placement in the fair value hierarchy, are summarized as follows at:

	March 31, 2018			
		Fair Value Hierarchy		
	Carrying Value	Level 1	Level 2	Level 3	Total Estimated Fair Value
	(In millions)				
Assets					
Mortgage loans	$70,617	$—	$—	$71,845	$71,845
Policy loans	$9,744	$—	$341	$11,082	$11,423
Other invested assets	$1,264	$—	$812	$452	$1,264
Premiums, reinsurance and other receivables	$4,358	$—	$1,450	$3,025	$4,475
Other assets	$345	$—	$175	$199	$374
Liabilities					
Policyholder account balances	$114,715	$—	$—	$116,193	$116,193
Long-term debt	$15,696	$—	$16,973	$—	$16,973
Collateral financing arrangement	$1,108	$—	$—	$898	$898
Junior subordinated debt securities	$3,145	$—	$4,073	$—	$4,073
Other liabilities	$3,810	$—	$2,113	$2,252	$4,365
Separate account liabilities	$118,151	$—	$118,151	$—	$118,151

Table of Contents

MetLife, Inc.

Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)

8. Fair Value (continued)

	December 31, 2017			
		Fair Value Hierarchy		
	Carrying Value	Level 1	Level 2	Level 3	Total Estimated Fair Value
	(In millions)				
Assets					
Mortgage loans	$68,211	$—	$—	$69,797	$69,797
Policy loans	$9,669	$—	$336	$11,176	$11,512
Other limited partnership interests	$219	$—	$—	$216	$216
Other invested assets	$443	$—	$—	$443	$443
Premiums, reinsurance and other receivables	$4,155	$—	$1,283	$3,056	$4,339
Other assets	$285	$—	$189	$139	$328
Liabilities					
Policyholder account balances	$114,355	$—	$—	$116,534	$116,534
Long-term debt	$15,675	$—	$17,773	$—	$17,773
Collateral financing arrangement	$1,121	$—	$—	$894	$894
Junior subordinated debt securities	$3,144	$—	$4,319	$—	$4,319
Other liabilities	$3,208	$—	$1,496	$2,345	$3,841
Separate account liabilities	$124,011	$—	$124,011	$—	$124,011

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)

9. Equity

Preferred Stock

In March 2018, MetLife, Inc. issued 500,000 shares of 5.875% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series D (the "Series D preferred stock") with a $0.01 par value per share and a liquidation preference of $1,000 per share for aggregate net proceeds of $494 million. In connection with the offering of the Series D preferred stock, MetLife, Inc. incurred approximately $6 million of issuance costs which have been recorded as a reduction of additional paid-in capital.

The Series D preferred stock ranks senior to MetLife, Inc.'s common stock with respect to the payment of dividends and distributions upon liquidation, dissolution or winding-up. Holders of the Series D preferred stock will be entitled to receive dividend payments only when, as and if declared by MetLife, Inc.'s Board of Directors or a duly authorized committee thereof. If dividends are declared on the Series D preferred stock for any dividend period, they will be calculated on a non-cumulative basis at a fixed rate per annum of 5.875% from the date of original issue to, but excluding, March 15, 2028 and at a floating rate per annum equal to three-month U.S. dollar LIBOR plus 2.959% on the related LIBOR determination date from and after March 15, 2028. Dividends for any dividend period will be payable, if declared, semi-annually in arrears on the 15th day of March and September of each year commencing on September 15, 2018 and ending on March 15, 2028, and thereafter quarterly in arrears on the 15th day of June, September, December, and March of each year.

Dividends on the Series D preferred stock will not be cumulative and will not be mandatory. Accordingly, if dividends are not declared on the Series D preferred stock for any dividend period, then any accrued dividends for that dividend period will cease to accrue and be payable. If a dividend is not declared before the dividend payment date for any dividend period, MetLife, Inc. will have no obligation to pay dividends accrued for such dividend period whether or not dividends on the Series D preferred stock are declared for any future dividend period. No dividends may be paid or declared on MetLife, Inc.'s common stock (or any other securities ranking junior to the Series D preferred stock) and MetLife, Inc. may not purchase, redeem, or otherwise acquire its common stock (or other such junior stock) unless the full dividends for the latest completed dividend period on all outstanding shares of Series D preferred stock, and any parity stock, have been declared and paid or provided for.

Holders of the Series D preferred stock do not have voting rights except in certain circumstances, including where the dividends have not been paid for an equivalent of six or more dividend payment periods whether or not those periods are consecutive. Under such circumstances, the holders of the Series D preferred stock have certain voting rights with respect to members of the Board of Directors of MetLife, Inc.

The Series D preferred stock is not subject to any mandatory redemption, sinking fund, retirement fund, purchase fund or similar provisions. MetLife, Inc. may, at its option, redeem the Series D preferred stock, (a) in whole but not in part, at any time prior to March 15, 2028, within 90 days after the occurrence of a "rating agency event," at a redemption price equal to $1,020 per share of Series D preferred stock, plus an amount equal to any accrued and unpaid dividends per share that have accrued but not been declared and paid for the then-current dividend period to but excluding the redemption date and (b) (i) in whole but not in part, at any time prior to March, 15, 2028, within 90 days after the occurrence of a "regulatory capital event" or (ii) in whole or in part, from time to time, on or after March 15, 2028, in each case, at a redemption price equal to $1,000 per share of Series D preferred stock, plus an amount equal to any accrued and unpaid dividends per share that have accrued but not been declared and paid for the then-current dividend period to, but excluding, such redemption date. A "rating agency event" means that any nationally recognized statistical rating organization that then publishes a rating for MetLife, Inc. amends, clarifies or changes the criteria it uses to assign equity credit to securities like the Series D preferred stock, which results in the lowering of the equity credit assigned to the Series D preferred stock or shortens the length of time that the Series D preferred stock is assigned a particular level of equity credit. A "regulatory capital event" could occur as a result of a change or proposed change in capital adequacy rules (or the interpretation or application thereof) of any capital regulator, including but not limited to the Board of Governors of the Federal Reserve System (the "Federal Reserve Board"), the Federal Insurance Office, the National Association of Insurance Commissioners or any state insurance regulator, as may then have group-wide

oversight of MetLife, Inc.'s regulatory capital, from rules (or the interpretation or application thereof) in effect as of March 22, 2018, that would create a more than insubstantial risk, as determined by MetLife, Inc., that the Series D preferred stock would not be treated as "Tier 1 capital" or as capital with attributes similar to those of Tier 1 capital, except that a "regulatory capital event" will not include a change or proposed change (or the interpretation or application thereof) that would result in the adoption of any criterion substantially the same as the criteria in the capital adequacy rules of the Federal Reserve Board applicable to bank holding companies as of March 22, 2018.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
9. Equity (continued)

Preferred stock authorized, issued and outstanding was as follows:

Series	March 31, 2018			December 31, 2017		
	Shares Authorized	Shares Issued	Shares Outstanding	Shares Authorized	Shares Issued	Shares Outstanding
Floating Rate Non-Cumulative Preferred Stock, Series A	27,600,000	24,000,000	24,000,000	27,600,000	24,000,000	24,000,000
5.25% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series C	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
5.875% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series D	500,000	500,000	500,000	—	—	—
Series A Junior Participating Preferred Stock	10,000,000	—	—	10,000,000	—	—
Not designated	160,400,000	—	—	160,900,000	—	—
Total	200,000,000	26,000,000	26,000,000	200,000,000	25,500,000	25,500,000

Common Stock

During the three months ended March 31, 2018 and 2017, MetLife, Inc. repurchased 21,405,327 shares and 16,038,791 shares of its common stock through open market purchases for $1.0 billion and $858 million, respectively. On November 1, 2017, MetLife, Inc. announced that its Board of Directors authorized $2.0 billion of common stock repurchases. At March 31, 2018, MetLife, Inc. had $720 million remaining under this common stock repurchase authorization. Common stock repurchases are dependent upon several factors, including the Company's capital position, liquidity, financial strength and credit ratings, general market conditions, the market price of MetLife, Inc.'s common stock compared to management's assessment of the stock's underlying value and applicable regulatory approvals, as well as other legal and accounting factors.

See Note 15 for information on subsequent common stock repurchases.

Stock-Based Compensation Plans

Performance Shares and Performance Units

Final Performance Shares are paid in shares of MetLife, Inc. common stock. Final Performance Units are payable in cash equal to the closing price of MetLife, Inc. common stock on a date following the last day of the three-year performance period. The performance factor for the January 1, 2015 – December 31, 2017 performance period was 46.3%, which was determined within a possible range from 0% to 175%. This factor has been applied to the 1,194,283 Performance Shares and 186,085 Performance Units associated with that performance period that vested on December 31, 2017. As a result, in the first quarter of 2018, MetLife, Inc. issued 552,953 shares of its common stock (less withholding for taxes and other items, as applicable), excluding shares that payees choose to defer, and MetLife, Inc. or its affiliates paid the cash value of 86,157 Performance Units (less withholding for taxes and other items, as applicable).

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
9. Equity (continued)

Accumulated Other Comprehensive Income (Loss)
Information regarding changes in the balances of each component of AOCI attributable to MetLife, Inc., was as follows:

	Three Months Ended March 31, 2018				
	Unrealized Investment Gains (Losses), Net of Related Offsets (1)	Unrealized Gains (Losses) on Derivatives (1)	Foreign Currency Translation Adjustments	Defined Benefit Plans Adjustment	Total
	(In millions)				
Balance, beginning of period	$12,757	$ 905	$ (4,390)	$ (1,845)	$7,427
OCI before reclassifications	(3,811)	(352)	552	(4)	(3,615)
Deferred income tax benefit (expense)	835	58	3	1	897
AOCI before reclassifications, net of income tax	9,781	611	(3,835)	(1,848)	4,709
Amounts reclassified from AOCI	45	(165)	—	31	(89)
Deferred income tax benefit (expense)	(10)	27	—	(7)	10
Amounts reclassified from AOCI, net of income tax	35	(138)	—	24	(79)
Cumulative effects of changes in accounting principles	(425)	—	—	—	(425)
Deferred income tax benefit (expense), cumulative effects of changes in accounting principles	1,473	210	36	(382)	1,337
Cumulative effects of changes in accounting principles, net of income tax (2)	1,048	210	36	(382)	912
Sale of subsidiary (3)	—	—	92	—	92
Balance, end of period	$10,864	$ 683	$ (3,707)	$ (2,206)	$5,634

	Three Months Ended March 31, 2017				
	Unrealized Investment Gains (Losses), Net of Related Offsets (1)	Unrealized Gains (Losses) on Derivatives (1)	Foreign Currency Translation Adjustments	Defined Benefit Plans Adjustment	Total
	(In millions)				
Balance, beginning of period	$10,785	$ 1,865	$ (5,312)	$ (1,972)	$5,366
OCI before reclassifications	703	210	348	(20)	1,241
Deferred income tax benefit (expense)	(273)	(73)	122	2	(222)
AOCI before reclassifications, net of income tax	11,215	2,002	(4,842)	(1,990)	6,385
Amounts reclassified from AOCI	196	(229)	—	44	11
Deferred income tax benefit (expense)	(75)	80	—	(5)	—
Amounts reclassified from AOCI, net of income tax	121	(149)	—	39	11
Balance, end of period	$11,336	$ 1,853	$ (4,842)	$ (1,951)	$6,396

(1)

See Note 6 for information on offsets to investments related to future policy benefits, DAC, VOBA and DSI, and the policyholder dividend obligation.

(2) See Note 1 for further information on adoption of new accounting pronouncements.

(3) See Note 3 for further information on the 2018 disposition.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
9. Equity (continued)

Information regarding amounts reclassified out of each component of AOCI was as follows:

AOCI Components	Amounts Reclassified from AOCI		Consolidated Statements of Operations and Comprehensive Income (Loss) Locations
	Three Months Ended March 31,		
	2018	2017	
	(In millions)		
Net unrealized investment gains (losses):			
Net unrealized investment gains (losses)	$(101)	$40	Net investment gains (losses)
Net unrealized investment gains (losses)	3	6	Net investment income
Net unrealized investment gains (losses)	53	(151)	Net derivative gains (losses)
Net unrealized investment gains (losses)	—	(91)	Discontinued operations
Net unrealized investment gains (losses), before income tax	(45)	(196)	
Income tax (expense) benefit	10	75	
Net unrealized investment gains (losses), net of income tax	(35)	(121)	
Unrealized gains (losses) on derivatives - cash flow hedges:			
Interest rate swaps	16	8	Net derivative gains (losses)
Interest rate swaps	3	4	Net investment income
Interest rate swaps	—	1	Discontinued operations
Interest rate forwards	5	(4)	Net derivative gains (losses)
Interest rate forwards	1	—	Net investment income
Interest rate forwards	—	1	Discontinued operations
Foreign currency swaps	139	208	Net derivative gains (losses)
Foreign currency swaps	1	1	Other expenses
Foreign currency swaps	—	10	Discontinued operations
Gains (losses) on cash flow hedges, before income tax	165	229	
Income tax (expense) benefit	(27)	(80)	
Gains (losses) on cash flow hedges, net of income tax	138	149	
Defined benefit plans adjustment: (1)			
Amortization of net actuarial gains (losses)	(36)	(49)	
Amortization of prior service (costs) credit	5	5	
Amortization of defined benefit plan items, before income tax	(31)	(44)	
Income tax (expense) benefit	7	5	
Amortization of defined benefit plan items, net of income tax	(24)	(39)	
Total reclassifications, net of income tax	$79	$(11)	

(1) These AOCI components are included in the computation of net periodic benefit costs. See Note 11.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)

10. Other Expenses
Information on other expenses was as follows:

	Three Months Ended March 31,	
	2018	2017
	(In millions)	
Employee related costs	$937	$937
Third party staffing costs	380	362
General and administrative expenses	243	221
Pension, postretirement and postemployment benefit costs	49	79
Premium taxes, other taxes, and licenses & fees	179	175
Commissions and other variable expenses	1,416	1,304
Capitalization of DAC	(796)	(713)
Amortization of DAC and VOBA	693	663
Amortization of negative VOBA	(22)	(43)
Interest expense on debt	286	283
Total other expenses	$3,365	$3,268

Certain prior year amounts have been reclassified to conform to the current year presentation, which has been revised to align the expense categories with the Company's businesses. The reclassifications did not result in a change to total other expenses.
See Note 3 for further information on Separation-related transaction costs.
Restructuring Charges
The Company commenced in 2016 a unit cost improvement program related to the Company's refreshed enterprise strategy. This global strategy focuses on transforming the Company to become more digital, driving efficiencies and innovation to achieve competitive advantage, and simplified, decreasing the costs and risks associated with the Company's highly complex industry to customers and shareholders. Restructuring charges related to this program are included in other expenses. As the expenses relate to an enterprise-wide initiative, they are reported in Corporate & Other. Such restructuring charges were as follows:

	Three Months Ended March 31,	
	2018	2017
	Severance	
	(In millions)	
Balance, beginning of period	$22	$35
Restructuring charges	9	11
Cash payments	(12)	(8)
Balance, end of period	$19	$38
Total restructuring charges incurred since inception of initiative	$82	$46

Management anticipates further restructuring charges through the year ending December 31, 2019. However, such restructuring plans were not sufficiently developed to enable management to make an estimate of such restructuring charges at March 31, 2018.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)

11. Employee Benefit Plans

Pension and Other Postretirement Benefit Plans

Certain subsidiaries of MetLife, Inc. sponsor and/or administer various U.S. qualified and nonqualified defined benefit pension plans and other postretirement employee benefit plans covering employees who meet specified eligibility requirements. These subsidiaries also provide certain postemployment benefits and certain postretirement medical and life insurance benefits for U.S. retired employees.

The components of net periodic benefit costs, reported in other expenses, were as follows:

	Three Months Ended March 31,			
	2018		2017	
	Pension Benefits	Other Postretirement Benefits	Pension Benefits	Other Postretirement Benefits
	(In millions)			
Service costs	$60	$ 1	$61	$ 1
Interest costs	96	11	106	19
Expected return on plan assets	(133)	(18)	(130)	(18)
Amortization of net actuarial (gains) losses	44	(8)	49	—
Amortization of prior service costs (credit)	—	(5)	—	(5)
Net periodic benefit costs (credit)	$67	$ (19)	$86	$ (3)

12. Income Tax

On December 22, 2017, President Trump signed into law U.S. Tax Reform. U.S. Tax Reform includes numerous changes in tax law, including a permanent reduction in the U.S. federal corporate income tax rate from 35% to 21%, which took effect for taxable years beginning on or after January 1, 2018. U.S. Tax Reform moves the United States from a worldwide tax system to a participation exemption system by providing corporations a 100% dividends received deduction for dividends distributed by a controlled foreign corporation. To transition to that new system, U.S. Tax Reform imposed a one-time deemed repatriation tax on unremitted earnings and profits at a rate of 8.0% for illiquid assets and 15.5% for cash and cash equivalents.

In accordance with Staff Accounting Bulletin 118 issued by the U.S. Securities and Exchange Commission (“SEC”) in December 2017, the Company recorded provisional amounts for certain items for which the income tax accounting is not complete. For these items, the Company recorded a reasonable estimate of the tax effects of U.S. Tax Reform. The estimates will be reported as provisional amounts during a measurement period, which will not exceed one year from the date of enactment of U.S. Tax Reform. The Company may reflect adjustments to its provisional amounts upon obtaining, preparing, or analyzing additional information about facts and circumstances that existed as of the enactment date that, if known, would have affected the income tax effects initially reported as provisional amounts. See Note 18 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report for further information. As of March 31, 2018, no updates were made to the provisional amounts.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)

13. Earnings Per Common Share

The following table presents the weighted average shares, basic earnings per common share and diluted earnings per common share for each income category presented:

	Three Months Ended March 31,	
	2018	2017
	(In millions, except per share data)	
Weighted Average Shares:		
Weighted average common stock outstanding for basic earnings per common share	1,035.9	1,090.4
Incremental common shares from assumed exercise or issuance of stock-based awards	8.5	8.3
Weighted average common stock outstanding for diluted earnings per common share	1,044.4	1,098.7
Income (Loss) from Continuing Operations:		
Income (loss) from continuing operations, net of income tax	$1,257	$952
Less: Income (loss) from continuing operations, net of income tax, attributable to noncontrolling interests	4	3
Less: Preferred stock dividends	6	6
Income (loss) from continuing operations, net of income tax, available to MetLife, Inc.'s common shareholders	$1,247	$943
Basic	$1.20	$0.87
Diluted	$1.19	$0.86
Income (Loss) from Discontinued Operations:		
Income (loss) from discontinued operations, net of income tax	$—	$(76)
Less: Income (loss) from discontinued operations, net of income tax, attributable to noncontrolling interests	—	—
Income (loss) from discontinued operations, net of income tax, available to MetLife, Inc.'s common shareholders	$—	$(76)
Basic	$—	$(0.07)
Diluted	$—	$(0.07)
Net Income (Loss):		
Net income (loss)	$1,257	$876
Less: Net income (loss) attributable to noncontrolling interests	4	3
Less: Preferred stock dividends	6	6
Net income (loss) available to MetLife, Inc.'s common shareholders	$1,247	$867
Basic	$1.20	$0.80
Diluted	$1.19	$0.79

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)

14. Contingencies, Commitments and Guarantees

Contingencies

Litigation

The Company is a defendant in a large number of litigation matters. In some of the matters, very large and/or indeterminate amounts, including punitive and treble damages, are sought. Modern pleading practice in the U.S. permits considerable variation in the assertion of monetary damages or other relief. Jurisdictions may permit claimants not to specify the monetary damages sought or may permit claimants to state only that the amount sought is sufficient to invoke the jurisdiction of the trial court. In addition, jurisdictions may permit plaintiffs to allege monetary damages in amounts well exceeding reasonably possible verdicts in the jurisdiction for similar matters. This variability in pleadings, together with the actual experience of the Company in litigating or resolving through settlement numerous claims over an extended period of time, demonstrates to management that the monetary relief which may be specified in a lawsuit or claim bears little relevance to its merits or disposition value.

Due to the vagaries of litigation, the outcome of a litigation matter and the amount or range of potential loss at particular points in time may normally be difficult to ascertain. Uncertainties can include how fact finders will evaluate documentary evidence and the credibility and effectiveness of witness testimony, and how trial and appellate courts will apply the law in the context of the pleadings or evidence presented, whether by motion practice, at trial or on appeal. Disposition valuations are also subject to the uncertainty of how opposing parties and their counsel will view the relevant evidence and applicable law.

The Company establishes liabilities for litigation and regulatory loss contingencies when it is probable that a loss has been incurred and the amount of the loss can be reasonably estimated. Liabilities have been established for a number of the matters noted below. It is possible that some of the matters could require the Company to pay damages or make other expenditures or establish accruals in amounts that could not be reasonably estimated at March 31, 2018. While the potential future charges could be material in the particular quarterly or annual periods in which they are recorded, based on information currently known to management, management does not believe any such charges are likely to have a material effect on the Company’s financial position.

Matters as to Which an Estimate Can Be Made

For some of the matters disclosed below, the Company is able to estimate a reasonably possible range of loss. For such matters where a loss is believed to be reasonably possible, but not probable, the Company has not made an accrual. As of March 31, 2018, the Company estimates the aggregate range of reasonably possible losses in excess of amounts accrued for these matters to be $0 to $700 million.

Matters as to Which an Estimate Cannot Be Made

For other matters disclosed below, the Company is not currently able to estimate the reasonably possible loss or range of loss. The Company is often unable to estimate the possible loss or range of loss until developments in such matters have provided sufficient information to support an assessment of the range of possible loss, such as quantification of a damage demand from plaintiffs, discovery from other parties and investigation of factual allegations, rulings by the court on motions or appeals, analysis by experts, and the progress of settlement negotiations. On a quarterly and annual basis, the Company reviews relevant information with respect to litigation contingencies and updates its accruals, disclosures and estimates of reasonably possible losses or ranges of loss based on such reviews.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
14. Contingencies, Commitments and Guarantees (continued)

Asbestos-Related Claims

MLIC is and has been a defendant in a large number of asbestos-related suits filed primarily in state courts. These suits principally allege that the plaintiff or plaintiffs suffered personal injury resulting from exposure to asbestos and seek both actual and punitive damages. MLIC has never engaged in the business of manufacturing, producing, distributing, or selling asbestos or asbestos-containing products nor has MLIC issued liability or workers' compensation insurance to companies in the business of manufacturing, producing, distributing, or selling asbestos or asbestos-containing products. The lawsuits principally have focused on allegations with respect to certain research, publication and other activities of one or more of MLIC's employees during the period from the 1920's through approximately the 1950's and allege that MLIC learned or should have learned of certain health risks posed by asbestos and, among other things, improperly publicized or failed to disclose those health risks. MLIC believes that it should not have legal liability in these cases. The outcome of most asbestos litigation matters, however, is uncertain and can be impacted by numerous variables, including differences in legal rulings in various jurisdictions, the nature of the alleged injury and factors unrelated to the ultimate legal merit of the claims asserted against MLIC. MLIC employs a number of resolution strategies to manage its asbestos loss exposure, including seeking resolution of pending litigation by judicial rulings and settling individual or groups of claims or lawsuits under appropriate circumstances.

Claims asserted against MLIC have included negligence, intentional tort and conspiracy concerning the health risks associated with asbestos. MLIC's defenses (beyond denial of certain factual allegations) include that: (i) MLIC owed no duty to the plaintiffs— it had no special relationship with the plaintiffs and did not manufacture, produce, distribute, or sell the asbestos products that allegedly injured plaintiffs; (ii) plaintiffs did not rely on any actions of MLIC; (iii) MLIC's conduct was not the cause of the plaintiffs' injuries; (iv) plaintiffs' exposure occurred after the dangers of asbestos were known; and (v) the applicable time with respect to filing suit has expired. During the course of the litigation, certain trial courts have granted motions dismissing claims against MLIC, while other trial courts have denied MLIC's motions. There can be no assurance that MLIC will receive favorable decisions on motions in the future. While most cases brought to date have settled, MLIC intends to continue to defend aggressively against claims based on asbestos exposure, including defending claims at trials.

As reported in the 2017 Annual Report, MLIC received approximately 3,514 asbestos-related claims in 2017. During the three months ended March 31, 2018 and 2017, MLIC received approximately 823 and 1,104 new asbestos-related claims, respectively. See Note 20 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report for historical information concerning asbestos claims and MLIC's increase in its recorded liability at December 31, 2017. The number of asbestos cases that may be brought, the aggregate amount of any liability that MLIC may incur, and the total amount paid in settlements in any given year are uncertain and may vary significantly from year to year.

The ability of MLIC to estimate its ultimate asbestos exposure is subject to considerable uncertainty, and the conditions impacting its liability can be dynamic and subject to change. The availability of reliable data is limited and it is difficult to predict the numerous variables that can affect liability estimates, including the number of future claims, the cost to resolve claims, the disease mix and severity of disease in pending and future claims, the impact of the number of new claims filed in a particular jurisdiction and variations in the law in the jurisdictions in which claims are filed, the possible impact of tort reform efforts, the willingness of courts to allow plaintiffs to pursue claims against MLIC when exposure to asbestos took place after the dangers of asbestos exposure were well known, and the impact of any possible future adverse verdicts and their amounts.

The ability to make estimates regarding ultimate asbestos exposure declines significantly as the estimates relate to years further in the future. In the Company's judgment, there is a future point after which losses cease to be probable and reasonably estimable. It is reasonably possible that the Company's total exposure to asbestos claims may be materially greater than the asbestos liability currently accrued and that future charges to income may be necessary. While the potential future charges could be material in the particular quarterly or annual periods in which they are

recorded, based on information currently known by management, management does not believe any such charges are likely to have a material effect on the Company’s financial position.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
14. Contingencies, Commitments and Guarantees (continued)

The Company believes adequate provision has been made in its consolidated financial statements for all probable and reasonably estimable losses for asbestos-related claims. MLIC's recorded asbestos liability is based on its estimation of the following elements, as informed by the facts presently known to it, its understanding of current law and its past experiences: (i) the probable and reasonably estimable liability for asbestos claims already asserted against MLIC, including claims settled but not yet paid; (ii) the probable and reasonably estimable liability for asbestos claims not yet asserted against MLIC, but which MLIC believes are reasonably probable of assertion; and (iii) the legal defense costs associated with the foregoing claims. Significant assumptions underlying MLIC's analysis of the adequacy of its recorded liability with respect to asbestos litigation include: (i) the number of future claims; (ii) the cost to resolve claims; and (iii) the cost to defend claims.

MLIC reevaluates on a quarterly and annual basis its exposure from asbestos litigation, including studying its claims experience, reviewing external literature regarding asbestos claims experience in the United States, assessing relevant trends impacting asbestos liability and considering numerous variables that can affect its asbestos liability exposure on an overall or per claim basis. These variables include bankruptcies of other companies involved in asbestos litigation, legislative and judicial developments, the number of pending claims involving serious disease, the number of new claims filed against it and other defendants and the jurisdictions in which claims are pending. Based upon its regular reevaluation of its exposure from asbestos litigation, MLIC has updated its liability analysis for asbestos-related claims through March 31, 2018.

Regulatory Matters

The Company receives and responds to subpoenas or other inquiries seeking a broad range of information from state regulators, including state insurance commissioners; state attorneys general or other state governmental authorities; federal regulators, including the SEC; federal governmental authorities, including congressional committees; and the Financial Industry Regulatory Authority ("FINRA"), as well as from local and national regulators and government authorities in jurisdictions outside the United States where MetLife conducts business. The issues involved in information requests and regulatory matters vary widely. The Company cooperates in these inquiries.

In the Matter of Chemform, Inc. Site, Pompano Beach, Broward County, Florida

In July 2010, the Environmental Protection Agency ("EPA") advised MLIC that it believed payments were due under two settlement agreements, known as "Administrative Orders on Consent," that New England Mutual Life Insurance Company ("New England Mutual") signed in 1989 and 1992 with respect to the cleanup of a Superfund site in Florida (the "Chemform Site"). The EPA originally contacted MLIC (as successor to New England Mutual) and a third party in 2001, and advised that they owed additional clean-up costs for the Chemform Site. The matter was not resolved at that time. In September 2012, the EPA, MLIC and the third party executed an Administrative Order on Consent under which MLIC and the third party agreed to be responsible for certain environmental testing at the Chemform Site. The EPA may seek additional costs if the environmental testing identifies issues. The EPA and MLIC have reached a settlement in principal on the EPA's claim for past costs. The Company estimates that the aggregate cost to resolve this matter, including the settlement for claims of past costs and the costs of environmental testing, will not exceed $300 thousand.

Sales Practices Regulatory Matters

Regulatory authorities in a number of states and FINRA, and occasionally the SEC, have had investigations or inquiries relating to sales of individual life insurance policies or annuities or other products by MLIC and General American Life Insurance Company, as well as former subsidiaries of the Company that are part of Brighthouse as a result of the Separation, and a former broker-dealer subsidiary. These investigations often focus on the conduct of particular financial services representatives and the sale of unregistered or unsuitable products or the misuse of client assets. Over the past several years, these and a number of investigations by other regulatory authorities were resolved for monetary payments and certain other relief, including restitution payments. The Company may continue to resolve investigations in a similar manner. The Company believes adequate provision has been made in its consolidated financial statements for all probable and reasonably estimable losses for these sales practices-related investigations or

inquiries.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
14. Contingencies, Commitments and Guarantees (continued)

Unclaimed Property Litigation
City of Westland Police and Fire Retirement System v. MetLife, Inc., et al. (S.D.N.Y., filed January 12, 2012)
Seeking to represent a class of persons who purchased MetLife, Inc. common shares between February 2, 2010, and October 6, 2011, the plaintiff alleges that MetLife, Inc. and several current and former directors and executive officers of MetLife, Inc. violated the Securities Act of 1933, as well as the Securities Exchange Act of 1934 ("Exchange Act") and Rule 10b-5 promulgated thereunder by issuing, or causing MetLife, Inc. to issue, materially false and misleading statements concerning MetLife, Inc.'s potential liability for millions of dollars in insurance benefits that should have been paid to beneficiaries or escheated to the states. Plaintiff seeks unspecified compensatory damages and other relief. On September 22, 2017, the Court granted plaintiff's motion to certify its proposed class of persons who purchased or acquired MetLife, Inc. common stock in the Company's August 3, 2010 offering or the Company's March 4, 2011 offering. The defendants intend to defend this action vigorously.
Total Asset Recovery Services, LLC. v. MetLife, Inc., et al. (Supreme Court of the State of New York, County of New York, filed November 17, 2017)
Alleging that MetLife, Inc., MLIC, and several other insurance companies violated the New York False Claims Act (the "Act") by filing false unclaimed property reports from 1986 to 2017 with New York to avoid having to escheat the proceeds of more than 25,000 life insurance policies, including policies for which the defendants escheated funds as part of their demutualizations in the late 1990s, Total Asset Recovery Services ("The Relator") has brought an action under the qui tam provision of the Act on behalf of itself and New York. The Relator originally filed this action under seal in 2010, and the complaint was unsealed on December 19, 2017. The Relator seeks treble damages and other relief. The Company intends to defend this action vigorously.
Total Control Accounts Litigation
MLIC is a defendant in a lawsuit related to its use of retained asset accounts, known as Total Control Accounts ("TCA"), as a settlement option for death benefits.
Owens v. Metropolitan Life Insurance Company (N.D. Ga., filed April 17, 2014)
Plaintiff filed this class action lawsuit on behalf of all persons for whom MLIC established a TCA to pay death benefits under an Employee Retirement Income Security Act of 1974 ("ERISA") plan. The action alleges that MLIC's use of the TCA as the settlement option for life insurance benefits under some group life insurance policies violates MLIC's fiduciary duties under ERISA. As damages, plaintiff seeks disgorgement of profits that MLIC realized on accounts owned by members of the class. In addition, plaintiff, on behalf of a subgroup of the class, seeks interest under Georgia's delayed settlement interest statute, alleging that the use of the TCA as the settlement option did not constitute payment. On September 27, 2016, the court denied MLIC's summary judgment motion in full and granted plaintiff's partial summary judgment motion. On September 29, 2017, the court certified a nationwide class. The court also certified a Georgia subclass. The Company intends to defend this action vigorously.
Diversified Lending Group Litigation
Hartshorne v. MetLife, Inc., et al. (Los Angeles County Superior Court, filed March 25, 2015)
Plaintiffs named MetLife, Inc., MetLife Securities, Inc., and New England Life Insurance Company in 12 related lawsuits in California state court alleging various causes of action including multiple negligence and statutory claims relating to a Ponzi scheme involving the Diversified Lending Group. The Company settled with the last remaining plaintiff on or about May 2, 2018.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
14. Contingencies, Commitments and Guarantees (continued)

Inquiries into Pension Benefits and Assumed Variable Annuity Guarantee Reserves and Related Litigation

The Company informed its primary state regulator, the New York Department of Financial Services ("NYDFS"), about its practices in connection with the payment of certain pension benefits to annuitants and related matters. The NYDFS is examining the issue. The Division of Enforcement of the SEC is also investigating this matter and several additional regulators, including, but not limited to, the Massachusetts Securities Division, have made inquiries into these practices, including as to related disclosures. It is possible that other jurisdictions may pursue similar investigations or inquiries. On January 29, 2018, the Company announced that in connection with a review of practices and procedures used to estimate reserves related to certain Retirement Income Solutions ("RIS") group annuitants who have been unresponsive or missing over time, the Company had identified a material weakness in its internal control over financial reporting related to certain RIS group annuity reserves. In conjunction with the material weakness, the Company increased reserves by $510 million pre-tax to reinstate reserves previously released, and to reflect accrued interest and other related liabilities. See Note 1 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report.

The Company informed the SEC that as a result of its review of the calculation of reserves associated with certain variable annuity guarantees assumed from the former operating joint venture in Japan, the Company had identified a material weakness in its internal control over financial reporting related to these reserves. In conjunction with the material weakness, the Company decreased these reserves by $896 million pre-tax at December 31, 2017. See Note 1 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report. The Division of Enforcement of the SEC is investigating this matter and the Company has informed other regulators. It is possible that other regulators may pursue similar investigations or inquiries.

The Company is exposed to lawsuits and regulatory investigations, and could be exposed to additional legal actions relating to these matters. These may result in payments, including damages, fines, penalties, interest and other amounts assessed or awarded by courts or regulatory authorities under applicable escheat, tax, securities, ERISA, or other laws or regulations. The Company could incur significant costs in connection with these actions. The Company's increase in reserves does not reflect, and the Company has not recorded an accrual for, any such potential amounts. An estimate of the possible loss or range of loss cannot be made at this time.

Parchmann v. MetLife, Inc., et. al. (E.D.N.Y., filed February 5, 2018)

Seeking to represent a class of persons who purchased MetLife, Inc. common stock from February 27, 2013 through January 29, 2018, the plaintiff alleges that MetLife, Inc., its Chief Executive Officer and Chairman of the Board, and its CFO violated Section 10(b) of the Exchange Act and Rule 10b-5 promulgated thereunder by issuing materially false and/or misleading statements because the defendants failed to disclose that MetLife's practices and procedures used to estimate its reserves set aside for annuity and pension payments were inadequate, and that MetLife had inadequate internal control over financial reporting. The plaintiff seeks unspecified compensatory damages and other relief. The defendants intend to defend this action vigorously.

Demands

By letter dated March 28, 2018 to the MetLife, Inc. Board of Directors, a shareholder, Rosemarie R. Zavolta, has demanded that MetLife, Inc. take action against current and former Board members and executive officers for alleged breaches of fiduciary duty with respect to (i) the Company's allegedly inadequate practices and procedures used to estimate the Company's reserves for annuity and pension payments, (ii) the alleged lack of adequate internal controls over financial reporting, and (iii) the alleged dissemination of false, misleading and/or incomplete information related to these issues. Zavolta has demanded that the Board: (i) undertake or cause to be undertaken an independent internal investigation into management's violations of New York law, Delaware law, and/or federal law; and (ii) if warranted commence a civil action against each member of management to recover for the benefit of the Company the amount of damages sustained by the Company as a result of their breaches of fiduciary duties alleged. The MetLife, Inc. Board of Directors has appointed a special committee to investigate these allegations.

86

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
14. Contingencies, Commitments and Guarantees (continued)

Other Litigation
Sun Life Assurance Company of Canada Indemnity Claim
In 2006, Sun Life Assurance Company of Canada ("Sun Life"), as successor to the purchaser of MLIC's Canadian operations, filed a lawsuit in Toronto, seeking a declaration that MLIC remains liable for "market conduct claims" related to certain individual life insurance policies sold by MLIC that were subsequently transferred to Sun Life. In January 2010, the court found that Sun Life had given timely notice of its claim for indemnification but, because it found that Sun Life had not yet incurred an indemnifiable loss, granted MLIC's motion for summary judgment. Both parties agreed to consider the indemnity claim through arbitration. In September 2010, Sun Life notified MLIC that a purported class action lawsuit was filed against Sun Life in Toronto alleging sales practices claims regarding the policies sold by MLIC and transferred to Sun Life. On August 30, 2011, Sun Life notified MLIC that another purported class action lawsuit was filed against Sun Life in Vancouver, BC alleging sales practices claims regarding certain of the same policies sold by MLIC and transferred to Sun Life. Sun Life contends that MLIC is obligated to indemnify Sun Life for some or all of the claims in these lawsuits. These sales practices cases against Sun Life are ongoing, and the Company is unable to estimate the reasonably possible loss or range of loss arising from this litigation.
Voshall v. Metropolitan Life Insurance Company (Superior Court of the State of California, County of Los Angeles, April 8, 2015)
Plaintiff filed this putative class action lawsuit on behalf of himself and all persons covered under a long-term group disability income insurance policy issued by MLIC to public entities in California between April 8, 2011 and April 8, 2015. Plaintiff alleges that MLIC improperly reduced benefits by including cost of living adjustments and employee paid contributions in the employer retirement benefits and other income that reduces the benefit payable under such policies. Plaintiff asserts causes of action for declaratory relief, violation of the California Business & Professions Code, breach of contract and breach of the implied covenant of good faith and fair dealing. The Company intends to defend this action vigorously.
Martin v. Metropolitan Life Insurance Company, (Superior Court of the State of California, County of Contra Costa, filed December 17, 2015)
Plaintiffs filed this putative class action lawsuit on behalf of themselves and all California persons who have been charged compound interest by MLIC in life insurance policy and/or premium loan balances within the last four years. Plaintiffs allege that MLIC has engaged in a pattern and practice of charging compound interest on life insurance policy and premium loans without the borrower authorizing such compounding, and that this constitutes an unlawful business practice under California law. Plaintiff asserts causes of action for declaratory relief, violation of California's Unfair Competition Law and Usury Law, and unjust enrichment. Plaintiff seeks declaratory and injunctive relief, restitution of interest, and damages in an unspecified amount. On April 12, 2016, the court granted MLIC's motion to dismiss. Plaintiffs have appealed this ruling to the United States Court of Appeals for the Ninth Circuit. The Company intends to defend this action vigorously.
Lau v. Metropolitan Life Insurance Company (S.D.N.Y. filed, December 3, 2015)
This putative class action lawsuit was filed by a single defined contribution plan participant on behalf of all ERISA plans whose assets were invested in MetLife's "Group Annuity Contract Stable Value Funds" within the past six years. The suit alleges breaches of fiduciary duty under ERISA and challenges the "spread" with respect to the stable value fund group annuity products sold to retirement plans. The allegations focus on the methodology MetLife uses to establish and reset the crediting rate, the terms under which plan participants are permitted to transfer funds from a stable value option to another investment option, the procedures followed if an employer terminates a contract, and the level of disclosure provided. Plaintiff seeks declaratory and injunctive relief, as well as damages in an unspecified amount. The parties settled on January 2, 2018 and the court has dismissed the action.

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
14. Contingencies, Commitments and Guarantees (continued)

Newman v. Metropolitan Life Insurance Company (N.D. Ill., filed March 23, 2016)
Plaintiff filed this putative class action alleging causes of action for breach of contract, fraud, and violations of the Illinois Consumer Fraud and Deceptive Business Practices Act, based on MLIC's class-wide increase in premiums charged for long-term care insurance policies. Plaintiff alleges a class consisting of herself and all persons over age 65 who selected a Reduced Pay at Age 65 payment feature and whose premium rates were increased after age 65. Plaintiff asserts that premiums could not be increased for these class members and/or that marketing material was misleading as to MLIC's right to increase premiums. Plaintiff seeks unspecified compensatory, statutory and punitive damages, as well as recessionary and injunctive relief. On April 12, 2017, the court granted MLIC's motion, dismissing the action with prejudice. Plaintiff appealed this ruling to the United States Court of Appeals for the Seventh Circuit (the "Seventh Circuit") and on February 6, 2018, the Seventh Circuit reversed and remanded for further proceedings, ruling that Plaintiff is entitled to relief on her contract claim. Following MLIC's petition for rehearing, the Seventh Circuit issued an amended opinion on March 22, 2018, holding that plaintiff's claim survived MLIC's motion to dismiss but finding that the policy is ambiguous as to MLIC's right to raise plaintiff's premiums. The Seventh Circuit held that on remand to the district court, the parties may introduce evidence to try to resolve this ambiguity.
Miller, et al. v. MetLife, Inc., et al. (C.D. Cal., filed April 7, 2017)
Plaintiffs filed this putative class action against MetLife, Inc. and MLIC in the U.S. District Court for the Central District of California, purporting to assert claims on behalf of all persons who replaced their MetLife Optional Term Life or Group Universal Life policy with a Group Variable Universal Life policy wherein MetLife allegedly charged smoker rates for certain non-smokers. Plaintiffs seek unspecified compensatory and punitive damages, as well as other relief. On September 25, 2017, plaintiffs dismissed the action and refiled the complaint in U.S. District Court for the Southern District of New York. On November 9, 2017, plaintiffs dismissed MetLife, Inc. without prejudice from the action. MLIC intends to defend this action vigorously.
Julian & McKinney v. Metropolitan Life Insurance Company (S.D.N.Y., filed February 9, 2017)
Plaintiffs filed this putative class and collective action on behalf of themselves and all current and former long-term disability ("LTD") claims specialists between February 2011 and the present for alleged wage and hour violations under the Fair Labor Standards Act, the New York Labor Law, and the Connecticut Minimum Wage Act. The suit alleges that MetLife improperly reclassified the plaintiffs and similarly situated LTD claims specialists from non-exempt to exempt from overtime pay in November 2013. As a result, they and members of the putative class were no longer eligible for overtime pay even though they allege they continued to work more than 40 hours per week. On March 22, 2018, the Court conditionally certified the case as a collective action, requiring that notice be mailed to LTD claims specialists who worked for the Company from February 8, 2014 to the present. The Company intends to defend this action vigorously.
Sales Practices Claims
Over the past several years, the Company has faced numerous claims, including class action lawsuits, alleging improper marketing or sales of individual life insurance policies, annuities, mutual funds, other products or the misuse of client assets. Some of the current cases seek substantial damages, including punitive and treble damages and attorneys' fees. The Company continues to defend vigorously against the claims in these matters. The Company believes adequate provision has been made in its consolidated financial statements for all probable and reasonably estimable losses for sales practices matters.
Summary
Putative or certified class action litigation and other litigation and claims and assessments against the Company, in addition to those discussed previously and those otherwise provided for in the Company's consolidated financial statements, have arisen in the course of the Company's business, including, but not limited to, in connection with its activities as an insurer, mortgage lending bank, employer, investor, investment advisor and taxpayer. Further, state insurance regulatory authorities and other federal and state authorities regularly make inquiries and conduct investigations concerning the Company's compliance with applicable insurance and other laws and regulations.

88

Table of Contents
MetLife, Inc.
Notes to the Interim Condensed Consolidated Financial Statements (Unaudited) — (continued)
14. Contingencies, Commitments and Guarantees (continued)

It is not possible to predict the ultimate outcome of all pending investigations and legal proceedings. In some of the matters referred to previously, very large and/or indeterminate amounts, including punitive and treble damages, are sought. Although in light of these considerations it is possible that an adverse outcome in certain cases could have a material effect upon the Company's financial position, based on information currently known by the Company's management, in its opinion, the outcomes of such pending investigations and legal proceedings are not likely to have such an effect. However, given the large and/or indeterminate amounts sought in certain of these matters and the inherent unpredictability of litigation, it is possible that an adverse outcome in certain matters could, from time to time, have a material effect on the Company's consolidated net income or cash flows in particular quarterly or annual periods.

Commitments

Mortgage Loan Commitments

The Company commits to lend funds under mortgage loan commitments. The amounts of these mortgage loan commitments were $3.7 billion and $3.4 billion at March 31, 2018 and December 31, 2017, respectively.

Commitments to Fund Partnership Investments, Bank Credit Facilities, Bridge Loans and Private Corporate Bond Investments

The Company commits to fund partnership investments and to lend funds under bank credit facilities, bridge loans and private corporate bond investments. The amounts of these unfunded commitments were $6.1 billion at both March 31, 2018 and December 31, 2017.

Guarantees

In the normal course of its business, the Company has provided certain indemnities, guarantees and commitments to third parties such that it may be required to make payments now or in the future. In the context of acquisition, disposition, investment and other transactions, the Company has provided indemnities and guarantees, including those related to tax, environmental and other specific liabilities and other indemnities and guarantees that are triggered by, among other things, breaches of representations, warranties or covenants provided by the Company. In addition, in the normal course of business, the Company provides indemnifications to counterparties in contracts with triggers similar to the foregoing, as well as for certain other liabilities, such as third-party lawsuits. These obligations are often subject to time limitations that vary in duration, including contractual limitations and those that arise by operation of law, such as applicable statutes of limitation. In some cases, the maximum potential obligation under the indemnities and guarantees is subject to a contractual limitation ranging from less than $1 million to $329 million, with a cumulative maximum of $775 million, while in other cases such limitations are not specified or applicable. Since certain of these obligations are not subject to limitations, the Company does not believe that it is possible to determine the maximum potential amount that could become due under these guarantees in the future. Management believes that it is unlikely the Company will have to make any material payments under these indemnities, guarantees, or commitments.

In addition, the Company indemnifies its directors and officers as provided in its charters and by-laws. Also, the Company indemnifies its agents for liabilities incurred as a result of their representation of the Company's interests. Since these indemnities are generally not subject to limitation with respect to duration or amount, the Company does not believe that it is possible to determine the maximum potential amount that could become due under these indemnities in the future.

The Company has also minimum fund yield requirements on certain international pension funds in accordance with local laws. Since these guarantees are not subject to limitation with respect to duration or amount, the Company does not believe that it is possible to determine the maximum potential amount that could become due under these guarantees in the future.

The Company's recorded liabilities were $7 million and $5 million at March 31, 2018 and December 31, 2017, respectively, for indemnities, guarantees and commitments.

15. Subsequent Events

Common Stock Repurchases

In the second quarter of 2018 through April 30, 2018, MetLife, Inc. repurchased 7,630,398 shares of its common stock in the open market for $350 million.

Common Stock Dividend

On April 24, 2018, the MetLife, Inc. Board of Directors declared a second quarter 2018 common stock dividend of $0.42 per share payable on June 13, 2018 to shareholders of record as of May 7, 2018. The Company estimates that the aggregate dividend payment will be $428 million.

Table of Contents

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Index to Management's Discussion and Analysis of Financial Condition and Results of Operations

Table of Contents

Forward-Looking Statements and Other Financial Information

For purposes of this discussion, “MetLife,” the “Company,” “we,” “our” and “us” refer to MetLife, Inc., a Delaware corporatio incorporated in 1999, its subsidiaries and affiliates. This discussion should be read in conjunction with MetLife, Inc.’s Annual Report on Form 10-K for the year ended December 31, 2017 (the “2017 Annual Report”), the cautionary language regarding forward-looking statements included below, the “Risk Factors” set forth in Part II, Item 1A, and the additional risk factors referred to therein, “Quantitative and Qualitative Disclosures About Market Risk” and the Company’s interim condensed consolidated financial statements included elsewhere herein.

This Management’s Discussion and Analysis of Financial Condition and Results of Operations may contain or incorporate by reference information that includes or is based upon forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements give expectations or forecasts of future events. These statements can be identified by the fact that they do not relate strictly to historical or current facts. They use words such as “anticipate,” “estimate,” “expect,” “project,” “intend,” “plan,” “believe,” “will be,” “will not,” and oth and terms of similar meaning, or are tied to future periods, in connection with a discussion of future financial performance. In particular, these include statements relating to future actions, prospective services or products, future performance or results of current and anticipated services or products, sales efforts, expenses, the outcome of contingencies such as legal proceedings, trends in operations and financial results. Any or all forward-looking statements may turn out to be wrong. Actual results could differ materially from those expressed or implied in the forward-looking statements. See “Note Regarding Forward-Looking Statements.”

This Management’s Discussion and Analysis of Financial Condition and Results of Operations includes references to our performance measures, adjusted earnings and adjusted earnings available to common shareholders, that are not based on accounting principles generally accepted in the United States of America (“GAAP”). These measures are used by management to evaluate performance and allocate resources. Consistent with GAAP guidance for segment reporting, adjusted earnings is also our GAAP measure of segment performance. Adjusted earnings and other financial measures based on adjusted earnings are also the measures by which senior management’s and many other employees’ performance is evaluated for the purposes of determining their compensation under applicable compensation plans. Adjusted earnings and other financial measures based on adjusted earnings allow analysis of our performance relative to our business plan and facilitate comparisons to industry results. Forward-looking guidance provided on a non-GAAP basis cannot be reconciled to the most directly comparable GAAP measures on a forward-looking basis because net income may fluctuate significantly if net investment gains and losses and net derivative gains and losses move outside of estimated ranges. See “— Non-GAAP and Other Financial Disclosures” for definitions and a discussion of these measures, and “— Results of Operations” for reconciliations of historical non-GAAP financial measures to the most directly comparable GAAP measures.

Executive Summary

Overview

MetLife is one of the world’s leading financial services companies, providing insurance, annuities, employee benefits and asset management. MetLife is organized into five segments: U.S.; Asia; Latin America; Europe, the Middle East and Africa (“EMEA”); and MetLife Holdings. In addition, the Company reports certain of its results of operations in Corporate & Other. See Note 2 of the Notes to the Interim Condensed Consolidated Financial Statements for further information on the Company’s segments and Corporate & Other. Management continues to evaluate the Company’s segment performance and allocated resources and may adjust related measurements in the future to better reflect segment profitability.

Group Annuity Reserves, Assumed Variable Annuity Guarantee Reserves and Other Revisions

As discussed in “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Executive Summary — Overview — Group Annuity Reserves, Assumed Variable Annuity Guarantee Reserves and Other Revisions” included in the 2017 Annual Report, material weaknesses were identified in internal control over financial reporting relating to the review of practices and procedures used to estimate (i) the Company’s reserves related to certain Retirement and Income Solutions (“RIS”) group annuitants who have been unresponsive or missing over time and (ii) certain reserves associated with MetLife Holdings variable annuity guarantees assumed from a former operating joint venture in Japan. An update of the remediation plan to remove the material weaknesses is further described in

“Controls and Procedures.” Also, see Note 1 of the Notes to the Interim Condensed Consolidated Financial Statements for prior period revisions related to the Company’s consolidated results, as well as “Risk Factors” disclosed in the 2017 Annual Report for further information.

Table of Contents

U.S. Tax Reform

On December 22, 2017, President Trump signed into law H.R.1, commonly referred to as the Tax Cuts and Jobs Act of 2017 (“U.S. Tax Reform”). U.S. Tax Reform includes numerous changes in tax law, including a permanent reduction in the U.S. federal corporate income tax rate from 35% to 21%, which took effect for taxable years beginning on or after January 1, 2018, a participation exemption system which generally eliminates U.S. federal income tax on dividends received from foreign subsidiaries, and a number of other revenue raisers.

Given the complexities of U.S. Tax Reform, amounts recorded may change, possibly materially, due to, among other things, changes in interpretations and assumptions made by the Company, additional guidance that may be issued and actions that the Company may take. The Company continues to anticipate its 2018 effective tax rate to be in the range of 18% to 20%. See Notes 1 and 12 of the Notes to the Interim Condensed Consolidated Financial Statements for a further discussion of U.S. Tax Reform and the impact to the Company in the first quarter of 2018.

Separation of Brighthouse

On August 4, 2017, MetLife, Inc. completed the separation of Brighthouse Financial, Inc. and its subsidiaries (“Brighthouse”) through a distribution of 96,776,670 shares of Brighthouse Financial, Inc. common stock to the MetLife, Inc. common shareholders (the “Separation”). MetLife, Inc. retained the remaining ownership interest of 22,996,436 shares, or 19.2%, of Brighthouse Financial, Inc. common stock outstanding. The Separation resulted in the elimination of the Brighthouse Financial segment. The results of Brighthouse are reflected in the Company’s interim condensed consolidated financial statements as discontinued operations and, therefore, are presented as income (loss) from discontinued operations on the interim condensed consolidated statements of operations and comprehensive income (loss). Prior period results have been revised to reflect discontinued operations, which are reported in Corporate & Other. The reporting of discontinued operations had no impact on total consolidated assets or liabilities or on total consolidated net income (loss) for any of the periods presented. See Note 3 of the Notes to the Interim Condensed Consolidated Financial Statements for further information.

The Company intends to divest its shares of Brighthouse Financial, Inc. common stock as soon as practicable and is considering a variety of transactions to do so. These transactions may include an equity exchange offer, a direct sale of the shares, or an exchange involving debt securities. The Company expects to complete the divestiture prior to the end of 2018 and does not expect the structure of any such transaction to affect its plans to repurchase shares of MetLife, Inc. common stock in 2018. The structure and timing of any such transaction or repurchases may not permit shareholders to dispose of Company securities and acquire Brighthouse Financial, Inc. common stock in a tax-free exchange, and are dependent upon several factors, including our capital position, liquidity, financial strength and credit ratings, general market conditions, the price of securities compared to management’s assessment of underlying value, applicable regulatory approvals, as well as other legal and accounting factors.

Table of Contents

Current Period Highlights

During the three months ended March 31, 2018, overall sales decreased slightly compared to the prior period reflecting declines in each of our segments despite growth in certain businesses, notably higher funding agreement issuances in our RIS business, continued growth in our voluntary business and increased sales of foreign currency-denominated life products in Japan. In addition, while positive net flows drove an increase in our investment portfolio, investment yields declined and interest credited rates were higher. Underwriting experience was favorable compared to the prior period. Net derivative gains (losses) improved primarily as a result of changes in key equity index levels, long-term U.S. interest rates and foreign currency exchange rates. An unfavorable change in net investment gains (losses) was primarily the result of a mark-to-market loss on our retained investment in Brighthouse Financial, Inc. common stock and a leveraged lease impairment.

The following represents segment level results and percentage contributions to total segment level adjusted earnings available to common shareholders for the three months ended March 31, 2018:

_____

(1) Excludes Corporate & Other adjusted loss available to common shareholders of $203 million.

(2) Consistent with GAAP guidance for segment reporting, adjusted earnings is our GAAP measure of segment performance. See "— Non-GAAP and Other Financial Disclosures."

Table of Contents

Three Months Ended March 31, 2018 Compared with the Three Months Ended March 31, 2017

Consolidated Results - Highlights

Net income (loss) available to MetLife, Inc.'s common shareholders up $380 million:

- Favorable change in net derivative gains (losses) of $561 million ($443 million, net of income tax)
- Favorable change in results from divested businesses of $316 million ($250 million, net of income tax)
- Unfavorable change in net investment gains (losses) of $421 million ($333 million, net of income tax)
- Unfavorable impact from U.S. Tax Reform of $54 million

(1) See "— Results of Operations — Consolidated Results" and "— Non-GAAP and Other Financial Disclosures" for reconciliations and definitions of non-GAAP financial measures.

Consolidated Results - Adjusted Earnings

Adjusted earnings available to common shareholders up $102 million:

- The primary drivers of the increase in adjusted earnings were the favorable impact of U.S. Tax Reform, higher net investment income due to a larger asset base, favorable underwriting and lower expenses, partially offset by higher interest credited expenses, lower investment yields and other unfavorable tax items
- Our results for the three months ended March 31, 2018 included the following:
  - favorable impact from U.S. Tax Reform of $101 million
  - favorable reserve adjustment of $62 million, net of income tax, relating to certain variable annuity guarantees assumed from a former joint venture in Japan
  - a $34 million, net of income tax, increase in expenses associated with the Company's previously announced unit cost initiative
- Our results for the three months ended March 31, 2017 included the following:
  - a $21 million, net of income tax, charge for expenses incurred related to a guaranty fund assessment for Penn Treaty Network America Insurance Company ("Penn Treaty")
  - favorable reserve adjustments of $34 million, net of income tax, resulting from modeling improvements in the reserving process in certain of our life businesses
  - a $21 million, net of income tax, increase in expenses associated with the Company's previously announced unit cost initiative

For a more in-depth discussion of our consolidated results, see "— Results of Operations — Consolidated Results" and "— Results of Operations — Consolidated Results — Adjusted Earnings."

Table of Contents

Other Key Information

Basis of Presentation

Discontinued Operations

As previously discussed, the results of Brighthouse are reflected in the Company's consolidated financial statements as discontinued operations. Prior period results have been revised to reflect discontinued operations, which are reported in Corporate & Other. See "— Overview — Separation of Brighthouse" and Note 3 of the Notes to the Interim Condensed Consolidated Financial Statements for information on discontinued operations and transactions with Brighthouse.

Revisions

See "— Overview — Group Annuity Reserves, Assumed Variable Annuity Guarantee Reserves and Other Revisions" and Note 1 of the Notes to the Interim Condensed Consolidated Financial Statements for information regarding prior period revisions related to the Company's consolidated results.

Industry Trends

The following information on industry trends should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations — Industry Trends" in Part II, Item 7, of the 2017 Annual Report.

We continue to be impacted by the changing global financial and economic environment that has been affecting the industry.

Financial and Economic Environment

Our business and results of operations are materially affected by conditions in the global capital markets and the economy generally. Stressed conditions, volatility and disruptions in global capital markets, particular markets, or financial asset classes can have an adverse effect on us, in part because we have a large investment portfolio and our insurance liabilities and derivatives are sensitive to changing market factors. See "Risk Factors — Economic Environment and Capital Markets-Related Risks — We Are Exposed to Significant Global Financial and Capital Markets Risks Which May Adversely Affect Our Results of Operations, Financial Condition and Liquidity, and May Cause Our Net Investment Income to Vary from Period to Period" and "Risk Factors — Economic Environment and Capital Markets-Related Risks —Difficult Conditions in the Global Capital Markets and the Economy Generally May Materially Adversely Affect Our Business and Results of Operations" in the 2017 Annual Report.

We have market presence in numerous countries and, therefore, our business operations are exposed to risks posed by local and regional economic conditions. See "Risk Factors — Risks Related to Our Business — Our International Operations Face Political, Legal, Operational and Other Risks, Including Exposure to Local and Regional Economic Conditions, That Could Negatively Affect Those Operations or Our Profitability" in the 2017 Annual Report.

We are closely monitoring political and/or economic conditions in the United Kingdom ("U.K."), Mexico, and South Korea that might contribute to global market volatility and impact our business operations, investment portfolio and derivatives. For example, events following the U.K.'s referendum on June 23, 2016 and the uncertainties, including foreign currency exchange risks, associated with its pending withdrawal from the European Union ("EU"), have contributed to market volatility, both in the U.S. and beyond. These factors could contribute to weakening Gross Domestic Product growth, primarily in the U.K. and, to a lesser degree, continental Europe. The magnitude and longevity of the potential negative economic impacts would depend on the detailed agreements reached by the U.K. and the EU as a result of the negotiations regarding future trade and other arrangements. See "— Investments — Current Environment — Selected Country Investments."

Table of Contents

Central banks around the world are using monetary policy to address regional economic conditions. For example, in the United States, citing a strengthening economy, the Board of Governors of the Federal Reserve System ("Federal Reserve Board") has begun its balance sheet tapering and the Federal Reserve Board's Federal Open Market Committee has continued to increase the federal funds rate, most recently in March 2018. While the European Central Bank has continued to expand its balance sheet via quantitative easing, it is doing so at a slower place and is expected to end quantitative easing by the end of 2018. In Japan, however, the Japanese government and the Bank of Japan are maintaining stimulus measures in order to boost inflation expectations and achieve sustainable economic growth in Japan. Such measures include the imposition of a negative rate on commercial bank deposits, continued government bond purchases and tax reform, including the lowering of the Japanese corporate tax rate and the delay until 2019 of an increase in the consumption tax to 10%. Going forward, Japan's structural and demographic challenges may continue to limit its potential growth unless reforms that boost productivity are put into place. Japan's high public sector debt levels are mitigated by low refinancing risks. Further actions by central banks in the future may affect interest rates and risk markets in the U.S., Europe, Japan and other developed and emerging economies, and may ultimately result in market volatility. We cannot predict with certainty the effect of these actions or the impact on our business operations, investment portfolio or derivatives. See "— Investments — Current Environment."

Impact of a Sustained Low Interest Rate Environment

During periods of declining interest rates, we may have to invest insurance cash flows and reinvest the cash flows we received as interest or return of principal on our investments in lower yielding instruments. Moreover, borrowers may prepay or redeem the fixed income securities, mortgage loans and mortgage-backed securities in our investment portfolio with greater frequency in order to borrow at lower market rates. Therefore, some of our products expose us to the risk that a reduction in interest rates will reduce the difference between the amounts that we are required to credit on contracts in our general account and the rate of return we are able to earn on investments intended to support obligations under these contracts. This difference between interest earned and interest credited, or margin, is a key metric for the management of, and reporting for, many of our businesses.

Our expectations regarding future margins are an important component impacting the amortization of certain intangible assets such as deferred policy acquisition costs ("DAC") and value of business acquired ("VOBA"). Significantly lower margins may cause us to accelerate the amortization, thereby reducing net income in the affected reporting period. Additionally, lower margins may also impact the recoverability of intangible assets such as goodwill, require the establishment of additional liabilities or trigger loss recognition events on certain policyholder liabilities. We review this long-term margin assumption, along with other assumptions, as part of our annual actuarial assumption review.

Some of our separate account products, including variable annuities, have certain minimum guarantee benefits. Declining interest rates increase the reserves we need to set up to protect the guarantee benefits, thereby reducing net income in the affected reporting period.

In formulating economic assumptions for its insurance contract assumptions, the Company uses projections that it makes regarding interest rates. Included in these assumptions is the projection that the 10-year Treasury rate will rise to 4.25% by 2027. See "Management's Discussion and Analysis of Financial Condition and Results of Operations — Industry Trends — Low Interest Rate Scenario" included in the 2017 Annual Report for further information.

Table of Contents

Competitive Pressures

The life insurance industry remains highly competitive. Product development is focused on differentiation leading to more intense competition with respect to product features and services. Several of the industry's products can be quite homogeneous and subject to intense price competition. Cost reduction efforts are a priority for industry players, with benefits resulting in price adjustments to favor customers and reinvestment capacity. Larger companies have the ability to invest in brand equity, product development, technology optimization, risk management, and innovation, which are among the fundamentals for sustained profitable growth in the life insurance industry. Insurers are focused on their core businesses, specifically in markets where they can achieve scale. Financial strength and flexibility, and technology modernization are prerequisites for sustainable growth in the life insurance industry. Larger market participants tend to have the capacity to invest in analytics, distribution, and information technology and have the capability to engage with the new digital entrants. There is a shift in distribution from proprietary to third party models in mature markets, due to the lower cost structure. Evolving customer expectations are having a significant impact on the competitive environment as insurers strive to offer the superior customer service demanded by an increasingly sophisticated industry client base. We believe that the continued volatility of the financial markets and its impact on the capital position of many competitors will continue to strain the competitive environment. Legislative and other changes affecting the regulatory environment can also affect the competitive environment within the life insurance industry and within the broader financial services industry. See "— Industry Trends — Regulatory Developments," as well as "Business — Regulation" in the 2017 Annual Report. We believe that the aforementioned factors have highlighted financial strength, technology efficiency, and organizational agility as the most significant differentiators and, as a result, we believe the Company is well positioned to compete in this environment.

Regulatory Developments

The following discussion on regulatory developments should be read in conjunction with "Business — Regulation" in the 2017 Annual Report, as amended or supplemented in our subsequently filed Quarterly Reports on Form 10-Q under the caption "Management's Discussion and Analysis of Financial Condition and Results of Operations — Industry Trends — Regulatory Developments."

In the United States, our life insurance companies are regulated primarily at the state level, with some products and services also subject to federal regulation. In addition, MetLife, Inc. and its U.S. insurance subsidiaries are subject to regulation under the insurance holding company laws of various U.S. jurisdictions. Furthermore, some of MetLife's operations, products and services are subject to consumer protection laws, securities, broker-dealer and investment adviser regulations, environmental and unclaimed property laws and regulations, and to the Employee Retirement Income Security Act of 1974 ("ERISA"). See "— U.S. Regulation" below, as well as "Business — Regulation — U.S. Regulat "Risk Factors — Regulatory and Legal Risks — Our Insurance, Pensions and Brokerage Businesses Are Highly Regulated, and Changes in Regulation and in Supervisory and Enforcement Policies May Reduce Our Profitability and Limit Our Growth," "Risk Factors — Risks Related to Our Business — Our Statutory Life Insurance Reserve Financings May Be Subject to Cost Increases and New Financings May Be Subject to Limited Market Capacity," and "Risk Factors — Regulatory and Legal Risks — Changes in U.S. Federal, State Securities and State Insurance Laws and Regulations May Affect Our Operations and Our Profitability" included in the 2017 Annual Report.

Our international insurance operations are principally regulated by insurance regulatory authorities in the jurisdictions in which they are located or operate. In addition, our investment and pension companies outside of the U.S. are subject to oversight by the relevant securities, pension and other authorities of the jurisdictions in which the companies operate. Our non-U.S. insurance businesses are also subject to current and developing solvency regimes which impose various capital and other requirements. Additionally, we may be subject in the future to enhanced capital standards, supervision and additional requirements of other international and global regulatory initiatives. See "— International Regulation" below, as well as "Business — Regulation — International Regulation" and "Risk Factors — Regulatory and Lega Risks — Our Insurance, Pensions and Brokerage Businesses Are Highly Regulated, and Changes in Regulation and in Supervisory and Enforcement Policies May Reduce Our Profitability and Limit Our Growth," included in the 2017 Annual Report.

U.S. Regulation

Insurance Regulation

Surplus and Capital; Risk-Based Capital

The National Association of Insurance Commissioners (“NAIC”) adopted for 2018 a Risk-Based Capital (“RBC”) revision for collateral pledged to support Federal Home Loan Bank (“FHLB”) advances, which we expect to have a modest positive impact on our RBC ratios, and a RBC charge for operational risk, which we expect to have an immaterial impact on our RBC ratios. The NAIC is also studying RBC revisions for bonds, real estate, and longevity risk, but it is premature to project the impact of any potential regulatory changes resulting from such studies.

Table of Contents

New York Insurance Regulation 210

Insurance Regulation 210 went into effect in New York on March 19, 2018. Insurance Regulation 210 establishes standards for the determination and any readjustment of non-guaranteed elements ("NGEs") that may vary at the insurer's discretion for life insurance policies and annuity contracts delivered or issued for delivery in New York State. Examples of NGEs include cost of insurance for universal life insurance policies, as well as interest crediting rates for annuities and universal life insurance policies. The regulation requires insurers to notify policyholders at least 60 days in advance of any change in NGEs that is adverse to policyholders and, with respect to life insurance, to notify the New York Department of Financial Services ("NYDFS") at least 120 days prior to any such changes. Additionally, the regulation requires insurers to file annually with NYDFS to inform the NYDFS of any changes adverse to policyholders made in the prior year. The regulation generally prohibits insurers from increasing profit margins for in-force policies or adjusting NGEs in order to recoup past losses.

ERISA and Fiduciary Considerations

The Department of Labor ("DOL") issued regulations, which became for the most part applicable on June 9, 2017, that substantially expanded the definition of "investment advice" and require that an impartial or "best interests" standard be met in providing such advice, thereby broadening the circumstances under which MetLife or its representatives, in providing investment advice with respect to ERISA plans, plan participants or Individual Retirement Accounts ("IRAs"), could be deemed a fiduciary under ERISA or the Internal Revenue Code of 1986, as amended. Several financial services industry groups have initiated litigation challenging the regulations on both procedural and substantive grounds. In particular, on March 15, 2018, the U.S. Court of Appeals for the Fifth Circuit (the "Fifth Circuit") vacated the regulations (including related prohibited transaction exemptions), holding that the regulations were unreasonable, that the DOL lacked statutory authority to promulgate them, and that the DOL overreached its authority by doing so. This decision, which could take effect as early as May 7, 2018, if it is not further litigated, may alter whether and how some or all of the rules are applied to our business or the way in which predecessor prohibited transaction exemptions may be interpreted in the future.

On November 24, 2017, the NAIC issued an exposure draft of an expanded Suitability in Annuity Transactions Model Regulation, intended to result in the adoption of a "best interest" standard on a nationwide basis. The amendments to the regulation originally proposed are expected to be modified following the decision by the Fifth Circuit described above. In addition, on December 27, 2017, the NYDFS proposed revisions to Insurance Regulation 187, which not only incorporate the "best interest" standard, but also would expand the scope of the regulations to include sales of life insurance policies, as well as annuities, to consumers. The NYDFS's proposed revisions to Insurance Regulation 187 were open for public comment until February 25, 2018, and on April 27, 2018, the NYDFS exposed an updated draft of the regulation for a 30-day comment period. Separately, on April 18, 2018, the SEC proposed and opened for public comment Regulation Best Interest, which would require broker-dealers to act in the best interest of "retail" customers including participants in ERISA-covered plans and IRAs when making a recommendation of any securities transaction or investment strategy involving securities. See "Risk Factors — Regulatory and Legal Risks — Our Insurance, Pensions and Brokerage Businesses Are Highly Regulated, and Changes in Regulation and in Supervisory and Enforcement Policies May Reduce Our Profitability and Limit Our Growth" included in the 2017 Annual Report.

International Regulation

In Chile, in September 2015, a Presidential Advisory Committee issued several recommendations to reform the pension system and, on August 10, 2017, Chilean President Bachelet submitted a pension reform proposal comprised of three legislative components: (i) a 5% additional contribution from employers; (ii) a public independent entity to manage the additional funds; and (iii) legislative text that modifies pension fund administrator regulations. After assuming office in March 2018, President Piñera announced that his government will introduce pension reform legislation during his first year in office. While the details of his pension reform proposal are still unknown, there is a risk that this reform may have an adverse effect on our business in Chile.

Other International and Global Regulatory Initiatives

The General Data Protection Regulation ("GDPR"), which is intended to establish uniform data privacy laws across the EU, is scheduled to become effective for all EU member states on May 25, 2018. GDPR is extraterritorial in that it applies to EU entities, as well as entities not established in the EU that offer goods or services to data subjects in the

EU or monitor consumer behavior that takes place in the EU. Fines may be imposed for non-compliance with the requirements of the GDPR.

Table of Contents

Summary of Critical Accounting Estimates

The preparation of financial statements in conformity with GAAP requires management to adopt accounting policies and make estimates and assumptions that affect amounts reported on the Interim Condensed Consolidated Financial Statements. The most critical estimates include those used in determining:

(i) liabilities for future policy benefits and the accounting for reinsurance;
(ii) capitalization and amortization of DAC and the establishment and amortization of VOBA;
(iii) estimated fair values of investments in the absence of quoted market values;
(iv) investment impairments;
(v) estimated fair values of freestanding derivatives and the recognition and estimated fair value of embedded derivatives requiring bifurcation;
(vi) measurement of goodwill and related impairment;
(vii) measurement of employee benefit plan liabilities;
(viii) measurement of income taxes and the valuation of deferred tax assets; and
(ix) liabilities for litigation and regulatory matters.

In addition, the application of acquisition accounting requires the use of estimation techniques in determining the estimated fair values of assets acquired and liabilities assumed — the most significant of which relate to the aforementioned critical accounting estimates. In applying these policies and estimates, management makes subjective and complex judgments that frequently require assumptions about matters that are inherently uncertain. Many of these policies, estimates and related judgments are common in the insurance and financial services industries; others are specific to our business and operations. Actual results could differ from these estimates.

The above critical accounting estimates are described in “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Summary of Critical Accounting Estimates” and Note 1 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report.

Economic Capital

Economic capital is an internally developed risk capital model, the purpose of which is to measure the risk in the business and to provide a basis upon which capital is deployed. The economic capital model accounts for the unique and specific nature of the risks inherent in our business.

Our economic capital model, coupled with considerations of local capital requirements, aligns segment allocated equity with emerging standards and consistent risk principles. The model applies statistics-based risk evaluation principles to the material risks to which the Company is exposed. These consistent risk principles include calibrating required economic capital shock factors to a specific confidence level and time horizon while applying an industry standard method for the inclusion of diversification benefits among risk types. Economic capital-based risk estimation is an evolving science and industry best practices have emerged and continue to evolve. Areas of evolving industry best practices include stochastic liability valuation techniques, alternative methodologies for the calculation of diversification benefits, and the quantification of appropriate shock levels. MetLife’s management is responsible for the ongoing production and enhancement of the economic capital model and reviews its approach periodically to ensure that it remains consistent with emerging industry practice standards.

Segment net investment income is credited or charged based on the level of allocated equity; however, changes in allocated equity do not impact our consolidated net investment income, income (loss) from continuing operations, net of income tax, or adjusted earnings.

Net investment income is based upon the actual results of each segment’s specifically identifiable investment portfolios adjusted for allocated equity. Other costs are allocated to each of the segments based upon: (i) a review of the nature of such costs; (ii) time studies analyzing the amount of employee compensation costs incurred by each segment; and (iii) cost estimates included in the Company’s product pricing.

Table of Contents

Acquisitions and Dispositions

2018 Disposition

See Note 3 of the Notes to the Interim Condensed Consolidated Financial Statements for information regarding the Company’s disposition of MetLife Afore, S.A. de C.V., its pension fund management business in Mexico.

2017 Separation of Brighthouse

See Note 3 of the Notes to the Interim Condensed Consolidated Financial Statements for information regarding the Separation.

Table of Contents

Results of Operations

Consolidated Results

Business Overview. Overall sales for the three months ended March 31, 2018 decreased slightly compared to the prior period reflecting declines in each of our segments despite growth in certain businesses. In our U.S. segment, while sales were down in both the RIS and Group Benefits businesses, funding agreement issuances were higher in RIS and Group Benefits experienced continued growth in its voluntary products. In Asia, the sales decline was largely the result of strong prior period sales, which included one large group case in Australia. Sales were also lower in Korea and Hong Kong, however; sales of foreign currency-denominated life products in Japan continued to increase. Total sales for Latin America decreased as a result of lower sales of group accident & health, life and retirement products in Mexico, partially offset by higher accident & health sales in Chile. The closing of the wealth management product to new business in the U.K. in the third quarter of 2017 resulted in lower sales for EMEA. Higher sales in employee benefits in Egypt and credit life in Turkey were partially offset by lower employee benefits sales in the Gulf region. Revenues in our MetLife Holdings segment decreased as a result of the discontinuance of the marketing of life and annuity products in early 2017.

	Three Months Ended March 31,	
	2018	2017
	(In millions)	
Revenues		
Premiums	$9,178	$8,965
Universal life and investment-type product policy fees	1,392	1,360
Net investment income	3,745	4,421
Other revenues	474	342
Net investment gains (losses)	(333)	88
Net derivative gains (losses)	349	(212)
Total revenues	14,805	14,964
Expenses		
Policyholder benefits and claims and policyholder dividends	9,015	9,173
Interest credited to policyholder account balances	769	1,451
Capitalization of DAC	(796)	(713)
Amortization of DAC and VOBA	693	663
Amortization of negative VOBA	(22)	(43)
Interest expense on debt	286	283
Other expenses	3,204	3,078
Total expenses	13,149	13,892
Income (loss) from continuing operations before provision for income tax	1,656	1,072
Provision for income tax expense (benefit)	399	120
Income (loss) from continuing operations, net of income tax	1,257	952
Income (loss) from discontinued operations, net of income tax	—	(76)
Net income (loss)	1,257	876
Less: Net income (loss) attributable to noncontrolling interests	4	3
Net income (loss) attributable to MetLife, Inc.	1,253	873
Less: Preferred stock dividends	6	6
Net income (loss) available to MetLife, Inc.’s common shareholders	$1,247	$867

Table of Contents

Three Months Ended March 31, 2018 Compared with the Three Months Ended March 31, 2017

During the three months ended March 31, 2018, net income (loss) increased $381 million from the prior period, primarily driven by favorable changes in net derivative gains (losses) and results from our divested businesses, partially offset by an unfavorable change in net investment gains (losses) and the unfavorable impact of U.S. Tax Reform.

Management of Investment Portfolio and Hedging Market Risks with Derivatives. We manage our investment portfolio using disciplined asset/liability management ("ALM") principles, focusing on cash flow and duration to support our current and future liabilities. Our intent is to match the timing and amount of liability cash outflows with invested assets that have cash inflows of comparable timing and amount, while optimizing risk-adjusted net investment income and risk-adjusted total return. Our investment portfolio is heavily weighted toward fixed income investments, with over 80% of our portfolio invested in fixed maturity securities and mortgage loans. These securities and loans have varying maturities and other characteristics which cause them to be generally well suited for matching the cash flow and duration of insurance liabilities. In addition, our general account investment portfolio includes, within contractholder-directed equity securities and fair value option securities (collectively, "Unit-linked and FVO Securities"), contractholder-directed equity securities supporting unit-linked variable annuity type liabilities ("Unit-linked investments"), which do not qualify as separate account assets. The returns on these Unit-linked investments, which can vary significantly from period to period, include changes in estimated fair value subsequent to purchase, inure to contractholders and are offset in earnings by a corresponding change in policyholder account balances through interest credited to policyholder account balances.

We purchase investments to support our insurance liabilities and not to generate net investment gains and losses. However, net investment gains and losses are incurred and can change significantly from period to period due to changes in external influences, including changes in market factors such as interest rates, foreign currency exchange rates, credit spreads and equity markets; counterparty specific factors such as financial performance, credit rating and collateral valuation; and internal factors such as portfolio rebalancing. Changes in these factors from period to period can significantly impact the levels of both impairments and realized gains and losses on investments sold.

We also use derivatives as an integral part of our management of the investment portfolio and insurance liabilities to hedge certain risks, including changes in interest rates, foreign currency exchange rates, credit spreads and equity market levels. We use freestanding interest rate, equity, credit and currency derivatives to hedge certain invested assets and insurance liabilities. A small portion of these hedges are designated and qualify as accounting hedges, which reduce volatility in earnings. For those hedges not designated as accounting hedges, changes in market factors lead to the recognition of fair value changes in net derivative gains (losses) generally without an offsetting gain or loss recognized in earnings for the item being hedged, which creates volatility in earnings. During 2017, we restructured certain derivative hedges to decrease volatility from nonqualified interest rate derivatives and to help meet prospective dividend and free cash flow objectives under varying interest rate scenarios. As part of this restructuring, we replaced certain nonqualified derivatives with derivatives that qualify for hedge accounting treatment. In addition, we also entered into replication transactions using interest rate swaps, which are accounted for at amortized cost under statutory guidelines and are nonqualified derivatives under GAAP. We actively evaluate market risk hedging needs and strategies to ensure our free cash flow and capital objectives are met under a range of market conditions.

Certain variable annuity products with guaranteed minimum benefits contain embedded derivatives that are measured at estimated fair value separately from the host variable annuity contract, with changes in estimated fair value recorded in net derivative gains (losses). We use freestanding derivatives to hedge the market risks inherent in these variable annuity guarantees. Ongoing refinement of the strategy may be required to adapt to changing NAIC rules, which may become effective as early as January 1, 2019. The restructured hedge strategy is classified as a macro hedge program, included in the non-VA program derivatives section of the table below, to protect our overall statutory capital from significant adverse economic conditions. The valuation of these embedded derivatives includes a nonperformance risk adjustment, which is unhedged, and can be a significant driver of net derivative gains (losses) and volatility in earnings, but does not have an economic impact on us.

Table of Contents

Net Derivative Gains (Losses). The variable annuity embedded derivatives and associated freestanding derivative hedges are collectively referred to as "VA program derivatives" in the following table. All other derivatives that are economic hedges of certain invested assets and insurance liabilities are referred to as "non-VA program derivatives" in the following table. The table below presents the impact on net derivative gains (losses) from non-VA program derivatives and VA program derivatives:

	Three Months Ended March 31,	
	2018	2017
	(In millions)	
Non-VA program derivatives		
Interest rate	$(97)	$(168)
Foreign currency exchange rate	287	125
Credit	(29)	44
Equity	17	(1)
Non-VA embedded derivatives	26	(40)
Total non-VA program derivatives	204	(40)
VA program derivatives		
Market risks in embedded derivatives	(4)	287
Nonperformance risk adjustment on embedded derivatives	20	(52)
Other risks in embedded derivatives	(5)	(38)
Total embedded derivatives	11	197
Freestanding derivatives hedging embedded derivatives	134	(369)
Total VA program derivatives	145	(172)
Net derivative gains (losses)	$349	$(212)

The favorable change in net derivative gains (losses) on non-VA program derivatives was $244 million ($193 million, net of income tax). This was primarily due to realized currency losses in the prior period on sales of foreign-denominated securities in non-qualified hedges. Due to asymmetrical accounting, currency gains or losses on the derivatives are recognized each period in net derivative gains (losses), whereas currency gains or losses since inception on the foreign-denominated securities are recognized in net derivative gains (losses) only at maturity or termination. Additionally, short-term interest rates increased more in the current period than in the prior period, favorably impacting interest rate caps. There was a change in the value of the underlying assets favorably impacting non-VA embedded derivatives related to funds withheld on a certain reinsurance agreement. These increases were partially offset by credit spreads mostly widening in the current period and narrowing in the prior period unfavorably impacting replications. Because certain of these hedging strategies are not designated or do not qualify as accounting hedges, the changes in the estimated fair value of these freestanding derivatives are recognized in net derivative gains (losses) without an offsetting gain or loss recognized in earnings for the item being hedged.

The favorable change in net derivative gains (losses) on VA program derivatives was $317 million ($250 million, net of income tax). This was due to a favorable change of $212 million ($167 million, net of income tax) in market risks in embedded derivatives, net of the impact of freestanding derivatives hedging those risks, a favorable change of $33 million ($26 million, net of income tax) in other risks in embedded derivatives, and a favorable change of $72 million, ($57 million, net of income tax) in the nonperformance risk adjustment on embedded derivatives. Other risks relate primarily to the impact of policyholder behavior and other non-market risks that generally cannot be hedged.

Table of Contents

The foregoing $212 million ($167 million, net of income tax) favorable change reflects a $503 million ($397 million, net of income tax) favorable change in freestanding derivatives hedging market risks in embedded derivatives partially offset by a $291 million ($230 million, net of income tax) unfavorable change in market risks in embedded derivatives.

The primary changes in market factors are summarized as follows:

- Key equity index levels decreased in the current period and increased in the prior period, contributing to a favorable change in our freestanding derivatives and an unfavorable change in our embedded derivatives. For example, the S&P 500 Index decreased 1% in the current period and increased 6% in the prior period.
- Long-term U.S. interest rates increased more in the current period versus the prior period, contributing to a favorable change in our embedded derivatives. Our freestanding interest rate derivatives were favorably impacted by the restructuring of the VA hedging strategy. For example, the 30-year U.S. swap rate increased 28 basis points in the current period and increased 5 basis points in the prior period.
- Changes in foreign currency exchange rates contributed to a favorable change in our freestanding derivatives and an unfavorable change in our embedded derivatives related to the assumed variable annuity guarantees from our former operating joint venture in Japan. For example, the Japanese yen strengthened against the U.S. dollar by 6% in the current period and strengthened by 4% in the prior period.

The aforementioned $72 million ($57 million, net of income tax) favorable change in the nonperformance risk adjustment on embedded derivatives resulted from a favorable change of $49 million, before income tax, related to changes in our own credit spread, in addition to a favorable change of $23 million, before income tax, as a result of model changes and changes in capital market inputs, such as long-term interest rates and key equity index levels, on variable annuity guarantees.

When equity index levels decrease in isolation, the variable annuity guarantees become more valuable to policyholders, which results in an increase in the undiscounted embedded derivative liability. Discounting this unfavorable change by the risk adjusted rate yields a smaller loss than by discounting at the risk-free rate, thus creating a gain from including an adjustment for nonperformance risk.

When the risk-free interest rate decreases in isolation, discounting the embedded derivative liability produces a higher valuation of the liability than if the risk-free interest rate had remained constant. Discounting this unfavorable change by the risk adjusted rate yields a smaller loss than by discounting at the risk-free interest rate, thus creating a gain from including an adjustment for nonperformance risk.

When our own credit spread increases in isolation, discounting the embedded derivative liability produces a lower valuation of the liability than if our own credit spread had remained constant. As a result, a gain is created from including an adjustment for nonperformance risk. For each of these primary market drivers, the opposite effect occurs when they move in the opposite direction.

Net Investment Gains (Losses). The unfavorable change in net investment gains (losses) of $421 million ($333 million, net of income tax) primarily reflects mark-to-market losses on both our retained investment in Brighthouse Financial, Inc. common stock and our equity securities both of which are measured at fair value through net income, as well as a leveraged lease impairment and higher losses on sales of fixed maturity securities in the current period.

Divested Businesses. Income (loss) before provision for income tax related to the divested businesses, excluding net investment gains (losses) and net derivative gains (losses), increased $316 million ($250 million, net of income tax) to a loss of $2 million ($1 million, net of income tax) in the current period from a loss of $318 million ($251 million, net of income tax) in the prior period. Included in this increase was an increase in total revenues of $287 million, before income tax, and a decrease in total expenses of $29 million, before income tax. Divested businesses primarily include activity related to the Separation.

Discontinued Operations. Income (loss) from discontinued operations, net of income tax, increased $76 million for the three months ended March 31, 2018 from a loss of $76 million, net of income tax, for the comparable prior period. Income (loss) from discontinued operations reflects the results of our former Brighthouse Financial segment. For further information, see Note 3 of the Notes to the Interim Condensed Consolidated Financial Statements.

Table of Contents

Taxes. Income tax expense for the three months ended March 31, 2018 was $399 million, or 24% of income (loss) from continuing operations before provision for income tax, compared with $120 million, or 11% of income (loss) from continuing operations before provision for income tax, for the three months ended March 31, 2017. The Company's effective tax rates differ from the U.S. statutory rate of 21% typically due to non-taxable investment income, tax credits for low income housing, and foreign earnings taxed at different rates than the U.S. statutory rate. Our current period results include a tax charge of $17 million related to a tax adjustment in Chile and a $5 million tax charge in Colombia to establish a deferred tax liability due to a change in tax status. Our prior period results include a tax benefit of $9 million related to the settlement of an audit. The changes from U.S. Tax Reform resulted in a decrease in earnings of $54 million for the first quarter of 2018 compared to the prior period.

Adjusted Earnings. As more fully described in "— Non-GAAP and Other Financial Disclosures," we use adjusted earnings, which does not equate to income (loss) from continuing operations, net of income tax, as determined in accordance with GAAP, to analyze our performance, evaluate segment performance, and allocate resources. We believe that the presentation of adjusted earnings and adjusted earnings available to common shareholders, as we measure it for management purposes, enhances the understanding of our performance by highlighting the results of operations and the underlying profitability drivers of the business. Adjusted earnings and other financial measures based on adjusted earnings allow analysis of our performance relative to our business plan and facilitate comparisons to industry results. Adjusted earnings and adjusted earnings available to common shareholders should not be viewed as substitutes for net income (loss) and net income (loss) available to MetLife, Inc.'s common shareholders, respectively. Adjusted earnings available to common shareholders increased $102 million, net of income tax, to $1.4 billion, net of income tax, for the three months ended March 31, 2018 from $1.3 billion, net of income tax, for the three months ended March 31, 2017.

Table of Contents

Reconciliation of income (loss) from continuing operations, net of income tax, to adjusted earnings available to common shareholders

Three Months Ended March 31, 2018

	U.S.	Asia	Latin America	EMEA	MetLife Holdings	Corporate & Other	Total
	(In millions)						
Net income (loss)	$489	$564	$ 186	$ 87	$ 344	$ (413)	$1,257
Less: Income (loss) from discontinued operations, net of income tax	—	—	—	—	—	—	—
Income (loss) from continuing operations, net of income tax	$489	$564	$ 186	$ 87	$ 344	$ (413)	$1,257
Less: Net investment gains (losses)	(110)	78	3	(6)	(106)	(192)	(333)
Less: Net derivative gains (losses)	(54)	259	149	1	34	(40)	349
Less: Other adjustments to continuing operations (1)	(45)	(8)	(64)	4	(31)	(2)	(146)
Less: Provision for income tax (expense) benefit	45	(92)	(42)	7	22	18	(42)
Adjusted earnings	$653	$327	$ 140	$ 81	$ 425	(197)	1,429
Less: Preferred stock dividends						6	6
Adjusted earnings available to common shareholders						$ (203)	$1,423

Three Months Ended March 31, 2017

	U.S.	Asia	Latin America	EMEA	MetLife Holdings	Corporate & Other	Total
	(In millions)						
Net income (loss)	$345	$480	$ 231	$ 81	$ 345	$ (606)	$876
Less: Income (loss) from discontinued operations, net of income tax	—	—	—	—	—	(76)	(76)
Income (loss) from continuing operations, net of income tax	$345	$480	$ 231	$ 81	$ 345	$ (530)	$952
Less: Net investment gains (losses)	(18)	117	12	2	21	(46)	88
Less: Net derivative gains (losses)	(148)	177	136	13	(4)	(386)	(212)
Less: Other adjustments to continuing operations (1)	(66)	(4)	(29)	5	(83)	(314)	(491)
Less: Provision for income tax (expense) benefit	80	(105)	(31)	(14)	24	286	240
Adjusted earnings	$497	$295	$ 143	$ 75	$ 387	(70)	1,327
Less: Preferred stock dividends						6	6
Adjusted earnings available to common shareholders						$ (76)	$1,321

(1) See definitions of adjusted revenues and adjusted expenses under "— Non-GAAP and Other Financial Disclosures" for the components of such adjustments and Note 2 of the Notes to the Interim Condensed Consolidated Financial Statements for additional details on these adjustments by financial statement line item.

Table of Contents

Reconciliation of revenues to adjusted revenues and expenses to adjusted expenses

Three Months Ended March 31, 2018

	U.S.	Asia	Latin America	EMEA	MetLife Holdings	Corporate & Other	Total
	(In millions)						
Total revenues	$7,123	$3,203	$ 1,417	$462	$2,595	$ 5	$14,805
Less: Net investment gains (losses)	(110)	78	3	(6)	(106)	(192)	(333)
Less: Net derivative gains (losses)	(54)	259	149	1	34	(40)	349
Less: Adjustments related to net investment gains (losses) and net derivative gains (losses)	—	(4)	—	(1)	—	—	(5)
Less: Other adjustments to revenues (1)	(54)	(82)	—	(286)	(16)	84	(354)
Total adjusted revenues	$7,341	$2,952	$ 1,265	$754	$2,683	$ 153	$15,148
Total expenses	$6,508	$2,402	$ 1,114	$361	$2,169	$ 595	$13,149
Less: Adjustments related to net investment gains (losses) and net derivative gains (losses)	—	(7)	—	(1)	(6)	—	(14)
Less: Other adjustments to expenses (1)	(9)	(71)	64	(290)	21	86	(199)
Total adjusted expenses	$6,517	$2,480	$ 1,050	$652	$2,154	$ 509	$13,362

Three Months Ended March 31, 2017

	U.S.	Asia	Latin America	EMEA	MetLife Holdings	Corporate & Other	Total
	(In millions)						
Total revenues	$7,034	$3,103	$ 1,398	$1,059	$2,942	$ (572)	$14,964
Less: Net investment gains (losses)	(18)	117	12	2	21	(46)	88
Less: Net derivative gains (losses)	(148)	177	136	13	(4)	(386)	(212)
Less: Adjustments related to net investment gains (losses) and net derivative gains (losses)	—	1	—	—	—	—	1
Less: Other adjustments to revenues (1)	(66)	22	31	356	(33)	(277)	33
Total adjusted revenues	$7,266	$2,786	$ 1,219	$688	$2,958	$ 137	$15,054
Total expenses	$6,520	$2,372	$ 1,098	$952	$2,435	$ 515	$13,892
Less: Adjustments related to net investment gains (losses) and net derivative gains (losses)	—	1	—	—	(2)	(1)	(2)
Less: Other adjustments to expenses (1)	—	26	60	351	52	38	527
Total adjusted expenses	$6,520	$2,345	$ 1,038	$601	$2,385	$ 478	$13,367

(1) See definitions of adjusted revenues and adjusted expenses under "— Non-GAAP and Other Financial Disclosures" for the components of such adjustments and Note 2 of the Notes to the Interim Condensed Consolidated Financial Statements for additional details on these adjustments by financial statement line item.

Table of Contents

Consolidated Results —Adjusted Earnings

Three Months Ended March 31, 2018 Compared with the Three Months Ended March 31, 2017

Unless otherwise stated, all amounts discussed below are net of income tax.

Overview. The primary drivers of the increase in adjusted earnings were the favorable impact of U.S. Tax Reform, higher net investment income due to a larger asset base, favorable underwriting and lower expenses, partially offset by higher interest credited expenses, lower investment yields and other unfavorable tax items.

Foreign Currency. Changes in foreign currency exchange rates had a $35 million positive impact on adjusted earnings for the first quarter of 2018 compared to the prior period. Unless otherwise stated, all amounts discussed below are net of foreign currency fluctuations. Foreign currency fluctuations can result in significant variances in the financial statement line items.

U.S. Tax Reform. The changes from U.S. Tax Reform resulted in an increase in adjusted earnings of $101 million for the first quarter of 2018 compared to the prior period.

Business Growth. We benefited from positive net flows from many of our businesses, which increased our invested asset base. Growth in the investment portfolios of our U.S., Asia, and Latin America segments resulted in higher net investment income. However, this was offset by a corresponding increase in interest credited expense on certain insurance-related liabilities. In our U.S. segment, an increase in average premium per policy in our auto business, partially offset by a decrease in exposures, improved adjusted earnings. Business growth also drove an increase in commissions and other variable expenses, which were partially offset by higher DAC capitalization. The items discussed above resulted in a $38 million increase in adjusted earnings.

Market Factors. Market factors, including interest rate levels, variability in equity market returns, and foreign currency exchange rate fluctuations, continued to impact our results; however, certain impacts were mitigated by derivatives used to hedge these risks. Excluding the impact of changes in foreign currency exchange rates on reported net investment income in our non-U.S. segments and changes in inflation rates on our inflation-indexed investments, investment yields decreased. Investment yields were negatively affected by (i) lower yields on fixed maturity securities and fixed maturity and equity securities held-for-investment by the general account to support asset and liability management strategies for certain insurance products and investments in certain separate accounts (“FVO general account securities”), (ii) lower returns on private equities driven by a decrease in certain partnership distributions, and (iii) lower income on derivatives. These decreases were partially offset by higher yields on mortgage loans. Higher average interest credited rates drove an increase in interest credited expenses, primarily in our U.S. segment. In our MetLife Holdings segment, lower equity market performance in the current period drove a decrease in average separate account balances, resulting in lower asset-based fee income. The changes in market factors discussed above resulted in a $136 million decrease in adjusted earnings.

Underwriting and Other Insurance Adjustments. Favorable underwriting resulted in a $64 million increase in adjusted earnings primarily as a result of lower catastrophe losses, favorable mortality in our Latin America segment and favorable morbidity in our U.S. segment, partially offset by unfavorable claims experience in our Asia segment. Refinements to DAC and certain insurance-related liabilities, which were recorded in both periods across the majority of our segments, resulted in a $26 million increase in adjusted earnings. This includes a current period favorable reserve adjustment of $62 million in our MetLife Holdings segment relating to certain variable annuity guarantees assumed from a former joint venture in Japan. This also includes favorable refinements in the prior period of (i) a DAC adjustment related to certain participating whole life business assumed from Brighthouse; and (ii) a reserve adjustment resulting from modeling improvements in our life business reserving process.

Expenses and Taxes. A $50 million decrease in expenses included expenses incurred in the prior period related to the guaranty fund assessment for Penn Treaty, as well as declines in Separation-related costs and costs associated with enterprise-wide initiatives. Our effective tax rates differ from the U.S. statutory rate of 21% typically due to nontaxable investment income, tax credits for low income housing, and foreign earnings taxed at different rates than the U.S. statutory rate. Lower utilization of tax preferenced items and foreign tax rate differential decreased current period adjusted earnings by $39 million from the prior period. Our current period results include a tax charge of $17 million related to a tax adjustment in Chile and a $5 million tax charge in Colombia to establish a deferred tax liability due to a change in tax status. Our prior period results include a tax benefit of $9 million related to the settlement of an

audit.

Other. Adjusted earnings decreased by $19 million as a result of continued annuities reinsurance activity with Brighthouse. This unfavorable impact was due to the prior period recapture and novation of assumed and ceded agreements covering certain variable annuity business.

Table of Contents

Segment Results and Corporate & Other

U.S.

Business Overview. Sales decreased from the prior period, primarily driven by our RIS business, with lower sales of stable value, pension risk transfers, structured settlement and specialized benefit products. These decreases in sales were partially offset by an increase in funding agreement issuances. Changes in premiums for the RIS business were almost entirely offset by the related changes in policyholder benefits and claims. Sales declined slightly in the Group Benefits business compared to the prior period, as lower sales in our core insurance products were mostly offset by continued growth in our voluntary products. The increase in premiums, fees and other revenues from the impact of prior year sales was partially offset by the loss of a large dental contract in the second quarter of 2017. In our Property & Casualty business, sales increased over the prior period. The number of exposures decreased from the prior period, reflecting management actions to improve the quality of the business.

	Three Months Ended March 31,	
	2018	2017
	(In millions)	
Adjusted revenues		
Premiums	$5,217	$5,185
Universal life and investment-type product policy fees	258	265
Net investment income	1,662	1,612
Other revenues	204	204
Total adjusted revenues	7,341	7,266
Adjusted expenses		
Policyholder benefits and claims and policyholder dividends	5,138	5,244
Interest credited to policyholder account balances	407	351
Capitalization of DAC	(106)	(100)
Amortization of DAC and VOBA	115	114
Interest expense on debt	2	2
Other expenses	961	909
Total adjusted expenses	6,517	6,520
Provision for income tax expense (benefit)	171	249
Adjusted earnings	$653	$497

Three Months Ended March 31, 2018 Compared with the Three Months Ended March 31, 2017

Unless otherwise stated, all amounts discussed below are net of income tax.

U.S. Tax Reform. The changes from U.S. Tax Reform resulted in an increase in adjusted earnings of $101 million for the first quarter of 2018 compared to the prior period.

Business Growth. The impact of deposits, net flows from funding agreements and increased premiums resulted in higher average invested assets, improving net investment income. However, consistent with the growth in average invested assets from increased premiums and net flows, interest credited on long-duration contracts increased. An increase in average premium per policy in our auto business, partially offset by the decrease in exposures, improved adjusted earnings. Higher volume-related, direct and premium tax expenses were mostly offset by lower pension and post retirement expenses. This net increase in expenses, coupled with the increase due to the current period reinstatement of the annual health insurer fee under the Patient Protection and Affordable Care Act, were mostly offset by a corresponding increase in premiums, fees and other revenues. The combined impact of the items discussed above increased adjusted earnings by $49 million.

Table of Contents

Market Factors. Market factors, including interest rate levels, variability in equity market returns and foreign currency exchange rate fluctuations, continued to impact our results; however, certain impacts were mitigated by derivatives used to hedge these risks. Investment yields decreased, primarily due to lower returns from private equities, driven by a decrease in certain partnership distributions, as well as a decrease in derivative income. These decreases in investment yields were partially offset by higher returns on fixed maturity securities, real estate joint ventures and mortgage loans. Higher average interest credited rates drove an increase in interest credited expenses; however, this was partially offset by an increase in adjusted earnings due to a decrease in the crediting rate on certain long-duration insurance contracts. The changes in market factors discussed above resulted in a $51 million decrease in adjusted earnings.

Underwriting and Other Insurance Adjustments. In our Property & Casualty business, catastrophe-related losses decreased $43 million in the current period, primarily due to the impact of severe storm activity in the prior period. Non-catastrophe claim costs increased $5 million, the result of higher severities in our auto business and higher frequencies in our homeowner business, partially offset by lower auto frequencies and homeowner severities. Favorable claims experience, primarily in our individual disability and accident & health businesses, resulted in a $17 million increase in adjusted earnings. Less favorable mortality results in the current period, mainly due to less favorable claim experience in our term life business, driven by the impact of a more severe flu season, were partially offset by lower incidence in our accidental death & dismemberment and universal life businesses, which resulted in a $7 million decrease in adjusted earnings. Favorable mortality in our specialized life insurance business was partially offset by less favorable mortality in our pension risk transfer business, increasing adjusted earnings by $7 million.

Asia

Business Overview. Sales decreased compared to the prior period primarily due to strong prior period sales which included one large group case in Australia. In addition, sales were lower in Korea and Hong Kong as a result of prior period sales in advance of regulatory changes that went into effect in the second quarter of 2017. In Japan, we continue to see an increase in sales of foreign currency-denominated life products.

	Three Months Ended March 31,	
	2018	2017
	(In millions)	
Adjusted revenues		
Premiums	$1,748	$1,708
Universal life and investment-type product policy fees	394	366
Net investment income	795	702
Other revenues	15	10
Total adjusted revenues	2,952	2,786
Adjusted expenses		
Policyholder benefits and claims and policyholder dividends	1,343	1,315
Interest credited to policyholder account balances	351	321
Capitalization of DAC	(465)	(420)
Amortization of DAC and VOBA	314	291
Amortization of negative VOBA	(15)	(37)
Other expenses	952	875
Total adjusted expenses	2,480	2,345
Provision for income tax expense (benefit)	145	146
Adjusted earnings	$327	$295

Three Months Ended March 31, 2018 Compared with the Three Months Ended March 31, 2017

Unless otherwise stated, all amounts discussed below are net of income tax.

Foreign Currency. Changes in foreign currency exchange rates increased adjusted earnings by $11 million for the first quarter of 2018 compared to the prior period, primarily due to the strengthening of the Japanese yen and Korean won

against the U.S. dollar. Unless otherwise stated, all amounts discussed below are net of foreign currency fluctuations. Foreign currency fluctuations can result in significant variances in the financial statement line items.

Table of Contents

U.S. Tax Reform. The changes from U.S. Tax Reform resulted in an increase in adjusted earnings of $11 million for the first quarter of 2018 compared to the prior period.

Business Growth. Asia's premiums, fees and other revenues decreased from the prior period mainly due to a change in product mix from premium-based products to fee-based products, primarily from Yen protection products to foreign currency-denominated life products in Japan. The decrease in premiums from Yen protection products was partially offset by a related decline in policyholder benefits. Positive net flows in Japan and Korea resulted in higher average invested assets, which improved net investment income. The combined impact of the items discussed above improved adjusted earnings by $22 million.

Market Factors. Market factors, including interest rate levels and variability in equity market returns, continued to impact our results; however, certain impacts were mitigated by derivatives used to hedge these risks. Investment results were favorably impacted by increased derivative income, higher yields on mortgage loans and higher earnings from our joint venture in China. These increases were partially offset by lower returns on real estate investments due to a prior period lease termination fee and lower yields on fixed maturity securities in Korea and Bangladesh. The decline in fixed maturity yields was partially offset by the favorable impact of increased sales of foreign currency-denominated fixed annuities in Japan, primarily in its Australian dollar-denominated portfolio, which drove an increase in higher yielding foreign currency-denominated fixed maturity securities. The combined impact of the items discussed above increased adjusted earnings by $13 million.

Underwriting and Other Insurance Adjustments. Higher lapses and claims in Japan decreased adjusted earnings by $21 million. Refinements to certain insurance liabilities and other liabilities in the prior period resulted in a $15 million increase in adjusted earnings.

Expenses. Higher expenses, primarily driven by higher employee-related and project costs, reduced adjusted earnings by $15 million.

Latin America

Business Overview. Total sales for Latin America decreased compared to the prior period, driven by lower sales of group accident & health, life and retirement products in Mexico, partially offset by higher accident & health sales in Chile.

	Three Months Ended March 31,	
	2018	2017
	(In millions)	
Adjusted revenues		
Premiums	$699	$647
Universal life and investment-type product policy fees	282	260
Net investment income	276	303
Other revenues	8	9
Total adjusted revenues	1,265	1,219
Adjusted expenses		
Policyholder benefits and claims and policyholder dividends	646	633
Interest credited to policyholder account balances	98	82
Capitalization of DAC	(94)	(82)
Amortization of DAC and VOBA	60	78
Interest expense on debt	2	1
Other expenses	338	326
Total adjusted expenses	1,050	1,038
Provision for income tax expense (benefit)	75	38
Adjusted earnings	$140	$143

Three Months Ended March 31, 2018 Compared with the Three Months Ended March 31, 2017

Unless otherwise stated, all amounts discussed below are net of income tax.

Table of Contents

Foreign Currency. Changes in foreign currency exchange rates increased adjusted earnings by $14 million for the first quarter of 2018 compared to the prior period mainly due to the strengthening of the Mexican and Chilean pesos against the U.S. dollar. Unless otherwise stated, all amounts discussed below are net of foreign currency fluctuations. Foreign currency fluctuations can result in significant variances in the financial statement line items.

U.S. Tax Reform. The changes from U.S. Tax Reform resulted in a decrease in adjusted earnings of $10 million for the first quarter of 2018 compared to the prior period.

Business Growth. Latin America experienced growth across several lines of business primarily within Chile. This growth resulted in increased premiums and policy fee income which was largely offset by related changes in policyholder benefits. Positive net flows, primarily from Mexico and Chile, resulted in an increase in average invested assets and generated higher net investment income. This was partially offset by an increase in interest credited expense on certain insurance liabilities. Business growth also drove an increase in commissions and other variable expenses, which were partially offset by higher DAC capitalization. The items discussed above resulted in a $9 million decrease in adjusted earnings.

Market Factors. Market factors, including interest rate levels and variability in equity market returns, continued to impact our results; however, certain impacts were mitigated by derivatives used to hedge these risks. Changes in market factors resulted in a $38 million decrease in adjusted earnings primarily due to lower investment yields. The decrease in investment yields was primarily driven by lower returns from FVO general account securities in Chile and lower yields on fixed income securities in Mexico and Chile. In addition, an increase in interest credited expenses contributed to the decline in adjusted earnings.

Underwriting and Other Insurance Adjustments. Favorable underwriting resulted in a $35 million increase to adjusted earnings primarily driven by lower claims experience in Mexico. In addition, refinements to certain insurance liabilities and other adjustments in both periods, primarily in Chile, Mexico and Brazil, resulted in a $5 million increase to adjusted earnings.

Expenses and Taxes. An $18 million decrease in expenses was primarily the result of reduction of a litigation reserve in Argentina. Our results for the current period include tax expenses of $20 million primarily driven by a $17 million tax charge related to a tax adjustment in Chile and a $5 million tax charge in Colombia to establish a deferred tax liability due to a change in tax status. Other tax items include a $10 million tax benefit as a result of changes in the valuation of the peso in Argentina in both periods offset by a prior period tax benefit of $9 million related to the settlement of an audit.

Table of Contents

EMEA

Business Overview. Sales decreased slightly in the current period. Excluding the impact from the closure of the U.K. wealth management product to new business, sales have increased, driven by accident and health, life and credit business sales.

	Three Months Ended March 31,	
	2018	2017
	(In millions)	
Adjusted revenues		
Premiums	$551	$502
Universal life and investment-type product policy fees	112	95
Net investment income	75	74
Other revenues	16	17
Total adjusted revenues	754	688
Adjusted expenses		
Policyholder benefits and claims and policyholder dividends	294	269
Interest credited to policyholder account balances	25	24
Capitalization of DAC	(118)	(92)
Amortization of DAC and VOBA	106	87
Amortization of negative VOBA	(6)	(3)
Other expenses	351	316
Total adjusted expenses	652	601
Provision for income tax expense (benefit)	21	12
Adjusted earnings	$81	$75

Three Months Ended March 31, 2018 Compared with the Three Months Ended March 31, 2017

Unless otherwise stated, all amounts discussed below are net of income tax.

Foreign Currency. Changes in foreign currency exchange rates increased adjusted earnings by $10 million for the first quarter of 2018 as compared to the prior period, primarily driven by the weakening of the U.S. dollar against the euro, the Polish zloty, and the British pound. Unless otherwise stated, all amounts discussed below are net of foreign currency fluctuations. Foreign currency fluctuations can result in significant variances in the financial statement line items.

U.S. Tax Reform. The changes from U.S. Tax Reform resulted in a decrease in adjusted earnings of $7 million for the first quarter of 2018 compared to the prior period.

Business Growth. Growth from our accident & health and credit life businesses in Turkey and across several European markets increased adjusted earnings by $8 million.

Market Factors. Market factors, including interest rate levels and variability in equity market returns, continued to impact our results; however, certain impacts were mitigated by derivatives used to hedge these risks. A slight decrease in net investment income was driven by the sustained low interest rate environment, which drove lower investment yields on fixed maturity securities.

Underwriting. Unfavorable underwriting, primarily in our employee benefits business in the U.K. and in our ordinary life business in France, decreased adjusted earnings by $11 million.

Expenses. Adjusted earnings increased by $12 million due to expense discipline across the region, as well as enterprise-wide initiatives taken by the Company, notably the closing of the wealth management product to new business in the U.K. in the third quarter of 2017.

Other. A decrease in our invested asset base due to dividend payments impacted net investment income and decreased adjusted earnings by $4 million.

113

Table of Contents

MetLife Holdings

Business Overview. The discontinuance of the marketing of life and annuity products in this segment in early 2017 resulted in lower revenues. This will continue to result in a declining DAC asset over time and we anticipate an average decline in premiums, fees and other revenues of approximately 5% per year from expected business run-off. A significant portion of our adjusted earnings is driven by separate account balances. Most directly, these balances determine asset-based fee income but they also impact DAC amortization and asset-based commissions. Separate account balances are driven by sales, movements in the market, surrenders, withdrawals, benefit payments, transfers and policy charges. Separate account balances decreased due to negative net flows, as benefits, surrenders and withdrawals exceeded sales and equity performance. Although we have discontinued selling our long-term care product, we continue to collect premiums and administer the existing block of business, which contributed to asset growth in the segment, and we expect the related reserves to grow as this block matures.

	Three Months Ended March 31,	
	2018	2017
	(In millions)	
Adjusted revenues		
Premiums	$950	$1,059
Universal life and investment-type product policy fees	314	362
Net investment income	1,352	1,441
Other revenues	67	96
Total adjusted revenues	2,683	2,958
Adjusted expenses		
Policyholder benefits and claims and policyholder dividends	1,550	1,733
Interest credited to policyholder account balances	236	257
Capitalization of DAC	(10)	(34)
Amortization of DAC and VOBA	100	74
Interest expense on debt	2	15
Other expenses	276	340
Total adjusted expenses	2,154	2,385
Provision for income tax expense (benefit)	104	186
Adjusted earnings	$425	$387

Three Months Ended March 31, 2018 Compared with the Three Months Ended March 31, 2017

Unless otherwise stated, all amounts discussed below are net of income tax.

U.S. Tax Reform. The changes from U.S. Tax Reform resulted in an increase in adjusted earnings of $73 million for the first quarter of 2018 compared to the prior period.

Business Growth. Lower net investment income, resulting from a reduced invested asset base, primarily in fixed maturity securities, decreased adjusted earnings. The reduced asset base is primarily the result of negative net flows in our deferred annuities business. These negative net flows also contributed to a decrease in average separate account balances and, consequently, asset-based fee income. Lower deferred annuity interest credited increased adjusted earnings. In our life business, a decrease in universal life sales resulted in lower fee income, net of DAC amortization, decreasing adjusted earnings. Interest credited decreased in our life business, partially offset by an increase in our long-term care business, resulting in a net increase to adjusted earnings. The combined impact of the items discussed above resulted in a $29 million decrease in adjusted earnings.

Market Factors. Market factors, including interest rate levels, variability in equity market returns, and foreign currency exchange rate fluctuations, continued to impact our results; however, certain impacts were mitigated by derivatives used to hedge these risks. Investment yields decreased primarily due to lower derivative income, as well as lower returns on fixed maturity securities and mortgage loans. These reductions in yields were partially offset by higher returns on real estate joint ventures. In our deferred annuity business, lower equity returns drove a decrease in average

separate account balances which resulted in lower asset-based fee income. The changes in market factors discussed above resulted in a $46 million decrease in adjusted earnings.

Table of Contents

Underwriting and Other Insurance Adjustments. Favorable claims experience in our long-term care business, as well as mortality gains on life-contingent annuities, partially offset by unfavorable mortality in our life business, resulted in a $7 million increase in adjusted earnings. Refinements to DAC and certain insurance-related liabilities that were recorded in both periods resulted in a $3 million increase in adjusted earnings. This includes a current period favorable reserve adjustment of $62 million relating to certain variable annuity guarantees assumed from a former joint venture in Japan. This also includes favorable refinements in the prior period of (i) a DAC adjustment related to certain participating whole life business assumed from Brighthouse; and (ii) a reserve adjustment resulting from modeling improvements in our life business reserving process.

Expenses. Adjusted earnings increased by $39 million as a result of lower expenses, primarily due to declines in Separation-related expenses.

Other. Adjusted earnings decreased by $19 million as a result of continued annuities reinsurance activity with Brighthouse. This unfavorable impact was due to the prior period recapture and novation of assumed and ceded agreements covering certain variable annuity business and continued reinsurance activity.

Table of Contents

Corporate & Other

	Three Months Ended March 31,	
	2018	2017
	(In millions)	
Adjusted revenues		
Premiums	$13	$38
Net investment income	59	40
Other revenues	81	59
Total adjusted revenues	153	137
Adjusted expenses		
Policyholder benefits and claims and policyholder dividends	(3)	25
Interest credited to policyholder account balances	—	1
Capitalization of DAC	(2)	(1)
Amortization of DAC and VOBA	2	1
Interest expense on debt	280	277
Other expenses	232	175
Total adjusted expenses	509	478
Provision for income tax expense (benefit)	(159)	(271)
Adjusted earnings	(197)	(70)
Less: Preferred stock dividends	6	6
Adjusted earnings available to common shareholders	$(203)	$(76)

The table below presents adjusted earnings available to common shareholders by source:

	Three Months Ended March 31,	
	2018	2017
	(In millions)	
Other business activities	$6	$8
Other net investment income	57	69
Interest expense on debt	(293)	(298)
Corporate initiatives and projects	(39)	(49)
Other	(87)	(71)
Provision for income tax (expense) benefit and other tax-related items	159	271
Preferred stock dividends	(6)	(6)
Adjusted earnings available to common shareholders	$(203)	$(76)

Three Months Ended March 31, 2018 Compared with the Three Months Ended March 31, 2017

Unless otherwise stated, all amounts discussed below are net of income tax.

U.S. Tax Reform. The changes from U.S. Tax Reform resulted in a decrease in adjusted earnings of $67 million for the first quarter of 2018 compared to the prior period.

Other Net Investment Income. Higher returns on private equities were more than offset by lower returns on the remainder of the portfolio, resulting in a decrease of $9 million in other net investment income.

Corporate Initiatives and Projects. Expenses associated with corporate initiatives and projects decreased by $8 million, primarily due to lower costs associated with enterprise-wide initiatives, partially offset by higher expenses related to our unit cost initiative.

Table of Contents

Provision for Income Tax (Expense) Benefit and Other Tax-Related Items. In addition to the impact of U.S. Tax Reform, Corporate & Other's effective tax rate differs from the U.S. statutory rate of 21% typically due to benefits from the impact of certain permanent tax preferenced items, including non-taxable investment income, tax credits for investments in low income housing, and foreign earnings taxed at different rates than the U.S. statutory rate. Results for the current period were lower by $45 million due to decreased utilization of tax preferenced items.

Other. Adjusted earnings decreased as a result of a $32 million increase in litigation reserves and an $18 million increase in corporate-related expenses. These increases in expenses were partially offset by $21 million of expenses incurred in the prior period and taxed at the prior period rate related to the guaranty fund assessment for Penn Treaty and a $13 million decrease in employee-related expenses.

Table of Contents

Investments

Investment Risks

Our primary investment objective is to optimize, net of income tax, risk-adjusted net investment income and risk-adjusted total return while ensuring that assets and liabilities are managed on a cash flow and duration basis. The Investments Department, led by the Chief Investment Officer, manages investment risks using a risk control framework comprised of policies, procedures and limits, as discussed further below. The Investments Risk Committee reviews and monitors investment risk limits and tolerances. We are exposed to the following primary sources of investment risks:

- credit risk, relating to the uncertainty associated with the continued ability of a given obligor to make timely payments of principal and interest;
- interest rate risk, relating to the market price and cash flow variability associated with changes in market interest rates. Changes in market interest rates will impact the net unrealized gain or loss position of our fixed income investment portfolio and the rates of return we receive on both new funds invested and reinvestment of existing funds;
- liquidity risk, relating to the diminished ability to sell certain investments, in times of strained market conditions;
- market valuation risk, relating to the variability in the estimated fair value of investments associated with changes in market factors such as credit spreads and equity market levels. A widening of credit spreads will adversely impact the net unrealized gain (loss) position of the fixed income investment portfolio, will increase losses associated with credit-based non-qualifying derivatives where we assume credit exposure, and, if credit spreads widen significantly or for an extended period of time, will likely result in higher other-than-temporary impairment ("OTTI"). Credit spread tightening will reduce net investment income associated with purchases of fixed maturity securities and will favorably impact the net unrealized gain (loss) position of the fixed income investment portfolio;
- currency risk, relating to the variability in currency exchange rates for foreign denominated investments. This risk relates to potential decreases in estimated fair value and net investment income resulting from changes in currency exchange rates versus the U.S. dollar. In general, the weakening of foreign currencies versus the U.S. dollar will adversely affect the estimated fair value of our foreign denominated investments; and
- real estate risk, relating to commercial, agricultural and residential real estate, and stemming from factors, which include, but are not limited to, market conditions, including the demand and supply of leasable commercial space, creditworthiness of borrowers and their tenants and joint venture partners, capital markets volatility and inherent interest rate movements.

We manage investment risk through in-house fundamental credit analysis of the underlying obligors, issuers, transaction structures and real estate properties. We also manage credit risk, market valuation risk and liquidity risk through industry and issuer diversification and asset allocation. Risk limits to promote diversification by asset sector, to avoid concentrations in any single issuer and to limit overall aggregate credit and equity risk exposure, as measured by our economic capital framework, are approved annually by the Investment Committee of MetLife, Inc. that oversees our investment portfolio. For real estate assets, we manage credit risk and market valuation risk through geographic, property type and product type diversification and asset allocation. We manage interest rate risk as part of our ALM strategies. These strategies include maintaining an investment portfolio with diversified maturities that has a weighted average duration that reflects the duration of our estimated liability cash flow profile, and utilizing product design, such as the use of market value adjustment features and surrender charges, to manage interest rate risk. We also manage interest rate risk through proactive monitoring and management of certain non-guaranteed elements of our products, such as the resetting of credited interest and dividend rates for policies that permit such adjustments. In addition to hedging with foreign currency derivatives, we manage currency risk by matching much of our foreign currency liabilities in our foreign subsidiaries with their respective foreign currency assets, thereby reducing our risk to foreign currency exchange rate fluctuation. We also use certain derivatives in the management of credit, interest rate and market valuation risk.

We use purchased credit default swaps to mitigate credit risk in our investment portfolio. Generally, we purchase credit protection by entering into credit default swaps referencing the issuers of specific assets we own. In certain cases, basis risk exists between these credit default swaps and the specific assets we own. For example, we may purchase credit protection on a macro basis to reduce exposure to specific industries or other portfolio concentrations.

In such instances, the referenced entities and obligations under the credit default swaps may not be identical to the individual obligors or securities in our investment portfolio. In addition, our purchased credit default swaps may have shorter tenors than the underlying investments they are hedging. However, we dynamically hedge this risk through the rebalancing and rollover of our credit default swaps at their most liquid tenors. We believe that our purchased credit default swaps serve as effective economic hedges of our credit exposure.

Table of Contents

We enter into market standard purchased and written credit default swap contracts. Payout under such contracts is triggered by certain credit events experienced by the referenced entities. For credit default swaps covering North American corporate issuers, credit events typically include bankruptcy and failure to pay on borrowed money. For European corporate issuers, credit events typically also include involuntary restructuring. With respect to credit default contracts on Western European sovereign debt, credit events typically include failure to pay debt obligations, repudiation, moratorium, or involuntary restructuring. In each case, payout on a credit default swap is triggered only after the Credit Derivatives Determinations Committee of the International Swaps and Derivatives Association determines that a credit event has occurred.

Current Environment

The global economy and markets continue to be affected by stress and volatility, which has adversely affected the financial services sector, in particular, and global capital markets. Political and economic instability has contributed to global market volatility which may have an impact on our investments.

As a global insurance company, we continue to be impacted by the changing global financial and economic environment, as well as the monetary policy of central banks around the world. Measures taken by central banks, including with respect to the level of interest rates, may have an impact on the pricing levels of risk-bearing investments and may adversely impact our business operations, investment portfolio and derivatives. The current environment continues to impact our net investment income, net investment gains (losses), net derivative gains (losses), level of unrealized gains (losses) within the various asset classes in our investment portfolio, and our level of investment in lower yielding cash equivalents, short-term investments and government securities. See “— Industry Trends — Financial and Economic Environment,” as well as “Risk Factors — Economic Environment and Capital Markets-Related Risks — We Are Exposed to Significant Global Financial and Capital Markets Risks Which May Adversely Affect Our Results of Operations, Financial Condition and Liquidity, and May Cause Our Net Investment Income to Vary from Period to Period” included in the 2017 Annual Report.

European Investments

We maintain general account investments in Europe to support our insurance operations and related policyholder liabilities in these countries and certain of our non-European operations invest in Europe for diversification. In Europe, we have proactively mitigated risk in both direct and indirect exposures by investing in a diversified portfolio of high quality investments with a focus on the higher-rated countries, including the U.K., Germany, France, the Netherlands, Poland, Sweden and Norway. The sovereign debt of these countries continues to maintain investment grade credit ratings from all major rating agencies. Our European fixed maturity and perpetual hybrid securities classified as non-redeemable preferred stock are invested in a diversified portfolio of primarily non-financial services securities. At March 31, 2018, our exposure to such securities in Europe totaled $37.9 billion, at estimated fair value, of which $8.7 billion was in sovereign fixed maturity securities. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Investments — Current Environment — European Investments” included in the 2017 Annual Report for further information.

Selected Country Investments

We have country specific exposure to volatility, as we maintain general account investments in the U.K., South Korea and Mexico to support our insurance operations and related policyholder liabilities in these countries. We also have exposure to volatility in these selected countries through our global portfolio diversification. Our exposure to sovereign fixed maturity securities and total fixed maturity securities of the U.K., South Korea and Mexico totaled $10.1 billion and $25.7 billion, at estimated fair value, respectively, at March 31, 2018.

We manage direct and indirect investment exposure in the selected countries through fundamental credit analysis and we continually monitor and adjust our level of investment exposure. We do not expect any adverse impact to our general account investments in these countries will have a material adverse effect on our results of operations or financial condition.

Table of Contents

Investment Portfolio Results

The following yield table presents the yield and net investment income, as reported on an adjusted basis, for our investment portfolio for the periods indicated. We calculate yields using net investment income, as reported on an adjusted basis. Net investment income, as reported on an adjusted basis, includes the impact of changes in foreign currency exchange rates. This yield table presentation is consistent with how we measure our investment performance for management purposes, and we believe it enhances understanding of our investment portfolio results.

	For the Three Months Ended March 31,					
	2018			2017		
	Yield % (1)		Amount (1)	Yield % (1)		Amount (1)
	(Dollars in millions)					
Fixed maturity securities (2), (3)	4.19	%	$2,839	4.34	%	$2,825
Mortgage loans (3)	4.53	%	792	4.47	%	736
Real estate and real estate joint ventures	3.39	%	83	3.20	%	73
Policy loans	5.12	%	124	5.33	%	127
Equity securities	3.79	%	16	4.90	%	31
Other limited partnership interests	15.10	%	219	18.58	%	240
Cash and short-term investments	1.87	%	46	1.42	%	33
Other invested assets			228			214
Investment income	4.50	%	4,347	4.65	%	4,279
Investment fees and expenses	(0.13)	%	(128)	(0.15)	%	(134)
Net investment income including divested businesses (4)	4.37	%	4,219	4.50	%	4,145
Less: net investment income from divested businesses (4)			—			(27)
Net investment income, as reported on an adjusted basis (4)			$4,219			$4,172

(1) Yields are calculated as investment income as a percent of average quarterly asset carrying values. Investment income excludes recognized gains and losses. Asset carrying values exclude unrealized gains (losses), collateral received in connection with our securities lending program, annuities funding structured settlement claims, freestanding derivative assets, collateral received from derivative counterparties, the effects of consolidating certain variable interest entities ("VIEs") under GAAP that are treated as consolidated securitization entities ("CSEs"), Unit-linked investments and FVO Brighthouse Common Stock. A yield is not presented for other invested assets, as it is not considered a meaningful measure of performance for this asset class.

(2) Investment income from fixed maturity securities includes amounts from FVO general account securities of $6 million and $29 million for the three months ended March 31, 2018 and 2017, respectively.

(3) Investment income from fixed maturity securities and mortgage loans includes prepayment fees.

(4) See Note 2 of the Notes to the Interim Condensed Consolidated Financial Statements for further information, as well as the presentation of net investment income, as reported on an adjusted basis, compared to the most directly comparable GAAP financial measure. See "— Non-GAAP and Other Financial Disclosures" for discussion of divested businesses.

See "— Results of Operations — Consolidated Results — Three Months Ended March 31, 2018 Compared with the Three Months Ended March 31, 2017" for an analysis of the period over period changes in net investment income.

Table of Contents

Fixed Maturity Securities AFS and Equity Securities

The following table presents fixed maturity securities AFS and equity securities by type (public or private) and information about perpetual and redeemable securities held at:

	March 31, 2018		December 31, 2017	
	Estimated Fair Value	% of Total	Estimated Fair Value	% of Total
	(Dollars in millions)			
Fixed maturity securities AFS				
Publicly-traded	$257,582	84.5 %	$262,078	84.8 %
Privately-placed	47,129	15.5	46,853	15.2
Total fixed maturity securities AFS	$304,711	100.0 %	$308,931	100.0 %
Percentage of cash and invested assets	66.9 %		67.6 %	
Equity securities				
Publicly-traded	$1,316	85.2 %	$1,490	59.3 %
Privately-held	228	14.8	1,023	40.7
Total equity securities	$1,544	100.0 %	$2,513	100.0 %
Percentage of cash and invested assets	0.3 %		0.6 %	
Perpetual securities included within fixed maturity AFS and equity securities	$442		$440	
Redeemable preferred stock with a stated maturity included within fixed maturity securities AFS	$573		$884	

Perpetual securities are included within fixed maturity securities available-for-sale (“AFS”) and equity securities. Upon acquisition, we classify perpetual securities that have attributes of both debt and equity as fixed maturity securities AFS if the securities have an interest rate step-up feature which, when combined with other qualitative factors, indicates that the securities have more debt-like characteristics; while those with more equity-like characteristics are classified as equity securities. Many of such securities, commonly referred to as “perpetual hybrid securities,” have been issued by non-U.S. financial institutions that are accorded the highest two capital treatment categories by their respective regulatory bodies (i.e. core capital, or “Tier 1 capital” and perpetual deferrable securities, or “Upper Tier 2 capital”).

Redeemable preferred stock with a stated maturity is included within fixed maturity securities AFS. These securities, which are commonly referred to as “capital securities,” primarily have cumulative interest deferral features and are primarily issued by U.S. financial institutions.

In connection with our investment management business, we manage a broad array of securities, limited partnership interests and liquid investments on behalf of institutional clients, which are unaffiliated investors. Assets under management, by sector, at estimated fair value, were as follows: investment grade corporate fixed maturity securities, including privately-placed, infrastructure and state and political subdivision, $66.9 billion and $66.6 billion at March 31, 2018 and December 31, 2017, respectively; structured finance fixed maturity securities, including residential mortgage-backed securities (“RMBS”), commercial mortgage-backed securities (“CMBS”) and asset-backed securities (“ABS”) (collectively, “Structured Securities”), $16.4 billion and $15.8 billion at March 31, 2018 and December 31, 2017, respectively; U.S. government and agency fixed maturity securities, $18.9 billion and $21.7 billion at March 31, 2018 and December 31, 2017, respectively; foreign government fixed maturity securities, $2.2 billion and $2.1 billion at March 31, 2018 and December 31, 2017, respectively; below investment grade corporate fixed maturity securities, including emerging market and high yield, $7.8 billion and $7.7 billion at March 31, 2018 and December 31, 2017, respectively; equity securities, $0.3 billion at both March 31, 2018 and December 31, 2017; other limited partnership interests, $1.7 billion at both March 31, 2018 and December 31, 2017; and cash equivalents and short-term investments, $2.6 billion and $3.0 billion at March 31, 2018 and December 31, 2017, respectively.

Table of Contents

Also in connection with our investment management business, we manage index investment portfolios that track the return of industry fixed income and equity market indices such as the Bloomberg Barclay's U.S. Aggregate Bond Index and Standard & Poor's ("S&P") 500® Index. These assets had an estimated fair value of $28.0 billion and $28.5 billion at March 31, 2018 and December 31, 2017 respectively. Index investment portfolios included within separate account assets in our interim condensed consolidated financial statements were $14.8 billion and $14.9 billion at March 31, 2018 and December 31, 2017, respectively. Index investment portfolios managed on behalf of our institutional clients were $13.2 billion and $13.6 billion at March 31, 2018 and December 31, 2017, respectively and are not included in our interim condensed consolidated financial statements. Index investment portfolios managed on behalf of our institutional clients, by sector, at estimated fair value, were as follows: investment grade corporate fixed maturity securities and state and political subdivision securities, $775 million and $794 million at March 31, 2018 and December 31, 2017, respectively; structured securities, $823 million and $828 million at March 31, 2018 and December 31, 2017, respectively; U.S. government and agency fixed maturity securities, $1.1 billion at both March 31, 2018 and December 31, 2017; equity securities, $10.0 billion and $10.4 billion at March 31, 2018 and December 31, 2017, respectively; and cash equivalents and short-term investments, $474 million and $517 million at March 31, 2018 and December 31, 2017, respectively.

See also "Management's Discussion and Analysis of Financial Condition and Results of Operations — Investments — Fixed Maturity and Equity Securities AFS — Valuation of Securities" included in the 2017 Annual Report for further information on the processes used to value securities and the related controls.

Fair Value of Fixed Maturity Securities AFS and Equity Securities

Fixed maturity securities AFS and equity securities measured at estimated fair value on a recurring basis and their corresponding fair value pricing sources are as follows:

	March 31, 2018			
	Fixed Maturity Securities		Equity Securities	
	(Dollars in millions)			
Level 1				
Quoted prices in active markets for identical assets	$22,873	7.5 %	$909	58.9 %
Level 2				
Independent pricing sources	263,548	86.5	118	7.6
Internal matrix pricing or discounted cash flow techniques	2,719	0.9	95	6.2
Significant other observable inputs	266,267	87.4	213	13.8
Level 3				
Independent pricing sources	11,347	3.7	297	19.2
Internal matrix pricing or discounted cash flow techniques	3,953	1.3	123	8.0
Independent broker quotations	271	0.1	2	0.1
Significant unobservable inputs	15,571	5.1	422	27.3
Total estimated fair value	$304,711	100.0%	$1,544	100.0%

See Note 8 of the Notes to the Interim Condensed Consolidated Financial Statements for the fixed maturity securities AFS and equity securities fair value hierarchy.

Table of Contents

The composition of fair value pricing sources for and significant changes in Level 3 securities at March 31, 2018 are as follows:

- The majority of the Level 3 fixed maturity securities AFS and equity securities were concentrated in three sectors: foreign and U.S. corporate securities and RMBS.
- Level 3 fixed maturity securities are priced principally through market standard valuation methodologies, independent pricing services and, to a much lesser extent, independent non-binding broker quotations using inputs that are not market observable or cannot be derived principally from or corroborated by observable market data. Level 3 fixed maturity securities consist of less liquid securities with very limited trading activity or where less price transparency exists around the inputs to the valuation methodologies. Level 3 fixed maturity securities include: sub-prime RMBS; certain below investment grade private securities; less liquid investment grade corporate securities (included in United States and foreign corporate securities) and less liquid ABS and foreign government securities.
- During the three months ended March 31, 2018, Level 3 fixed maturity securities decreased by $698 million, or 4%. The decrease was driven by transfers out of Level 3 in excess of transfers into Level 3, partially offset by purchases in excess of sales.

See Note 8 of the Notes to the Interim Condensed Consolidated Financial Statements for a rollforward of the fair value measurements for fixed maturity securities AFS and equity securities measured at estimated fair value on a recurring basis using significant unobservable (Level 3) inputs; transfers into and/or out of Level 3; and further information about the valuation approaches and inputs by level by major classes of invested assets that affect the amounts reported above. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Summary of Critical Accounting Estimates — Estimated Fair Value of Investments” included in the 2017 Annual Report for further information on the estimates and assumptions that affect the amounts reported above.

Fixed Maturity Securities AFS

See Note 6 of the Notes to the Interim Condensed Consolidated Financial Statements for information about fixed maturity securities AFS by sector, contractual maturities and continuous gross unrealized losses.

Fixed Maturity Securities Credit Quality — Ratings

See “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Investments — Fixed Maturity and Equity Securities AFS — Fixed Maturity Securities Credit Quality — Ratings” included in the 2017 Annual Report for a discussion of the credit quality ratings assigned by Nationally Recognized Statistical Rating Organizations (“NRSRO”), credit quality designations assigned by and methodologies used by the Securities Valuation Office of the NAIC for fixed maturity securities and the revised methodologies adopted by the NAIC for certain Structured Securities.

The following table presents total fixed maturity securities by NRSRO rating and the applicable NAIC designation from the NAIC published comparison of NRSRO ratings to NAIC designations, except for certain Structured Securities, which are presented using the revised NAIC methodologies, as well as the percentage, based on estimated fair value that each NAIC designation is comprised of at:

		March 31, 2018				December 31, 2017			
NAIC Designation	NRSRO Rating	Amortized Cost	Unrealized Gain (Loss)	Estimated Fair Value	% of Total	Amortized Cost	Unrealized Gain (Loss)	Estimated Fair Value	% of Total
		(Dollars in millions)							
1	Aaa/Aa/A	$200,912	$13,534	$214,446	70.4 %	$201,806	$17,024	$218,830	70.8 %
2	Baa	68,896	3,635	72,531	23.8	67,270	5,126	72,396	23.4
	Subtotal investment grade	269,808	17,169	286,977	94.2	269,076	22,150	291,226	94.2
3	Ba	11,165	386	11,551	3.8	11,155	556	11,711	3.8
4	B	5,263	69	5,332	1.7	5,004	151	5,155	1.7
5	Caa and lower	838	(11)	827	0.3	824	9	833	0.3
6	In or near default	25	(1)	24	—	10	(4)	6	—
	Subtotal below investment grade	17,291	443	17,734	5.8	16,993	712	17,705	5.8

Total fixed maturity securities	$287,099	$17,612	$304,711	100.0%	$286,069	$22,862	$308,931	100.0%

Table of Contents

The following tables present total fixed maturity securities, based on estimated fair value, by sector classification and by NRSRO rating and the applicable NAIC designations from the NAIC published comparison of NRSRO ratings to NAIC designations, except for certain Structured Securities, which are presented using the revised NAIC methodologies:

	Fixed Maturity Securities — by Sector & Credit Quality Rating						
NAIC Designation:	1	2	3	4	5	6	Total
NRSRO Rating:	Aaa/Aa/A	Baa	Ba	B	Caa and Lower	In or Near Default	Estimated Fair Value
	(Dollars in millions)						
March 31, 2018							
U.S. corporate	$36,439	$35,010	$6,213	$3,527	$645	$ —	$81,834
Foreign government	55,968	5,241	2,318	930	52	1	64,510
Foreign corporate	21,661	30,333	2,573	835	61	—	55,463
U.S. government and agency	43,410	417	—	—	—	—	43,827
RMBS	26,848	303	179	39	19	23	27,411
State and political subdivision	11,644	475	73	—	—	—	12,192
ABS	10,936	632	192	1	3	—	11,764
CMBS	7,540	120	3	—	47	—	7,710
Total fixed maturity securities	$214,446	$72,531	$11,551	$5,332	$827	$ 24	$304,711
Percentage of total	70.4 %	23.8 %	3.8 %	1.7 %	0.3 %	— %	100.0 %
December 31, 2017							
U.S. corporate	$37,305	$35,096	$6,153	$3,387	$717	$ 3	$82,661
Foreign government	53,027	5,135	2,376	947	49	—	61,534
Foreign corporate	21,925	30,214	2,616	759	55	—	55,569
U.S. government and agency	47,067	327	—	—	—	—	47,394
RMBS	28,209	297	224	61	9	—	28,800
State and political subdivision	11,921	454	78	—	—	2	12,455
ABS	11,311	760	215	1	3	1	12,291
CMBS	8,065	113	49	—	—	—	8,227
Total fixed maturity securities	$218,830	$72,396	$11,711	$5,155	$833	$ 6	$308,931
Percentage of total	70.8 %	23.4 %	3.8 %	1.7 %	0.3 %	— %	100.0 %

U.S. and Foreign Corporate Fixed Maturity Securities

We maintain a diversified portfolio of corporate fixed maturity securities across industries and issuers. This portfolio does not have any exposure to any single issuer in excess of 1% of total investments and the top 10 holdings comprised 1% of total investments at both March 31, 2018 and December 31, 2017. The tables below present our U.S. and foreign corporate securities holdings by industry at:

	March 31, 2018		December 31, 2017	
	Estimated Fair Value	% of Total	Estimated Fair Value	% of Total
	(Dollars in millions)			
Industrial	$41,975	30.6 %	$42,273	30.6 %
Consumer	31,020	22.6	31,419	22.7
Finance	29,932	21.8	29,884	21.6
Utility	21,861	15.9	21,773	15.8
Communications	10,805	7.9	11,072	8.0
Other	1,704	1.2	1,809	1.3

Total	$137,297	100.0%	$138,230	100.0%

124

Table of Contents

Structured Securities

We held $46.9 billion and $49.3 billion of Structured Securities, at estimated fair value, at March 31, 2018 and December 31, 2017, respectively, as presented in the RMBS, ABS and CMBS sections below.

RMBS

The table below presents our RMBS holdings at:

	March 31, 2018			December 31, 2017		
	Estimated Fair Value	% of Total	Net Unrealized Gains (Losses)	Estimated Fair Value	% of Total	Net Unrealized Gains (Losses)
	(Dollars in millions)					
By security type:						
Collateralized mortgage obligations	$14,832	54.1 %	$ 748	$15,388	53.4 %	$ 913
Pass-through securities	12,579	45.9	(195)	13,412	46.6	41
Total RMBS	$27,411	100.0%	$ 553	$28,800	100.0%	$ 954
By risk profile:						
Agency	$18,915	69.0 %	$ (119)	$20,010	69.5 %	$ 274
Prime	1,143	4.2	66	1,209	4.2	73
Alt-A	4,060	14.8	367	4,182	14.5	372
Sub-prime	3,293	12.0	239	3,399	11.8	235
Total RMBS	$27,411	100.0%	$ 553	$28,800	100.0%	$ 954
Ratings profile:						
Rated Aaa/AAA	$19,373	70.7 %		$20,465	71.1 %	
Designated NAIC 1	$26,848	97.9 %		$28,209	97.9 %	

See also “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Investments — Fixed Maturity and Equity Securities AFS — Structured Securities — RMBS” included in the 2017 Annual Report for further information about collateralized mortgage obligations and pass-through mortgage-backed securities, as well as agency, prime, alternative residential mortgage loan (“Alt-A”) and sub-prime RMBS.

Historically, we have managed our exposure to sub-prime RMBS holdings by focusing primarily on senior tranche securities, stress testing the portfolio with severe loss assumptions and closely monitoring the performance of the portfolio. Our sub-prime RMBS portfolio consists predominantly of securities that were purchased after 2012 at significant discounts to par value and discounts to the expected principal recovery value of these securities. The vast majority of these securities are investment grade under the NAIC designations (e.g., NAIC 1 and NAIC 2). The estimated fair value of our sub-prime RMBS holdings purchased since 2012 was $3.0 billion and $3.1 billion at March 31, 2018 and December 31, 2017, respectively, with unrealized gains (losses) of $211 million and $200 million at March 31, 2018 and December 31, 2017, respectively.

Table of Contents

ABS

Our ABS holdings are diversified both by collateral type and by issuer. The following table presents our ABS holdings at:

	March 31, 2018			December 31, 2017		
	Estimated Fair Value	% of Total	Net Unrealized Gains (Losses)	Estimated Fair Value	% of Total	Net Unrealized Gains (Losses)
	(Dollars in millions)					
By collateral type:						
Collateralized obligations	$6,255	53.2 %	$ 30	$5,703	46.4 %	$ 45
Credit card loans	784	6.7	(1)	1,686	13.7	1
Student loans	1,325	11.3	14	1,266	10.3	(1)
Automobile loans	1,000	8.5	(3)	1,193	9.7	—
Foreign residential loans	953	8.1	20	965	7.9	20
Consumer loans	558	4.7	4	605	4.9	6
Other loans	889	7.5	5	873	7.1	7
Total	$11,764	100.0 %	$ 69	$12,291	100.0 %	$ 78
Ratings profile:						
Rated Aaa/AAA	$6,907	58.7 %		$7,108	57.8 %	
Designated NAIC 1	$10,936	93.0 %		$11,311	92.0 %	

Table of Contents

CMBS

Our CMBS holdings are diversified by vintage year. The following tables present our CMBS holdings by NRSRO rating and by vintage year at:

	March 31, 2018											
	Aaa		Aa		A		Baa		Below Investment Grade		Total	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
	(Dollars in millions)											
2003 - 2010	$113	$119	$17	$18	$8	$8	$15	$15	$—	$—	$153	$160
2011	170	180	34	35	—	—	—	—	—	—	204	215
2012	257	263	243	244	231	235	6	7	—	—	737	749
2013	769	787	708	718	289	288	—	—	60	47	1,826	1,840
2014	486	486	506	506	129	129	—	—	—	—	1,121	1,121
2015	620	613	184	188	53	54	—	—	—	—	857	855
2016	299	292	67	64	41	41	69	70	—	—	476	467
2017	830	821	676	672	245	242	44	44	—	—	1,795	1,779
2018	296	296	136	137	91	91	—	—	—	—	523	524
Total	$3,840	$3,857	$2,571	$2,582	$1,087	$1,088	$134	$136	$60	$47	$7,692	$7,710
Ratings Distribution		50.0 %		33.5 %		14.1 %		1.8 %		0.6 %		100.0 %

	December 31, 2017											
	Aaa		Aa		A		Baa		Below Investment Grade		Total	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
	(Dollars in millions)											
2003 - 2010	$116	$124	$4	$5	$22	$23	$15	$15	$—	$—	$157	$167
2011	170	184	34	35	—	—	—	—	—	—	204	219
2012	289	302	257	263	230	237	7	7	—	—	783	809
2013	787	835	717	748	285	292	60	45	—	—	1,849	1,920
2014	537	552	513	522	129	130	—	—	—	—	1,179	1,204
2015	1,122	1,140	191	196	117	120	—	—	—	—	1,430	1,456
2016	401	404	69	68	40	40	65	66			575	578
2017	898	899	685	687	246	246	41	42	—	—	1,870	1,874
Total	$4,320	$4,440	$2,470	$2,524	$1,069	$1,088	$188	$175	$—	$—	$8,047	$8,227
Ratings Distribution		54.0 %		30.7 %		13.2 %		2.1 %		— %		100.0 %

The tables above reflect NRSRO ratings including Moody’s Investors Service, S&P, Fitch Ratings and Morningstar, Inc. CMBS designated NAIC 1 were 98% of total CMBS at both March 31, 2018 and December 31, 2017.

Evaluation of Fixed Maturity Securities AFS for OTTI and Evaluating Temporarily Impaired Fixed Maturity Securities AFS

See Note 6 of the Notes to the Interim Condensed Consolidated Financial Statements for information about the evaluation of fixed maturity securities AFS for OTTI and evaluation of temporarily impaired AFS securities.

OTTI Losses on Fixed Maturity Securities AFS Recognized in Earnings

See Note 6 of the Notes to the Interim Condensed Consolidated Financial Statements for information about OTTI losses and gross gains and gross losses on fixed maturity securities AFS sold.

Overview of Fixed Maturity Security AFS OTTI Losses Recognized in Earnings

Impairments of fixed maturity securities AFS were less than $1 million for both the three months ended March 31, 2018 and 2017.

Table of Contents

Future Impairments

Future OTTI on fixed maturity securities AFS will depend primarily on economic fundamentals, issuer performance (including changes in the present value of future cash flows expected to be collected), and changes in credit ratings, collateral valuation, interest rates and credit spreads. If economic fundamentals deteriorate or if there are adverse changes in the above factors, OTTI may be incurred in upcoming periods.

Contractholder-Directed Equity Securities and Fair Value Option Securities

Unit-linked and FVO Securities were $16.4 billion and $16.7 billion at estimated fair value, or 3.6% and 3.7% of cash and invested assets, at March 31, 2018 and December 31, 2017, respectively. Unit-linked and FVO Securities are primarily comprised of Unit-linked investments. See Notes 6 and 8 of the Notes to the Interim Condensed Consolidated Financial Statements for a description of our Unit-linked and FVO Securities portfolio, the Unit-linked and FVO Securities fair value hierarchy and a rollforward of the fair value measurements for Unit-linked and FVO Securities measured at estimated fair value on a recurring basis using significant unobservable (Level 3) inputs.

Securities Lending

We participate in a securities lending program whereby securities are loaned to third parties, primarily brokerage firms and commercial banks. We obtain collateral, usually cash, in an amount generally equal to 102% of the estimated fair value of the securities loaned, which is obtained at the inception of a loan and maintained at a level greater than or equal to 100% for the duration of the loan. We monitor the estimated fair value of the securities loaned on a daily basis with additional collateral obtained as necessary throughout the duration of the loan. Securities loaned under such transactions may be sold or re-pledged by the transferee. We are liable to return to our counterparties the cash collateral under our control. Security collateral received from counterparties may not be sold or re-pledged, unless the counterparty is in default, and is not reflected on the consolidated financial statements. These transactions are treated as financing arrangements and the associated cash collateral liability is recorded at the amount of the cash received.

See “— Liquidity and Capital Resources — The Company — Liquidity and Capital Uses — Securities Lending” and Note 6 of Notes to the Interim Condensed Consolidated Financial Statements for information regarding our securities lending program.

Repurchase Agreements

The Company participates in short-term repurchase agreements with unaffiliated financial institutions. Under these agreements, the Company lends fixed maturity securities and receives cash as collateral in an amount generally equal to 98% of the estimated fair value of the securities loaned at the inception of the transaction. The associated liability is recorded at the amount of cash received. The Company monitors the estimated fair value of the collateral and the securities loaned throughout the duration of the transaction and additional collateral is obtained as necessary. Securities loaned under such transactions may be sold or re-pledged by the transferee.

See Note 6 of the Notes to the Interim Condensed Consolidated Financial Statements for additional information regarding our repurchase agreements.

FHLB of Boston Advance Agreements

A subsidiary of the Company participates in short-term advance agreements with the Federal Home Loan Bank (“FHLB”) of Boston. Under these agreements, the Company pledges fixed maturity securities and receives cash. The associated liability is recorded at the amount of cash received. The FHLB of Boston has minimum collateral requirements which vary depending on the type of collateral pledged. Securities pledged under such transactions may not be sold or re-pledged by the transferee.

See Note 6 of the Notes to the Interim Condensed Consolidated Financial Statements for information regarding our FHLB of Boston advance agreement transactions.

Table of Contents

Mortgage Loans

Our mortgage loans are principally collateralized by commercial, agricultural and residential properties. Mortgage loans and the related valuation allowances are summarized as follows at:

	March 31, 2018				December 31, 2017			
	Recorded Investment	% of Total	Valuation Allowance	% of Recorded Investment	Recorded Investment	% of Total	Valuation Allowance	% of Recorded Investment
	(Dollars in millions)							
Commercial	$46,690	65.8 %	$ 228	0.5 %	$44,375	64.8 %	$ 214	0.5 %
Agricultural	13,098	18.5	41	0.3 %	13,014	19.0	41	0.3 %
Residential	11,156	15.7	58	0.5 %	11,136	16.2	59	0.5 %
Total	$70,944	100.0 %	$ 327	0.5 %	$68,525	100.0 %	$ 314	0.5 %

The information presented in the tables herein exclude mortgage loans where we elected the FVO. Such amounts are presented in Note 6 of the Notes to the Interim Condensed Consolidated Financial Statements. The carrying value of all mortgage loans, net of valuation allowance was 15.6% and 15.0% of cash and invested assets at March 31, 2018 and December 31, 2017, respectively.

We diversify our mortgage loan portfolio by both geographic region and property type to reduce the risk of concentration. Of our commercial and agricultural mortgage loan portfolios, 82% are collateralized by properties located in the United States, with the remaining 18% collateralized by properties located outside the United States, which includes 7% of properties located in the U.K., at March 31, 2018. The carrying values of our commercial and agricultural mortgage loans located in California, New York and Texas were 19%, 11% and 7%, respectively, of total commercial and agricultural mortgage loans at March 31, 2018. Additionally, we manage risk when originating commercial and agricultural mortgage loans by generally lending up to 75% of the estimated fair value of the underlying real estate collateral.

We manage our residential mortgage loan portfolio in a similar manner to reduce risk of concentration, with 90% collateralized by properties located in the United States and the remaining 10% collateralized by properties located outside the United States at March 31, 2018. The carrying values of our residential mortgage loans located in California, Florida, and New York were 31%, 9%, and 6%, respectively, of total residential mortgage loans at March 31, 2018.

In connection with our investment management business, we manage commercial, agricultural and residential mortgage loans on behalf of institutional clients, which are unaffiliated investors. These commercial, agricultural and residential mortgage loans had an estimated fair value of $15.3 billion and $14.7 billion at March 31, 2018 and December 31, 2017, respectively. As these assets are managed on behalf of, and owned by, our institutional clients, they are not included in our interim condensed consolidated financial statements.

Table of Contents

Commercial Mortgage Loans by Geographic Region and Property Type. Commercial mortgage loans are the largest component of the mortgage loan invested asset class. The tables below present the diversification across geographic regions and property types of commercial mortgage loans at:

	March 31, 2018		December 31, 2017	
	Amount	% of Total	Amount	% of Total
	(Dollars in millions)			
Region				
Pacific	$10,583	22.7 %	$ 9,875	22.3 %
International	9,500	20.3	9,101	20.5
Middle Atlantic	7,467	16.0	7,231	16.3
South Atlantic	5,552	11.9	5,311	12.0
West South Central	3,664	7.8	3,819	8.6
East North Central	2,687	5.7	2,683	6.0
Mountain	1,355	2.9	1,188	2.7
New England	1,129	2.4	901	2.0
East South Central	963	2.1	840	1.9
West North Central	589	1.3	477	1.1
Multi-Region and Other	3,201	6.9	2,949	6.6
Total recorded investment	46,690	100.0%	44,375	100.0 %
Less: valuation allowances	228		214	
Carrying value, net of valuation allowances	$46,462		$ 44,161	
Property Type				
Office	$23,474	50.3 %	$ 22,602	50.9 %
Retail	8,247	17.7	8,032	18.1
Apartment	6,600	14.1	6,113	13.8
Hotel	3,797	8.1	3,620	8.2
Industrial	3,699	7.9	3,125	7.0
Other	873	1.9	883	2.0
Total recorded investment	46,690	100.0%	44,375	100.0 %
Less: valuation allowances	228		214	
Carrying value, net of valuation allowances	$46,462		$ 44,161	

Mortgage Loan Credit Quality - Monitoring Process. We monitor our mortgage loan investments on an ongoing basis, including a review of loans that are current, past due, restructured and under foreclosure. See Note 6 of the Notes to the Interim Condensed Consolidated Financial Statements for tables that present mortgage loans by credit quality indicator, past due and nonaccrual mortgage loans, as well as impaired mortgage loans. See "— Real Estate and Real Estate Joint Ventures" for real estate acquired through foreclosure.

We review our commercial mortgage loans on an ongoing basis. These reviews may include an analysis of the property financial statements and rent roll, lease rollover analysis, property inspections, market analysis, estimated valuations of the underlying collateral, loan-to-value ratios, debt service coverage ratios and tenant creditworthiness. The monitoring process focuses on higher risk loans, which include those that are classified as restructured, delinquent or in foreclosure, as well as loans with higher loan-to-value ratios and lower debt service coverage ratios. The monitoring process for agricultural mortgage loans is generally similar, with a focus on higher risk loans, such as loans with higher loan-to-value ratios, including reviews on a geographic and sector basis. We review our residential mortgage loans on an ongoing basis. See Note 8 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report for information on our evaluation of residential mortgage loans and related valuation allowance methodology.

Table of Contents

Loan-to-value ratios and debt service coverage ratios are common measures in the assessment of the quality of commercial mortgage loans. Loan-to-value ratios are a common measure in the assessment of the quality of agricultural mortgage loans. Loan-to-value ratios compare the amount of the loan to the estimated fair value of the underlying collateral. A loan-to-value ratio greater than 100% indicates that the loan amount is greater than the collateral value. A loan-to-value ratio of less than 100% indicates an excess of collateral value over the loan amount. Generally, the higher the loan-to-value ratio, the higher the risk of experiencing a credit loss. The debt service coverage ratio compares a property's net operating income to amounts needed to service the principal and interest due under the loan. Generally, the lower the debt service coverage ratio, the higher the risk of experiencing a credit loss. For our commercial mortgage loans, our average loan-to-value ratio was 54% at both March 31, 2018 and December 31, 2017 and our average debt service coverage ratio was 2.7x for both March 31, 2018 and December 31, 2017. The debt service coverage ratio, as well as the values utilized in calculating the ratio, is updated annually, on a rolling basis, with a portion of the portfolio updated each quarter. In addition, the loan-to-value ratio is routinely updated for all but the lowest risk loans as part of our ongoing review of our commercial mortgage loan portfolio. For our agricultural mortgage loans, our average loan-to-value ratio was 45% and 44% at March 31, 2018 and December 31, 2017, respectively. The values utilized in calculating the agricultural mortgage loan loan-to-value ratio are developed in connection with the ongoing review of the agricultural loan portfolio and are routinely updated.

Mortgage Loan Valuation Allowances. Our valuation allowances are established both on a loan specific basis for those loans considered impaired where a property specific or market specific risk has been identified that could likely result in a future loss, as well as for pools of loans with similar risk characteristics where a property specific or market specific risk has not been identified, but for which we expect to incur a loss. Accordingly, a valuation allowance is provided to absorb these estimated probable credit losses.

The determination of the amount of valuation allowances is based upon our periodic evaluation and assessment of known and inherent risks associated with our loan portfolios. Such evaluations and assessments are based upon several factors, including our experience for loan losses, defaults and loss severity, and loss expectations for loans with similar risk characteristics. These evaluations and assessments are revised as conditions change and new information becomes available, which can cause the valuation allowances to increase or decrease over time as such evaluations are revised. Negative credit migration, including an actual or expected increase in the level of problem loans, will result in an increase in the valuation allowance. Positive credit migration, including an actual or expected decrease in the level of problem loans, will result in a decrease in the valuation allowance.

See Notes 6 and 8 of the Notes to the Interim Condensed Consolidated Financial Statements for information about how valuation allowances are established and monitored, activity in and balances of the valuation allowance, and the estimated fair value of impaired mortgage loans and related impairments included within net investment gains (losses) as of and for the three months ended March 31, 2018 and 2017.

Real Estate and Real Estate Joint Ventures

Real estate and real estate joint ventures is comprised of wholly-owned real estate and joint ventures with interests in single property income-producing real estate, and to a lesser extent joint ventures with interests in multi-property projects with varying strategies ranging from the development of properties to the operation of income-producing properties, as well as a runoff portfolio of real estate private equity funds. We diversify our real estate investments by both geographic region and property type to reduce risk of concentration. The carrying values of real estate and real estate joint ventures were $9.9 billion and $9.6 billion, or 2.2% and 2.1% of cash and invested assets, including properties acquired through foreclosure of $47 million and $48 million at March 31, 2018 and December 31, 2017, respectively. The estimated fair value of our real estate investments was $15.3 billion and $14.9 billion at March 31, 2018 and December 31, 2017, respectively. The total gross market value of such real estate investments was $19.4 billion and $19.1 billion at March 31, 2018 and December 31, 2017, respectively. Gross market value is the total fair value of these investments regardless of encumbering debt.

In connection with our investment management business, we manage commercial real estate investments on behalf of institutional clients, which are unaffiliated investors. These commercial real estate investments under management for unaffiliated investors had an estimated fair value of $5.4 billion and $5.2 billion at March 31, 2018 and December 31, 2017, respectively. The total gross market value of commercial real estate investments under management for

unaffiliated investors was $7.4 billion and $6.7 billion at March 31, 2018 and December 31, 2017, respectively. As these assets are managed on behalf of, and owned by, our institutional clients, they are not included in our consolidated financial statements.

Table of Contents

Other Limited Partnership Interests

Other limited partnership interests are comprised of private equity funds and hedge funds. The carrying value of other limited partnership interests was $5.9 billion, or 1.3% of cash and invested assets, and $5.7 billion, or 1.3% of cash and invested assets, at March 31, 2018 and December 31, 2017, respectively, which included $637 million and $643 million of hedge funds, at March 31, 2018 and December 31, 2017, respectively. Cash distributions on these investments are generated from investment gains, operating income from the underlying investments of the funds and liquidation of the underlying investments of the funds. We estimate that the underlying investments of the funds will be liquidated over the next two to 10 years.

Other Invested Assets

The following table presents the carrying value of our other invested assets by type at:

	March 31, 2018		December 31, 2017	
	Carrying Value	% of Total	Carrying Value	% of Total
	(Dollars in millions)			
Freestanding derivatives with positive estimated fair values	$7,924	45.3 %	$8,551	49.5 %
Tax credit and renewable energy partnerships	3,195	18.3	3,167	18.3
Direct financing leases	1,375	7.9	1,323	7.7
Annuities funding structured settlement claims (1)	1,283	7.3	1,284	7.4
Leveraged leases, net of non-recourse debt	1,139	6.5	1,278	7.4
Federal Home Loan Bank common stock (2)	812	4.7	—	—
Operating joint ventures	612	3.5	539	3.1
Funds withheld	300	1.7	298	1.7
Other	846	4.8	823	4.8
Total	$17,486	100.0%	$17,263	100.0%
Percentage of cash and invested assets	3.8 %		3.8 %	

(1) See Note 3 of the Notes to the Interim Condensed Consolidated Financial Statements.

(2) See Note 6 of the Notes to the Interim Condensed Consolidated Financial Statements.

Table of Contents

Derivatives

Derivative Risks

We are exposed to various risks relating to our ongoing business operations, including interest rate, foreign currency exchange rate, credit and equity market. We use a variety of strategies to manage these risks, including the use of derivatives. See Note 7 of the Notes to the Interim Condensed Consolidated Financial Statements for:

- A comprehensive description of the nature of our derivatives, including the strategies for which derivatives are used in managing various risks.
- Information about the gross notional amount, estimated fair value, and primary underlying risk exposure of our derivatives by type of hedge designation, excluding embedded derivatives held at March 31, 2018 and December 31, 2017.
- The statement of operations effects of derivatives in net investments in foreign operations, cash flow, fair value, or nonqualifying hedge relationships for the three months ended March 31, 2018 and 2017.

See “Quantitative and Qualitative Disclosures About Market Risk — Management of Market Risk Exposures — Hedging Activities” included in the 2017 Annual Report for more information about our use of derivatives by major hedge program.

Fair Value Hierarchy

See Note 8 of the Notes to the Interim Condensed Consolidated Financial Statements for derivatives measured at estimated fair value on a recurring basis and their corresponding fair value hierarchy.

The valuation of Level 3 derivatives involves the use of significant unobservable inputs and generally requires a higher degree of management judgment or estimation than the valuations of Level 1 and Level 2 derivatives. Although Level 3 inputs are unobservable, management believes they are consistent with what other market participants would use when pricing such instruments and are considered appropriate given the circumstances. The use of different inputs or methodologies could have a material effect on the estimated fair value of Level 3 derivatives and could materially affect net income.

Derivatives categorized as Level 3 at March 31, 2018 include: interest rate forwards with maturities which extend beyond the observable portion of the yield curve; interest rate total return swaps with unobservable repurchase rates; foreign currency swaps and forwards with certain unobservable inputs, including the unobservable portion of the yield curve; credit default swaps priced using unobservable credit spreads, or that are priced through independent broker quotations; equity variance swaps with unobservable volatility inputs; and equity index options with unobservable correlation inputs. At March 31, 2018, less than 1% of the estimated fair value of our derivatives was priced through independent broker quotations.

See Note 8 of the Notes to the Interim Condensed Consolidated Financial Statements for a rollforward of the fair value measurements for derivatives measured at estimated fair value on a recurring basis using significant unobservable (Level 3) inputs.

The gain (loss) on Level 3 derivatives primarily relates to interest rate total return swaps with unobservable repurchase rates, certain purchased equity index options that are valued using models dependent on an unobservable market correlation input, equity variance swaps that are valued using observable equity volatility data plus an unobservable equity variance spread and foreign currency swaps and forwards that are valued using an unobservable portion of the swap yield curves. Other significant inputs, which are observable, include equity index levels, equity volatility and the swap yield curves. We validate the reasonableness of these inputs by valuing the positions using internal models and comparing the results to broker quotations.

Table of Contents

The gain (loss) on Level 3 derivatives, percentage of gain (loss) attributable to observable and unobservable inputs, and the primary drivers of observable gain (loss) are summarized as follows:

	Three Months Ended March 31, 2018
Gain (loss) recognized in net income (loss)	$11 million
Percentage of gain (loss) attributable to observable inputs	13%
Primary drivers of observable gain (loss)	Increases in certain equity volatility levels and decreases in certain equity index levels on equity derivatives; partially offset by increase in interest rate on interest rate total return swaps.
Percentage of gain (loss) attributable to unobservable inputs	87%

See “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Summary of Critical Accounting Estimates — Derivatives” included in the 2017 Annual Report for further information on the estimates and assumptions that affect derivatives.

Credit Risk

See Note 7 of the Notes to the Interim Condensed Consolidated Financial Statements for information about how we manage credit risk related to derivatives and for the estimated fair value of our net derivative assets and net derivative liabilities after the application of master netting agreements and collateral.

Our policy is not to offset the fair value amounts recognized for derivatives executed with the same counterparty under the same master netting agreement. This policy applies to the recognition of derivatives on the consolidated balance sheets, and does not affect our legal right of offset.

Credit Derivatives

The following table presents the gross notional amount and estimated fair value of credit default swaps at:

	March 31, 2018		December 31, 2017	
Credit Default Swaps	Gross Notional Amount	Estimated Fair Value	Gross Notional Amount	Estimated Fair Value
	(In millions)			
Purchased	$1,888	$ (36)	$2,020	$ (36)
Written	11,421	208	11,375	271
Total	$13,309	$ 172	$13,395	$ 235

The following table presents the gross gains, gross losses and net gains (losses) recognized in net derivative gains (losses) for credit default swaps as follows:

	Three Months Ended March 31,					
	2018			2017		
Credit Default Swaps	Gross Gains	Gross Losses	Net Gains (Losses)	Gross Gains	Gross Losses	Net Gains (Losses)
	(In millions)					
Purchased (1)	$1	$ (4)	$ (3)	$8	$ (16)	$ (8)
Written (1)	1	(45)	(44)	37	(5)	32
Total	$2	$ (49)	$ (47)	$45	$ (21)	$ 24

(1) Gains (losses) do not include earned income (expense) on credit default swaps.

Table of Contents

The favorable change in net gains (losses) on purchased credit default swaps of $5 million for the three months ended March 31, 2018 compared to the three months ended March 31, 2017 was due to certain credit spreads on credit default swaps hedging certain bonds, narrowing less in the current period compared to the prior period. The unfavorable change in net gains (losses) on written credit default swaps of ($76) million for the three months ended March 31, 2018 compared to the three months ended March 31, 2017 was due to certain credit spreads on certain credit default swaps used as replications widening in the current period as compared to the prior period.

The maximum amount at risk related to our written credit default swaps is equal to the corresponding gross notional amount. In a replication transaction, we pair an asset on our balance sheet with a written credit default swap to synthetically replicate a corporate bond, a core asset holding of life insurance companies. Replications are entered into in accordance with the guidelines approved by state insurance regulators and the NAIC and are an important tool in managing the overall corporate credit risk within the Company. In order to match our long-dated insurance liabilities, we seek to buy long-dated corporate bonds. In some instances, these may not be readily available in the market, or they may be issued by corporations to which we already have significant corporate credit exposure. For example, by purchasing Treasury bonds (or other high-quality assets) and associating them with written credit default swaps on the desired corporate credit name, we can replicate the desired bond exposures and meet our ALM needs. In addition, given the shorter tenor of the credit default swaps (generally five-year tenors) versus a long dated corporate bond, we have more flexibility in managing our credit exposures.

Embedded Derivatives

See Note 8 of the Notes to the Interim Condensed Consolidated Financial Statements for information about embedded derivatives measured at estimated fair value on a recurring basis and their corresponding fair value hierarchy.

See Note 8 of the Notes to the Interim Condensed Consolidated Financial Statements for a rollforward of the fair value measurements for embedded derivatives measured at estimated fair value on a recurring basis using significant unobservable (Level 3) inputs.

See Note 7 of the Notes to the Interim Condensed Consolidated Financial Statements for information about the nonperformance risk adjustment included in the valuation of guaranteed minimum benefits accounted for as embedded derivatives.

See “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Summary of Critical Accounting Estimates — Derivatives” included in the 2017 Annual Report for further information on the estimates and assumptions that affect embedded derivatives.

Off-Balance Sheet Arrangements

Credit and Committed Facilities

We maintain an unsecured revolving credit facility and certain committed facilities with various financial institutions. See “— Liquidity and Capital Resources — The Company — Liquidity and Capital Sources — Global Funding Sources — Cre and Committed Facilities” for further descriptions of such arrangements. For the classification of expenses on such revolving credit and committed facilities and the nature of the associated liability for letters of credit issued and drawdowns on these facilities, see Note 12 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report.

Collateral for Securities Lending, Third-Party Custodian Administered Repurchase Programs and Derivatives

We participate in a securities lending program in the normal course of business for the purpose of enhancing the total return on our investment portfolio. Periodically, we receive non-cash collateral for securities lending from counterparties, which cannot be sold or re-pledged, and which has not been recorded on our consolidated balance sheets. The amount of this collateral was $41 million and $19 million at estimated fair value at March 31, 2018 and December 31, 2017, respectively. See Note 6 of the Notes to the Interim Condensed Consolidated Financial Statements and “— Investments — Securities Lending,” as well as “Summary of Significant Accounting Policies — Investments — Securities Lending Program” in Note 1 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report for a discussion of our securities lending program, the classification of revenues and expenses, and the nature of the secured financing arrangement and associated liability.

We also participate in third-party custodian administered repurchase programs for the purpose of enhancing the total return on our investment portfolio. We loan certain of our fixed maturity securities to financial institutions and, in

exchange, non-cash collateral is put on deposit by the financial institutions on our behalf with third-party custodians. The estimated fair value of securities loaned in connection with these transactions was $169 million and $182 million at March 31, 2018 and December 31, 2017, respectively. Non-cash collateral on deposit with third-party custodians on our behalf was $179 million and $194 million at March 31, 2018 and December 31, 2017, respectively, which cannot be sold or re-pledged, and which has not been recorded on our consolidated balance sheets.

Table of Contents

We enter into derivatives to manage various risks relating to our ongoing business operations. We have non-cash collateral from counterparties for derivatives, which can be sold or re-pledged subject to certain constraints, and which has not been recorded on our consolidated balance sheets. The amount of this non-cash collateral was $1.1 billion for both March 31, 2018 and December 31, 2017. See "— Liquidity and Capital Resources — The Company — Liquidity and Capital Uses — Pledged Collateral" and Note 7 of the Notes to the Interim Condensed Consolidated Financial Statements for information regarding the earned income on and the gross notional amount, estimated fair value of assets and liabilities and primary underlying risk exposure of our derivatives.

Lease Commitments

As lessee, we have entered into various lease and sublease agreements for office space, information technology and other equipment. Our commitments under such lease agreements are included within the contractual obligations table. See "Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — The Company — Contractual Obligations" and Note 20 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report.

Guarantees

See "Guarantees" in Note 14 of the Notes to the Interim Condensed Consolidated Financial Statements.

Other

We enter into the following additional commitments in the normal course of business for the purpose of enhancing the total return on our investment portfolio: mortgage loan commitments and commitments to fund partnerships, bank credit facilities, bridge loans and private corporate bond investments. See "Net Investment Income" and "Net Investment Gains (Losses)" in Note 6 of the Notes to the Interim Condensed Consolidated Financial Statements for information on the investment income, investment expense, and gains and losses from such investments. See also "— Investments — Fixed Maturity Securities AFS" and "— Investments — Mortgage Loans" for information on our investments in fixed maturity securities and mortgage loans. See "— Investments — Real Estate and Real Estate Joint Ventures" and "— Investments — Oth Limited Partnership Interests" for information on our partnership investments.

Other than the commitments disclosed in Note 14 of the Notes to the Interim Condensed Consolidated Financial Statements, there are no other material obligations or liabilities arising from the commitments to fund mortgage loans, partnerships, bank credit facilities, bridge loans, and private corporate bond investments.

Policyholder Liabilities

We establish, and carry as liabilities, actuarially determined amounts that are calculated to meet policy obligations or to provide for future annuity payments. Amounts for actuarial liabilities are computed and reported on the interim condensed consolidated financial statements in conformity with GAAP. For more details on Policyholder Liabilities, see "Management's Discussion and Analysis of Financial Condition and Results of Operations — Summary of Critical Accounting Estimates" included in the 2017 Annual Report.

Due to the nature of the underlying risks and the uncertainty associated with the determination of actuarial liabilities, we cannot precisely determine the amounts that will ultimately be paid with respect to these actuarial liabilities, and the ultimate amounts may vary from the estimated amounts, particularly when payments may not occur until well into the future.

We periodically review our estimates of actuarial liabilities for future benefits and compare them with our actual experience. We revise estimates, to the extent permitted or required under GAAP, if we determine that future expected experience differs from assumptions used in the development of actuarial liabilities. We charge or credit changes in our liabilities to expenses in the period the liabilities are established or re-estimated. If the liabilities originally established for future benefit payments prove inadequate, we must increase them. Such an increase could adversely affect our earnings and have a material adverse effect on our business, results of operations and financial condition.

We have experienced, and will likely in the future experience, catastrophe losses and possibly acts of terrorism, as well as turbulent financial markets that may have an adverse impact on our business, results of operations and financial condition. Due to their nature, we cannot predict the incidence, timing, severity or amount of losses from catastrophes and acts of terrorism, but we make broad use of catastrophic and non-catastrophic reinsurance to manage risk from these perils. We also use hedging, reinsurance and other risk management activities to mitigate financial market volatility.

136

Table of Contents

Insurance regulators in many of the non-U.S. jurisdictions in which we operate require certain MetLife entities to prepare a sufficiency analysis of the reserves presented in the locally required regulatory financial statements, and to submit that analysis to the regulatory authorities.

See "— Industry Trends — Regulatory Developments" and "Business — Regulation — U.S. Regulation — Insurance Regulati Policy and Contract Reserve Adequacy Analysis" and "Business — Regulation — International Regulation" included in the 2017 Annual Report for further information.

Future Policy Benefits

We establish liabilities for amounts payable under insurance policies. See Notes 1 and 4 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report for additional information. See also "Management's Discussion and Analysis of Financial Condition and Results of Operations — Industry Trends — Impact of a Sustained Low Interest Rate Environment — Low Interest Rate Scenario" included in the 2017 Annual Report and "— Variable Annuity Guarantees." A discussion of future policy benefits by segment (as well as Corporate & Other) follows.

U.S.

Amounts payable under insurance policies for this segment are comprised of group insurance and annuities, as well as property & casualty policies. For group insurance, future policyholder benefits are comprised mainly of liabilities for disabled lives under disability waiver of premium policy provisions, liabilities for survivor income benefit insurance, active life policies and premium stabilization and other contingency liabilities held under life insurance contracts. For group annuity contracts, future policyholder benefits are primarily related to payout annuities, including pension risk transfers, structured settlement annuities and institutional income annuities. There is no interest rate crediting flexibility on these liabilities. As a result, a sustained low interest rate environment could negatively impact earnings; however, we mitigate our risks by applying various ALM strategies, including the use of various interest rate derivative positions. The components of future policy benefits related to our property & casualty policies are liabilities for unpaid claims, estimated based upon assumptions such as rates of claim frequencies, levels of severities, inflation, judicial trends, legislative changes or regulatory decisions. Assumptions are based upon our historical experience and analysis of historical development patterns of the relationship of loss adjustment expenses to losses for each line of business, and we consider the effects of current developments, anticipated trends and risk management programs, reduced for anticipated salvage and subrogation.

Asia

Future policy benefits for this segment are held primarily for traditional life, endowment, annuity and accident & health contracts. They are also held for total return pass-through provisions included in certain universal life and savings products. They include certain liabilities for variable annuity and variable life guarantees of minimum death benefits, and longevity guarantees. Factors impacting these liabilities include sustained periods of lower yields than rates established at policy issuance, lower than expected asset reinvestment rates, market volatility, actual lapses resulting in lower than expected income, and actual mortality or morbidity resulting in higher than expected benefit payments. We mitigate our risks by applying various ALM strategies.

Latin America

Future policy benefits for this segment are held primarily for immediate annuities in Chile, Argentina and Mexico and traditional life contracts mainly in Mexico, Brazil and Colombia. There are also liabilities held for total return pass-through provisions included in certain universal life and savings products in Mexico. Factors impacting these liabilities include sustained periods of lower yields than rates established at policy issuance, lower than expected asset reinvestment rates, and mortality and lapses different than expected. We mitigate our risks by applying various ALM strategies.

EMEA

Future policy benefits for this segment include unearned premium reserves for group life and credit insurance contracts. Future policy benefits are also held for traditional life, endowment and annuity contracts with significant mortality risk and accident & health contracts. Factors impacting these liabilities include lower than expected asset reinvestment rates, market volatility, actual lapses resulting in lower than expected income, and actual mortality or morbidity resulting in higher than expected benefit payments. We mitigate our risks by having premiums which are

adjustable or cancellable in some cases, and by applying various ALM strategies.

Table of Contents

MetLife Holdings

Future policy benefits for the life business are comprised mainly of liabilities for traditional life insurance contracts. In order to manage risk, we have often reinsured a portion of the mortality risk on life insurance policies. We routinely evaluate our reinsurance programs which may result in increases or decreases to existing coverage. We have entered into various interest rate derivative positions to mitigate the risk that investment of premiums received and reinvestment of maturing assets over the life of the policy will be at rates below those assumed in the original pricing of these contracts. For the annuities business, future policy benefits are comprised mainly of liabilities for life-contingent income annuities, and liabilities for the variable annuity guaranteed minimum benefits which are accounted for as insurance. Other future policyholder benefits are comprised mainly of liabilities for disabled lives under disability waiver of premium policy provisions, and active life policies. In addition, for our other products, future policyholder benefits related to the reinsurance of our former Japan joint venture are comprised of liabilities for the variable annuity guaranteed minimum benefits which are accounted for as insurance.

Corporate & Other

Future policy benefits primarily include liabilities for other reinsurance business. Additionally, future policy benefits include liabilities for the U.S direct business sold directly to consumers.

Policyholder Account Balances

Policyholder account balances are generally equal to the account value, which includes accrued interest credited, but excludes the impact of any applicable charge that may be incurred upon surrender. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Industry Trends — Impact of a Sustained Low Interest Rate Environment — Low Interest Rate Scenario” included in the 2017 Annual Report and “— Variable Annuity Guarantees.” See also Notes 1 and 4 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report for additional information. A discussion of policyholder account balances by segment follows.

U.S.

Policyholder account balances in this segment are comprised of funding agreements, retained asset accounts, universal life policies, the fixed account of variable life insurance policies and specialized life insurance products for benefit programs.

Group Benefits

Policyholder account balances in this business are held for retained asset accounts, universal life policies, the fixed account of variable life insurance policies and specialized life insurance products for benefit programs. Policyholder account balances are credited interest at a rate we determine, which is influenced by current market rates. A sustained low interest rate environment could negatively impact earnings as a result of the minimum credited rate guarantees present in most of these policyholder account balances. We have various interest rate derivative positions to partially mitigate the risks associated with such a scenario.

The table below presents the breakdown of account value subject to minimum guaranteed crediting rates for Group Benefits:

	March 31, 2018	
Guaranteed Minimum Crediting Rate	Account Value (1)	Account Value at Guarantee (1)
	(In millions)	
Greater than 0% but less than 2%	$4,812	$ 4,692
Equal to or greater than 2% but less than 4%	$1,814	$ 1,814
Equal to or greater than 4%	$737	$ 711

(1)These amounts are not adjusted for policy loans.

Table of Contents

Retirement and Income Solutions

Policyholder account balances in this business are primarily comprised of funding agreements. Interest crediting rates vary by type of contract, and can be fixed or variable. Variable interest crediting rates are generally tied to an external index, most commonly (1-month or 3-month) LIBOR. We are exposed to interest rate risks, as well as foreign currency exchange rate risk, when guaranteeing payment of interest and return of principal at the contractual maturity date. We may invest in floating rate assets or enter into receive-floating interest rate swaps, also tied to external indices, as well as interest rate caps, to mitigate the impact of changes in market interest rates. We also mitigate our risks by applying various ALM strategies and seek to hedge all foreign currency exchange rate risk through the use of foreign currency hedges, including cross currency swaps.

Asia

Policyholder account balances in this segment are held largely for fixed income retirement and savings plans, fixed deferred annuities, interest sensitive whole life products, universal life and, to a lesser degree, liability amounts for unit-linked-type funds that do not meet the GAAP definition of separate accounts. Also included are certain liabilities for retirement and savings products sold in certain countries in Asia that generally are sold with minimum credited rate guarantees. Liabilities for guarantees on certain variable annuities in Asia are accounted for as embedded derivatives and recorded at estimated fair value and are also included within policyholder account balances. These liabilities are generally impacted by sustained periods of low interest rates, where there are interest rate guarantees. We mitigate our risks by applying various ALM strategies and with reinsurance. Liabilities for unit-linked-type funds are impacted by changes in the fair value of the associated underlying investments, as the return on assets is generally passed directly to the policyholder.

The table below presents the breakdown of account value subject to minimum guaranteed crediting rates for Asia:

	March 31, 2018	
Guaranteed Minimum Crediting Rate	Account Value (1)	Account Value at Guarantee (1)
	(In millions)	
Annuities		
Greater than 0% but less than 2%	$23,122	$ 2,711
Equal to or greater than 2% but less than 4%	$1,263	$ 425
Equal to or greater than 4%	$2	$ 2
Life & Other		
Greater than 0% but less than 2%	$9,770	$ 9,466
Equal to or greater than 2% but less than 4%	$22,840	$ 9,299
Equal to or greater than 4%	$278	$ 278

(1) These amounts are not adjusted for policy loans.

Latin America

Policyholder account balances in this segment are held largely for investment-type products and universal life products in Mexico and Chile, and deferred annuities in Brazil. Some of the deferred annuities in Brazil are unit-linked-type funds that do not meet the GAAP definition of separate accounts. The rest of the deferred annuities have minimum credited rate guarantees, and these liabilities and the universal life liabilities are generally impacted by sustained periods of low interest rates. Liabilities for unit-linked-type funds are impacted by changes in the fair value of the associated investments, as the return on assets is generally passed directly to the policyholder.

EMEA

Policyholder account balances in this segment are held mostly for universal life, deferred annuity, pension products, and unit-linked-type funds that do not meet the GAAP definition of separate accounts. They are also held for endowment products without significant mortality risk. Where there are interest rate guarantees, these liabilities are generally impacted by sustained periods of low interest rates. We mitigate our risks by applying various ALM strategies. Liabilities for unit-linked-type funds are impacted by changes in the fair value of the associated

investments, as the return on assets is generally passed directly to the policyholder.

Table of Contents

MetLife Holdings

Life policyholder account balances are held for retained asset accounts, universal life policies, the fixed account of variable life insurance policies, and funding agreements. For annuities, policyholder account balances are held for fixed deferred annuities, the fixed account portion of variable annuities, non-life contingent income annuities, and embedded derivatives related to variable annuity guarantees. Interest is credited to the policyholder's account at interest rates we determine which are influenced by current market rates, subject to specified minimums. A sustained low interest rate environment could negatively impact earnings as a result of the minimum credited rate guarantees present in most of these policyholder account balances. We have various interest rate derivative positions to partially mitigate the risks associated with such a scenario. Additionally, for our other products, policyholder account balances are held for variable annuity guarantees assumed from a former operating joint venture in Japan that are accounted for as embedded derivatives.

The table below presents the breakdown of account value subject to minimum guaranteed crediting rates for the MetLife Holdings segment:

	March 31, 2018	
Guaranteed Minimum Crediting Rate	Account Value (1)	Account Value at Guarantee (1)
	(In millions)	
Greater than 0% but less than 2%	$1,662	$ 1,566
Equal to or greater than 2% but less than 4%	$19,312	$ 16,731
Equal to or greater than 4%	$8,336	$ 5,632

(1) These amounts are not adjusted for policy loans.

Variable Annuity Guarantees

We issue, directly and through assumed business, certain variable annuity products with guaranteed minimum benefits that provide the policyholder a minimum return based on their initial deposit (i.e., the benefit base) less withdrawals. In some cases, the benefit base may be increased by additional deposits, bonus amounts, accruals or optional market value resets. See Notes 1 and 4 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report, as well as Note 4 of the Notes to the Interim Condensed Consolidated Financial Statements, for additional information.

Certain guarantees, including portions thereof, have insurance liabilities established that are included in future policy benefits. Guarantees accounted for in this manner include guaranteed minimum death benefits ("GMDBs"), the life-contingent portion of certain guaranteed minimum withdrawal benefits ("GMWBs"), and the non-life contingent portions of both GMWBs and guaranteed minimum income benefits ("GMIBs") that require annuitization. These liabilities are accrued over the life of the contract in proportion to actual and future expected policy assessments based on the level of guaranteed minimum benefits generated using multiple scenarios of separate account returns. The scenarios are based on best estimate assumptions consistent with those used to amortize DAC. When current estimates of future benefits exceed those previously projected or when current estimates of future assessments are lower than those previously projected, liabilities will increase, resulting in a current period charge to net income. The opposite result occurs when the current estimates of future benefits are lower than those previously projected or when current estimates of future assessments exceed those previously projected. At the end of each reporting period, we update the actual amount of business remaining in-force, which impacts expected future assessments and the projection of estimated future benefits resulting in a current period charge or increase to earnings.

Certain guarantees, including portions thereof, accounted for as embedded derivatives, are recorded at estimated fair value and included in policyholder account balances. Guarantees accounted for as embedded derivatives include guaranteed minimum accumulation benefits ("GMABs"), and the non-life contingent portions of both GMWBs and GMIBs that do not require annuitization. The estimated fair values of guarantees accounted for as embedded derivatives are determined based on the present value of projected future benefits minus the present value of projected future fees. The projections of future benefits and future fees require capital market and actuarial assumptions

including expectations concerning policyholder behavior. A risk neutral valuation methodology is used to project the cash flows from the guarantees under multiple capital market scenarios to determine an economic liability. The reported estimated fair value is then determined by taking the present value of these risk-free generated cash flows using a discount rate that incorporates a spread over the risk-free rate to reflect our nonperformance risk and adding a risk margin. For more information on the determination of estimated fair value, see Note 8 of the Notes to the Interim Condensed Consolidated Financial Statements.

Table of Contents

The table below presents the carrying value for guarantees at:

	Future Policy Benefits		Policyholder Account Balances	
	March 31, 2018	December 31, 2017	March 31, 2018	December 31, 2017
	(In millions)			
Asia				
GMDB	$44	$ 38	$—	$ —
GMAB	—	—	17	19
GMWB	94	92	207	182
EMEA				
GMDB	—	1	—	—
GMAB	—	—	15	15
GMWB	35	42	(81)	(90)
MetLife Holdings				
GMDB	318	304	—	—
GMIB	593	581	(151)	(125)
GMAB	—	—	2	—
GMWB	105	183	406	322
Total	$1,189	$ 1,241	$415	$ 323

The carrying amounts for guarantees included in policyholder account balances above include nonperformance risk adjustments of $150 million and $130 million at March 31, 2018 and December 31, 2017, respectively. These nonperformance risk adjustments represent the impact of including a credit spread when discounting the underlying risk neutral cash flows to determine the estimated fair values. The nonperformance risk adjustment does not have an economic impact on us as it cannot be monetized given the nature of these policyholder liabilities. The change in valuation arising from the nonperformance risk adjustment is not hedged.

The carrying values of these guarantees can change significantly during periods of sizable and sustained shifts in equity market performance, equity volatility, interest rates or foreign currency exchange rates. Carrying values are also impacted by our assumptions around mortality, separate account returns and policyholder behavior, including lapse rates.

As discussed below, we use a combination of product design, hedging strategies, reinsurance, and other risk management actions to mitigate the risks related to these benefits. Within each type of guarantee, there is a range of product offerings reflecting the changing nature of these products over time. Changes in product features and terms are in part driven by customer demand but, more importantly, reflect our risk management practices of continuously evaluating the guaranteed benefits and their associated asset-liability matching. Recently, we have been diversifying the concentration of income benefits in the portfolio of the Company’s annuities business by focusing on withdrawal benefits, variable annuities without living benefits and index-linked annuities.

The sections below provide further detail by total account value for certain of our most popular guarantees. Total account values include amounts not reported on the consolidated balance sheets from assumed business, Unit-linked investments which do not qualify for presentation as separate account assets, and amounts included in our general account. The total account values and the net amounts at risk include direct and assumed business, but exclude offsets from hedging or ceded reinsurance, if any.

Table of Contents

GMDBs

We offer a range of GMDBs to our contractholders. The table below presents GMDBs, by benefit type, at March 31, 2018:

	Total Account Value (1)	
	Asia & EMEA	MetLife Holdings
	(In millions)	
Return of premium or five to seven year step-up	$7,759	$ 53,065
Annual step-up	—	3,577
Roll-up and step-up combination	—	6,327
Total	$7,759	$ 62,969

(1) Total account value excludes $306 million for contracts with no GMDBs. Further, many of our annuity contracts offer more than one type of guarantee such that GMDB amounts listed above are not mutually exclusive to the amounts in the living benefit guarantees table below.

Based on total account value, less than 19% of our GMDBs included enhanced death benefits such as the annual step-up or roll-up and step-up combination products. We expect the above GMDB risk profile to be relatively consistent for the foreseeable future.

Living Benefit Guarantees

The table below presents our living benefit guarantees based on total account values at March 31, 2018:

	Total Account Value (1)	
	Asia & EMEA	MetLife Holdings
	(In millions)	
GMIB	$—	$ 24,206
GMWB - non-life contingent (2)	2,355	3,181
GMWB - life-contingent	3,689	10,967
GMAB	1,223	535
Total	$7,267	$ 38,889

(1) Total account value excludes $24.4 billion for contracts with no living benefit guarantees. Further, many of our annuity contracts offer more than one type of guarantee such that living benefit guarantee amounts listed above are not mutually exclusive of the amounts in the GMDBs table above.

(2) The Asia and EMEA segments include the non-life contingent portion of the GMWB total account value of $963 million with a guarantee at annuitization.

In terms of total account value, GMIBs are our most significant living benefit guarantee. Our primary risk management strategy for our GMIB products is our derivatives hedging program as discussed below. Additionally, we have engaged in certain reinsurance agreements covering some of our GMIB business. As part of our overall risk management approach for living benefit guarantees, we continually monitor the reinsurance markets for the right opportunity to purchase additional coverage for our GMIB business.

Table of Contents

The table below presents our GMIB associated total account values, by their guaranteed payout basis, at March 31, 2018:

	Total Account Value
	(In millions)
7-year setback, 2.5% interest rate	$ 6,387
7-year setback, 1.5% interest rate	1,048
10-year setback, 1.5% interest rate	5,296
10-year mortality projection, 10-year setback, 1.0% interest rate	9,765
10-year mortality projection, 10-year setback, 0.5% interest rate	1,710
	$ 24,206

The annuitization interest rates on GMIBs have been decreased from 2.5% to 0.5% over time, partially in response to the low interest rate environment, accompanied by an increase in the setback period from seven years to 10 years and the introduction of a 10-year mortality projection.

Additionally, 40% of the $24.2 billion of GMIB total account value has been invested in managed volatility funds as of March 31, 2018. These funds seek to manage volatility by adjusting the fund holdings within certain guidelines based on capital market movements. Such activity reduces the overall risk of the underlying funds while maintaining their growth opportunities. These risk mitigation techniques reduce or eliminate the need for us to manage the funds' volatility through hedging or reinsurance.

Our GMIB products typically have a waiting period of 10 years to be eligible for annuitization. As of March 31, 2018, only 16% of our contracts with GMIBs were eligible for annuitization. The remaining contracts are not eligible for annuitization for an average of five years.

Once eligible for annuitization, contractholders would be expected to annuitize only if their contracts were in-the-money. We calculate in-the-moneyness with respect to GMIBs consistent with net amount at risk as discussed in Note 4 of the Notes to the Interim Condensed Consolidated Financial Statements, by comparing the contractholders' income benefits based on total account values and current annuity rates versus the guaranteed income benefits. The net amount at risk was $510 million at March 31, 2018, of which $307 million was related to GMIB guarantees. For those contracts with GMIB, the table below presents details of contracts that are in-the-money and out-of-the-money at March 31, 2018:

	In-the-Moneyness	Total Account Value	% of Total	
	(In millions)			
In-the-money	30% +	$284	1	%
	20% to 30%	201	1	%
	10% to 20%	421	2	%
	0% to 10%	826	3	%
		1,732		
Out-of-the-money	-10% to 0%	1,861	8	%
	-20% to -10%	3,317	14	%
	-20% +	17,296	72	%
		22,474		
Total GMIBs		$24,206		

Table of Contents

Derivatives Hedging Variable Annuity Guarantees

Our risk mitigating hedging strategy uses various over-the-counter and exchange traded derivatives. The table below presents the gross notional amount, estimated fair value and primary underlying risk exposure of the derivatives hedging our variable annuity guarantees:

		March 31, 2018			December 31, 2017		
Primary Underlying Risk Exposure	Instrument Type	Gross Notional Amount	Estimated Fair Value		Gross Notional Amount	Estimated Fair Value	
			Assets	Liabilities		Assets	Liabilities
		(In millions)					
Interest rate	Interest rate swaps	$ 8,185	$ 58	$ 11	$ 16,080	$ 433	$ 22
	Interest rate futures	1,966	1	3	3,060	1	4
	Interest rate options	2,180	383	—	10,173	486	11
Foreign currency exchange rate	Foreign currency forwards	2,871	54	7	2,288	5	36
Equity market	Equity futures	2,884	5	19	3,781	17	4
	Equity index options	9,653	399	603	9,546	383	690
	Equity variance swaps	4,661	52	194	4,661	54	199
	Equity total return swaps	1,012	35	—	1,117	—	41
	Total	$ 33,412	$ 987	$ 837	$ 50,706	$ 1,379	$ 1,007

The change in estimated fair values of our derivatives is recorded in policyholder benefits and claims if such derivatives are hedging guarantees included in future policy benefits, and in net derivative gains (losses) if such derivatives are hedging guarantees included in policyholder account balances.

Our hedging strategy involves the significant use of static longer-term derivative instruments to avoid the need to execute transactions during periods of market disruption or higher volatility. We continually monitor the capital markets for opportunities to adjust our liability coverage, as appropriate. Futures are also used to dynamically adjust the daily coverage levels as markets and liability exposures fluctuate.

We remain liable for the guaranteed benefits in the event that reinsurers or derivative counterparties are unable or unwilling to pay. Certain of our reinsurance agreements and substantially all derivative positions are collateralized and derivatives positions are subject to master netting agreements, both of which significantly reduce the exposure to counterparty risk. In addition, we are subject to the risk that hedging and other risk management actions prove ineffective or that unanticipated policyholder behavior or mortality, combined with adverse market events, produces economic losses beyond the scope of the risk management techniques employed.

Liquidity and Capital Resources

Overview

Our business and results of operations are materially affected by conditions in the global capital markets and the economy generally. Stressed conditions, volatility and disruptions in global capital markets, particular markets, or

financial asset classes can have an adverse effect on us, in part because we have a large investment portfolio and our insurance liabilities and derivatives are sensitive to changing market factors. Changing conditions in the global capital markets and the economy may affect our financing costs and market interest for our debt or equity securities. For further information regarding market factors that could affect our ability to meet liquidity and capital needs, see "— Industry Trends" and "— Investments — Current Environment."

Liquidity Management

Based upon the strength of our franchise, diversification of our businesses, strong financial fundamentals and the substantial funding sources available to us as described herein, we continue to believe we have access to ample liquidity to meet business requirements under current market conditions and reasonably possible stress scenarios. We continuously monitor and adjust our liquidity and capital plans for MetLife, Inc. and its subsidiaries in light of market conditions, as well as changing needs and opportunities.

Table of Contents

Short-term Liquidity

We maintain a substantial short-term liquidity position, which was $11.3 billion and $10.0 billion at March 31, 2018 and December 31, 2017, respectively. Short-term liquidity includes cash and cash equivalents and short-term investments, excluding assets that are pledged or otherwise committed, including amounts received in connection with securities lending, repurchase agreements, derivatives, and secured borrowings, as well as amounts held in the closed block.

Liquid Assets

An integral part of our liquidity management includes managing our level of liquid assets, which was $205.6 billion and $209.1 billion at March 31, 2018 and December 31, 2017, respectively. Liquid assets include cash and cash equivalents, short-term investments and publicly-traded securities, excluding assets that are pledged or otherwise committed. Assets pledged or otherwise committed include amounts received in connection with securities lending, repurchase agreements, derivatives, regulatory deposits, the collateral financing arrangement, funding agreements and secured borrowings, as well as amounts held in the closed block.

Capital Management

We have established several senior management committees as part of our capital management process. These committees, including the Capital Management Committee and the Enterprise Risk Committee (“ERC”), regularly review actual and projected capital levels (under a variety of scenarios including stress scenarios) and our annual capital plan in accordance with our capital policy. The Capital Management Committee is comprised of members of senior management, including MetLife, Inc.’s Chief Financial Officer (“CFO”), Treasurer, and Chief Risk Officer (“CRO”). The ERC is also comprised of members of senior management, including MetLife, Inc.’s CFO, CRO and Chief Investment Officer.

Our Board of Directors and senior management are directly involved in the development and maintenance of our capital policy. The capital policy sets forth, among other things, minimum and target capital levels and the governance of the capital management process. All capital actions, including proposed changes to the annual capital plan, capital targets or capital policy, are reviewed by the Finance and Risk Committee of the Board of Directors prior to obtaining full Board of Directors approval. The Board of Directors approves the capital policy and the annual capital plan and authorizes capital actions, as required.

See “Risk Factors — Capital-Related Risks — Legal and Regulatory Restrictions and Uncertainty and Restrictions Under the Terms of Certain of Our Securities May Prevent Us from Repurchasing Our Stock and Paying Dividends at the Level We Wish” and Note 15 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report for information regarding restrictions on payment of dividends and stock repurchases. See also “— The Company — Liquidity and Capital Uses — Common Stock Repurchases” for information regarding MetLife, Inc.’s common stock repurchase authorization.

The Company

Liquidity

Liquidity refers to the ability to generate adequate amounts of cash to meet our needs. In the event of significant cash requirements beyond anticipated liquidity needs, we have various alternatives available depending on market conditions and the amount and timing of the liquidity need. These available alternatives include cash flows from operations, sales of liquid assets, global funding sources including commercial paper and various credit and committed facilities.

Capital

We manage our capital position to maintain our financial strength and credit ratings. Our capital position is supported by our ability to generate strong cash flows within our operating companies and borrow funds at competitive rates, as well as by our demonstrated ability to raise additional capital to meet operating and growth needs despite adverse market and economic conditions.

Table of Contents

Summary of the Company's Primary Sources and Uses of Liquidity and Capital

Our primary sources and uses of liquidity and capital are summarized as follows:

	Three Months Ended March 31,	
	2018	2017
	(In millions)	
Sources:		
Operating activities, net	$1,296	$2,098
Changes in policyholder account balances, net	414	2,171
Changes in payables for collateral under securities loaned and other transactions, net	667	391
Long-term debt issued	14	—
Financing element on certain derivative instruments and other derivative related transactions, net	37	188
Preferred stock issued, net of issuance costs	494	—
Other, net	100	66
Effect of change in foreign currency exchange rates on cash and cash equivalents	197	213
Total sources	3,219	5,127
Uses:		
Investing activities, net	485	4,276
Long-term debt repaid	32	4
Collateral financing arrangement repaid	13	12
Treasury stock acquired in connection with share repurchases	1,041	858
Dividends on preferred stock	6	6
Dividends on common stock	416	437
Total uses	1,993	5,593
Net increase (decrease) in cash and cash equivalents	$1,226	$(466)

Cash Flows from Operations

The principal cash inflows from our insurance activities come from insurance premiums, net investment income, annuity considerations and deposit funds. The principal cash outflows are the result of various life insurance, property & casualty, annuity and pension products, operating expenses and income tax, as well as interest expense. A primary liquidity concern with respect to these cash flows is the risk of early contractholder and policyholder withdrawal. The cash flows from discontinued operations are not separately classified, but generally arise from the same activities described above.

Cash Flows from Investments

The principal cash inflows from our investment activities come from repayments of principal, proceeds from maturities and sales of investments and settlements of freestanding derivatives. The principal cash outflows relate to purchases of investments, issuances of policy loans and settlements of freestanding derivatives. Additional cash outflows relate to purchases of businesses. We typically have a net cash outflow from investing activities because cash inflows from insurance operations are reinvested in accordance with our ALM discipline to fund insurance liabilities. We closely monitor and manage these risks through our comprehensive investment risk management process. The primary liquidity concerns with respect to these cash flows are the risk of default by debtors and market disruption. The cash flows from discontinued operations are not separately classified, but generally arise from the same activities described above.

Table of Contents

Cash Flows from Financing

The principal cash inflows from our financing activities come from issuances of debt and other securities, deposits of funds associated with policyholder account balances and lending of securities. The principal cash outflows come from repayments of debt and collateral financing arrangements, payments of dividends on and repurchases of MetLife, Inc.'s securities, withdrawals associated with policyholder account balances and the return of securities on loan. The primary liquidity concerns with respect to these cash flows are market disruption and the risk of early contractholder and policyholder withdrawal. The cash flows from discontinued operations are not separately classified, but generally arise from the same activities described above.

Liquidity and Capital Sources

In addition to the general description of liquidity and capital sources in "— Summary of the Company's Primary Sources and Uses of Liquidity and Capital," the following additional information is provided regarding our primary sources of liquidity and capital. See Note 3 of the Notes to the Interim Condensed Consolidated Financial Statements for information regarding financing transactions related to the Separation.

Global Funding Sources

Liquidity is provided by a variety of global funding sources, including funding agreements, credit and committed facilities and commercial paper. Capital is provided by a variety of global funding sources, including short-term and long-term debt, the collateral financing arrangement, junior subordinated debt securities, preferred securities, equity securities and equity-linked securities. The diversity of our global funding sources enhances our funding flexibility, limits dependence on any one market or source of funds and generally lowers the cost of funds. Our primary global funding sources include:

Preferred Stock

In March 2018, MetLife, Inc. issued 500,000 shares of 5.875% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series D (the "Series D preferred stock") with a $0.01 par value per share and a liquidation preference of $1,000 per share, for aggregate proceeds of $494 million. See Note 9 of the Notes to the Interim Condensed Consolidated Financial Statements for further information.

Common Stock

During the three months ended March 31, 2018 and 2017, MetLife, Inc. issued 1,934,114 and 1,840,900 new shares of its common stock, respectively, for $74 million and $66 million, respectively, to satisfy various stock option exercises and other stock-based awards.

Commercial Paper, Reported in Short-term Debt

MetLife, Inc. and MetLife Funding, Inc. ("MetLife Funding"), a subsidiary of Metropolitan Life Insurance Company ("MLIC"), each have a commercial paper program that is supported by our unsecured revolving credit facility (see "— Credit and Committed Facilities"). MetLife Funding raises cash from its commercial paper program and uses the proceeds to extend loans through MetLife Credit Corp., another subsidiary of MLIC, to affiliates in order to enhance the financial flexibility and liquidity of these companies.

Federal Home Loan Bank Funding Agreements, Reported in Policyholder Account Balances

Certain of our domestic insurance subsidiaries are members of a regional FHLB. During the three months ended March 31, 2018 and 2017, we issued $6.5 billion and $4.4 billion, respectively, and repaid $6.5 billion and $4.4 billion, respectively, under funding agreements with certain regional FHLBs. At both March 31, 2018 and December 31, 2017, total obligations outstanding under these funding agreements were $15.3 billion. See Note 4 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report.

Federal Home Loan Bank Advance Agreements, Reported in Payables for Collateral Under Securities Loaned and Other Transactions

During the three months ended March 31, 2018, we issued $800 million and repaid $300 million, under advance agreements with a regional FHLB. There were no such transactions during the three months ended March 31, 2017. At March 31, 2018 and December 31, 2017, total obligations outstanding under these advance agreements were $800 million and $300 million, respectively. See Note 6 of the Notes to the Interim Condensed Consolidated Financial Statements.

147

Table of Contents

Special Purpose Entity Funding Agreements, Reported in Policyholder Account Balances

We issue fixed and floating rate funding agreements, which are denominated in either U.S. dollars or foreign currencies, to certain special purpose entities ("SPEs") that have issued either debt securities or commercial paper for which payment of interest and principal is secured by such funding agreements. During the three months ended March 31, 2018 and 2017, we issued $12.9 billion and $10.3 billion, respectively, and repaid $13.9 billion and $9.5 billion, respectively, under such funding agreements. At March 31, 2018 and December 31, 2017, total obligations outstanding under these funding agreements were $33.6 billion and $34.2 billion, respectively. See Note 4 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report.

Federal Agricultural Mortgage Corporation Funding Agreements, Reported in Policyholder Account Balances

We have issued funding agreements to a subsidiary of the Federal Agricultural Mortgage Corporation ("Farmer Mac"), as well as to certain SPEs that have issued debt securities for which payment of interest and principal is secured by such funding agreements, and such debt securities are also guaranteed as to payment of interest and principal by Farmer Mac. The obligations under all such funding agreements are secured by a pledge of certain eligible agricultural mortgage loans. During the three months ended March 31, 2018 and 2017, we issued $125 million and $0, respectively, and repaid $125 million and $0, respectively, under such funding agreements. At both March 31, 2018 and December 31, 2017, total obligations outstanding under these funding agreements were $2.6 billion. See Note 4 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report.

Credit and Committed Facilities

At March 31, 2018, we maintained a $3.0 billion unsecured revolving credit facility and certain committed facilities aggregating $3.5 billion. When drawn upon, these facilities bear interest at varying rates in accordance with the respective agreements.

The unsecured revolving credit facility is used for general corporate purposes, to support the borrowers' commercial paper programs and for the issuance of letters of credit. At March 31, 2018, we had outstanding $312 million in letters of credit and no drawdowns against this facility. Remaining availability was $2.7 billion at March 31, 2018.

The committed facilities are used as collateral for certain of our affiliated reinsurance liabilities. At March 31, 2018, we had outstanding $3.0 billion in letters of credit and no drawdowns against these facilities. Remaining availability was $541 million at March 31, 2018. At March 31, 2018, Brighthouse was a beneficiary of $2.4 billion of letters of credit issued under a certain facility. See Note 3 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report.

See Note 12 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report for further information about these facilities.

We have no reason to believe that our lending counterparties will be unable to fulfill their respective contractual obligations under these facilities. As commitments under our credit and committed facilities may expire unused, these amounts do not necessarily reflect our future cash funding requirements.

Outstanding Debt Under Global Funding Sources

The following table summarizes our outstanding debt, excluding long-term debt relating to CSEs, at:

	March 31, 2018	December 31, 2017
	(In millions)	
Short-term debt (1)	$526	$ 477
Long-term debt (2)	$15,702	$ 15,680
Collateral financing arrangement	$1,108	$ 1,121
Junior subordinated debt securities	$3,145	$ 3,144

(1) Includes $426 million and $377 million of debt that is non-recourse to MetLife, Inc. and MLIC, subject to customary exceptions, at March 31, 2018 and December 31, 2017, respectively. Certain subsidiaries have pledged assets to secure this debt.

Table of Contents

(2) Includes $506 million and $523 million of debt that is non-recourse to MetLife, Inc. and MLIC, subject to customary exceptions, at March 31, 2018 and December 31, 2017, respectively. Certain investment subsidiaries have pledged assets to secure this debt.

Debt and Facility Covenants

Certain of our debt instruments and committed facilities, as well as our unsecured revolving credit facility, contain various administrative, reporting, legal and financial covenants. We believe we were in compliance with all applicable financial covenants at March 31, 2018.

Liquidity and Capital Uses

In addition to the general description of liquidity and capital uses in "— Summary of the Company's Primary Sources and Uses of Liquidity and Capital," the following additional information is provided regarding our primary uses of liquidity and capital.

Common Stock Repurchases

On November 1, 2017, MetLife, Inc. announced that its Board of Directors authorized $2.0 billion of common stock repurchases. Under this authorization, MetLife, Inc. may purchase its common stock from the MetLife Policyholder Trust, in the open market (including pursuant to the terms of a pre-set trading plan meeting the requirements of Rule 10b5-1 under the Securities Exchange Act of 1934 ("Exchange Act")) and in privately negotiated transactions. During the three months ended March 31, 2018 and 2017, MetLife, Inc. repurchased 21,405,327 shares and 16,038,791 shares, respectively, of common stock in open market purchases for $1.0 billion and $858 million, respectively. At March 31, 2018, MetLife, Inc. had $720 million remaining under the common stock repurchase authorization.

Common stock repurchases are dependent upon several factors, including our capital position, liquidity, financial strength and credit ratings, general market conditions, the market price of MetLife, Inc.'s common stock compared to management's assessment of the stock's underlying value and applicable regulatory approvals, as well as other legal and accounting factors. See "Business — Regulation," "Risk Factors — Capital-Related Risks — Legal and Regulatory Restrictions and Uncertainty and Restrictions Under the Terms of Certain of Our Securities May Prevent Us from Repurchasing Our Stock and Paying Dividends at the Level We Wish" and Note 15 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report.

Dividends

Preferred Stock Dividends

The declaration, record and payment dates, as well as per share and aggregate dividend amounts, for MetLife, Inc.'s preferred stock were as follows for the three months ended March 31, 2018 and 2017:

			Preferred Stock Dividend					
Declaration Date	Record Date	Payment Date	Series A Per Share	Series A Aggregate	Series C Per Share	Series C Aggregate	Series D Per Share	Series D Aggregate
			(In millions, except per share data)					
March 5, 2018	February 28, 2018	March 15, 2018	$0.250	$ 6	$ —	$ —	$ —	$ —
March 6, 2017	February 28, 2017	March 15, 2017	$0.250	$ 6	$ —	$ —	$ —	$ —

Dividends are paid quarterly on MetLife, Inc.'s Floating Rate Non-Cumulative Preferred Stock, Series A. Dividends are paid semi-annually on MetLife, Inc.'s 5.25% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series C, commencing December 15, 2015 and ending June 15, 2020 and, thereafter, will be paid quarterly. Dividends will be paid semi-annually on MetLife, Inc.'s 5.875% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series D, commencing September 15, 2018 and ending March 15, 2028 and, thereafter, will be paid quarterly.

Table of Contents

Common Stock Dividends

The declaration, record and payment dates, as well as per share and aggregate dividend amounts, for MetLife, Inc.'s common stock were as follows for the three months ended March 31, 2018 and 2017:

Declaration Date	Record Date	Payment Date	Common Stock Dividend Per Share	Aggregate (In millions, except per share data)
January 5, 2018	February 5, 2018	March 13, 2018	$0.400	$ 416
January 6, 2017	February 6, 2017	March 13, 2017	$0.400	$ 437

The declaration and payment of common stock dividends is subject to the discretion of our Board of Directors, and will depend on MetLife, Inc.'s financial condition, results of operations, cash requirements, future prospects, regulatory restrictions on the payment of dividends by MetLife, Inc.'s insurance subsidiaries and other factors deemed relevant by the Board. See Note 15 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report for additional information. See also Note 15 of the Notes to the Interim Condensed Consolidated Financial Statements for information regarding a common stock dividend declared subsequent to March 31, 2018.

Dividend Restrictions

The payment of dividends is also subject to restrictions under the terms of our preferred stock and junior subordinated debentures in situations where we may be experiencing financial stress. See "Risk Factors — Capital-Related Risks — Legal and Regulatory Restrictions and Uncertainty and Restrictions Under the Terms of Certain of Our Securities May Prevent Us from Repurchasing Our Stock and Paying Dividends at the Level We Wish" and Note 15 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report. If additional capital requirements are imposed on MetLife, Inc. as a global systemically important insurer ("G-SII"), its ability to pay dividends could be reduced. See "Business — Regulation — International Regulation — Other International and Global Regulatory Initiatives" in the 2017 Annual Report.

Debt and Collateral Financing Arrangement Repayments

During the three months ended March 31, 2018 and 2017, following regulatory approval, MetLife Reinsurance Company of Charleston, a wholly-owned subsidiary of MetLife, Inc., repurchased and canceled $13 million and $12 million, respectively, in aggregate principal amount of its surplus notes, which were reported in collateral financing arrangement on the consolidated balance sheets.

Debt Repurchases

We may from time to time seek to retire or purchase our outstanding debt through cash purchases and/or exchanges for other securities, in open market purchases, privately negotiated transactions or otherwise. Any such repurchases or exchanges will be dependent upon several factors, including our liquidity requirements, contractual restrictions, general market conditions, and applicable regulatory, legal and accounting factors. Whether or not to repurchase any debt and the size and timing of any such repurchases will be determined at our discretion.

Support Agreements

MetLife, Inc. and several of its subsidiaries (each, an "Obligor") are parties to various capital support commitments and guarantees with subsidiaries. Under these arrangements, each Obligor has agreed to cause the applicable entity to meet specified capital and surplus levels or has guaranteed certain contractual obligations. We anticipate that in the event these arrangements place demands upon us, there will be sufficient liquidity and capital to enable us to meet such demands. See "Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — MetLife, Inc. — Liquidity and Capital Uses — Support Agreements" included in the 2017 Annual Report.

Table of Contents

Insurance Liabilities

Liabilities arising from our insurance activities primarily relate to benefit payments under various life insurance, property & casualty, annuity and group pension products, as well as payments for policy surrenders, withdrawals and loans. For annuity or deposit type products, surrender or lapse behavior differs somewhat by segment. In the MetLife Holdings segment, which includes individual annuities, lapses and surrenders tend to occur in the normal course of business. During the three months ended March 31, 2018 and 2017, general account surrenders and withdrawals from annuity products were $450 million and $358 million, respectively. In the Retirement and Income Solutions business within the U.S. segment, which includes pension risk transfers, bank-owned life insurance and other fixed annuity contracts, as well as funding agreements and other capital market products, most of the products offered have fixed maturities or fairly predictable surrenders or withdrawals. With regard to the Retirement and Income Solutions business products that provide customers with limited rights to accelerate payments, at March 31, 2018 there were funding agreements totaling $166 million that could be put back to the Company.

Pledged Collateral

We pledge collateral to, and have collateral pledged to us by, counterparties in connection with our derivatives. At March 31, 2018 and December 31, 2017, we had received pledged cash collateral from counterparties of $4.5 billion and $5.0 billion, respectively. At March 31, 2018 and December 31, 2017, we had pledged cash collateral to counterparties of $293 million and $456 million, respectively. With respect to derivative contracts between two counterparties which are in a net liability position and have credit contingent provisions, a one-notch downgrade in the Company’s credit or financial strength rating, as applicable, would have required $14 million of additional collateral be provided to our counterparties as of March 31, 2018. See Note 7 of the Notes to the Interim Condensed Consolidated Financial Statements for additional information about collateral pledged to us, collateral we pledge and derivatives subject to credit contingent provisions.

We pledge collateral and have had collateral pledged to us, and may be required from time to time to pledge additional collateral or be entitled to have additional collateral pledged to us, in connection with the collateral financing arrangement related to the reinsurance of closed block liabilities.

We pledge collateral from time to time in connection with funding agreements and advance agreements. See Note 4 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report and Note 6 of the Notes to the Interim Condensed Consolidated Financial Statements.

Securities Lending

We participate in a securities lending program whereby securities are loaned to third parties, primarily brokerage firms and commercial banks. We obtain collateral, usually cash, from the borrower, which must be returned to the borrower when the loaned securities are returned to us. Under our securities lending program, we were liable for cash collateral under our control of $18.1 billion and $19.4 billion at March 31, 2018 and December 31, 2017, respectively. Of these amounts, $3.5 billion and $3.8 billion at March 31, 2018 and December 31, 2017, respectively, were on open, meaning that the related loaned security could be returned to us on the next business day, requiring the immediate return of cash collateral we hold. The estimated fair value of the securities on loan related to the cash collateral on open at March 31, 2018 was $3.4 billion, all of which were U.S. government and agency securities which, if put to us, could be immediately sold to satisfy the cash requirement. See Note 6 of the Notes to the Interim Condensed Consolidated Financial Statements.

Repurchase Agreements

We participate in short-term repurchase agreements whereby securities are loaned to unaffiliated financial institutions. We obtain collateral, usually cash, from the borrower, which must be returned to the borrower when the loaned securities are returned to us. Under these repurchase agreements, we were liable for cash collateral under our control of $2.9 billion and $1.1 billion at March 31, 2018 and December 31, 2017, respectively. The estimated fair value of the securities on loan at March 31, 2018 was $2.9 billion which were primarily U.S. government and agency securities which, if put to us, could be immediately sold to satisfy the cash requirement. See Note 6 of the Notes to the Interim Condensed Consolidated Financial Statements.

Table of Contents

Litigation

Putative or certified class action litigation and other litigation, and claims and assessments against us, in addition to those discussed elsewhere herein and those otherwise provided for on the consolidated financial statements, have arisen in the course of our business, including, but not limited to, in connection with our activities as an insurer, employer, investor, investment advisor, taxpayer and, formerly, a mortgage lending bank. Further, state insurance regulatory authorities and other federal and state authorities regularly make inquiries and conduct investigations concerning our compliance with applicable insurance and other laws and regulations. See Note 14 of the Notes to the Interim Condensed Consolidated Financial Statements.

We establish liabilities for litigation and regulatory loss contingencies when it is probable that a loss has been incurred and the amount of the loss can be reasonably estimated. For material matters where a loss is believed to be reasonably possible but not probable, no accrual is made but we disclose the nature of the contingency and an aggregate estimate of the reasonably possible range of loss in excess of amounts accrued, when such an estimate can be made. It is not possible to predict or determine the ultimate outcome of all pending investigations and legal proceedings. In some of the matters referred to herein, very large and/or indeterminate amounts, including punitive and treble damages, are sought. Although in light of these considerations, it is possible that an adverse outcome in certain cases could have a material adverse effect upon our financial position, based on information currently known by us, in our opinion, the outcome of such pending investigations and legal proceedings are not likely to have such an effect. However, given the large and/or indeterminate amounts sought in certain of these matters and the inherent unpredictability of litigation, it is possible that an adverse outcome in certain matters could, from time to time, have a material adverse effect on our consolidated net income or cash flows in particular quarterly or annual periods.

Contractual Obligations

See “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — The Company — Contractual Obligations” included in the 2017 Annual Report for additional information regarding the Company’s contractual obligations.

MetLife, Inc.

Liquidity and Capital Management

Liquidity and capital are managed to preserve stable, reliable and cost-effective sources of cash to meet all current and future financial obligations and are provided by a variety of sources, including a portfolio of liquid assets, a diversified mix of short- and long-term funding sources from the wholesale financial markets and the ability to borrow through credit and committed facilities. Liquidity is monitored through the use of internal liquidity risk metrics, including the composition and level of the liquid asset portfolio, timing differences in short-term cash flow obligations, access to the financial markets for capital and debt transactions and exposure to contingent draws on MetLife, Inc.’s liquidity. MetLife, Inc. is an active participant in the global financial markets through which it obtains a significant amount of funding. These markets, which serve as cost-effective sources of funds, are critical components of MetLife, Inc.’s liquidity and capital management. Decisions to access these markets are based upon relative costs, prospective views of balance sheet growth and a targeted liquidity profile and capital structure. A disruption in the financial markets could limit MetLife, Inc.’s access to liquidity.

MetLife, Inc.’s ability to maintain regular access to competitively priced wholesale funds is fostered by its current credit ratings from the major credit rating agencies. We view our capital ratios, credit quality, stable and diverse earnings streams, diversity of liquidity sources and our liquidity monitoring procedures as critical to retaining such credit ratings.

Liquidity

For a summary of MetLife, Inc.’s liquidity, see “— The Company — Liquidity.”

Capital

For a summary of MetLife, Inc.’s capital, see “— The Company — Capital.” For further information regarding potential capital restrictions and limitations on MetLife, Inc. as a G-SII, see “Business — Regulation — International Regulation — Other International and Global Regulatory Initiatives” included in the 2017 Annual Report. See also “— The Company — Liquidity and Capital Uses — Common Stock Repurchases” for information regarding MetLife, Inc.’s common stock repurchases.

152

Table of Contents

Liquid Assets

At March 31, 2018 and December 31, 2017, MetLife, Inc. and other MetLife holding companies had $5.1 billion and $5.7 billion, respectively, in liquid assets. Of these amounts, $3.8 billion and $4.1 billion were held by MetLife, Inc. and $1.3 billion and $1.6 billion were held by other MetLife holding companies at March 31, 2018 and December 31, 2017, respectively. Liquid assets include cash and cash equivalents, short-term investments and publicly-traded securities excluding assets that are pledged or otherwise committed. Assets pledged or otherwise committed include amounts received in connection with derivatives and a collateral financing arrangement.

Liquid assets held in non-U.S. holding companies are generated in part through dividends from non-U.S. insurance operations. Such dividends are subject to local insurance regulatory requirements, as discussed in "— Liquidity and Capital Sources — Dividends from Subsidiaries." The cumulative earnings of certain active non-U.S. operations have historically been reinvested indefinitely in such non-U.S. operations. Following a post-Separation review of our capital needs in the third quarter of 2017, we expect to repatriate approximately $3.0 billion of pre-2017 earnings in the future. See Note 18 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report for information on the taxation of such cumulative earnings. The Company repatriated $2.6 billion in the fourth quarter of 2017 and intends to repatriate the remaining amount in 2018. As a result of U.S. Tax Reform, we expect to repatriate future foreign earnings back to the U.S. with minimal or no additional U.S. tax. See also Note 12 of the Notes to the Interim Condensed Consolidated Financial Statements.

See "Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — MetLife, Inc. — Liquid Assets" included in the 2017 Annual Report for additional information on the sources and uses of liquid assets, as well as sources and uses of liquid assets included in free cash flow for MetLife, Inc. and other MetLife holding companies.

Liquidity and Capital Sources

In addition to the description of liquidity and capital sources in "— The Company — Summary of the Company's Primary Sources and Uses of Liquidity and Capital" and "— The Company — Liquidity and Capital Sources," the following additional information is provided regarding MetLife, Inc.'s primary sources of liquidity and capital.

Dividends from Subsidiaries

MetLife, Inc. relies, in part, on dividends from its subsidiaries to meet its cash requirements. MetLife, Inc.'s insurance subsidiaries are subject to regulatory restrictions on the payment of dividends imposed by the regulators of their respective domiciles. The dividend limitation for U.S. insurance subsidiaries is generally based on the surplus to policyholders at the end of the immediately preceding calendar year and statutory net gain from operations for the immediately preceding calendar year. Statutory accounting practices, as prescribed by insurance regulators of various states in which we conduct business, differ in certain respects from accounting principles used in financial statements prepared in conformity with GAAP. The significant differences relate to the treatment of DAC, certain deferred income tax, required investment liabilities, statutory reserve calculation assumptions, goodwill and surplus notes.

The table below sets forth the dividends permitted to be paid in 2018 by MetLife, Inc.'s primary insurance subsidiaries without insurance regulatory approval and the respective dividends paid during the three months ended March 31, 2018:

Company	Paid	Permitted w/o Approval (1)
	(In millions)	
Metropolitan Life Insurance Company	$1,000	$ 3,075
Metropolitan Property and Casualty Insurance Company	$—	$ 125
General American Life Insurance Company	$—	$ 118
Metropolitan Tower Life Insurance Company	$—	$ 73
American Life Insurance Company	$—	$ —

(1) Reflects dividend amounts that may be paid during 2018 without prior regulatory approval. However, because dividend tests may be based on dividends previously paid over rolling 12-month periods, if paid before a specified date during 2018, some or all of such dividends may require regulatory approval.

In addition to the amounts presented in the table above, for the three months ended March 31, 2018, MetLife, Inc. received cash of $20 million, representing a return of capital from a subsidiary.

Table of Contents

The dividend capacity of our non-U.S. operations is subject to similar restrictions established by the local regulators. The non-U.S. regulatory regimes also commonly limit dividend payments to the parent company to a portion of the subsidiary's prior year statutory income, as determined by the local accounting principles. The regulators of our non-U.S. operations, including Japan's Financial Services Agency, may also limit or not permit profit repatriations or other transfers of funds to the U.S. if such transfers are deemed to be detrimental to the solvency or financial strength of the non-U.S. operations, or for other reasons. Most of our non-U.S. subsidiaries are second tier subsidiaries which are owned by various non-U.S. holding companies. The capital and rating considerations applicable to our first tier subsidiaries may also impact the dividend flow into MetLife, Inc.

We proactively manage target and excess capital levels and dividend flows and forecast local capital positions as part of the financial planning cycle. The dividend capacity of certain U.S. and non-U.S. subsidiaries is also subject to business targets in excess of the minimum capital necessary to maintain the desired rating or level of financial strength in the relevant market. See "Risk Factors — Capital-Related Risks — As a Holding Company, MetLife, Inc. Depends on the Ability of Its Subsidiaries to Pay Dividends, a Major Component of Holding Company Free Cash Flow" included in the 2017 Annual Report and Note 15 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report.

Short-term Debt

MetLife, Inc. maintains a commercial paper program, the proceeds of which can be used to finance the general liquidity needs of MetLife, Inc. and its subsidiaries. MetLife, Inc. had no short-term debt outstanding at either March 31, 2018 or December 31, 2017.

Preferred Stock

For information on MetLife, Inc.'s preferred stock, see "— The Company — Liquidity and Capital Sources — Global Funding Sources — Preferred Stock" and "— The Company — Liquidity and Capital Uses — Dividends — Preferred Stock Dividends.

Redenomination of Affiliated Long-term Debt

In March 2018, three senior notes previously issued by MetLife, Inc. to MLIC were redenominated to Japanese yen. A $500 million senior note was redenominated to a new 53.3 billion Japanese yen senior note to MLIC. The 53.3 billion Japanese yen senior note matures in June 2019 and bears interest at a rate per annum of 1.45%, payable semi-annually. A $250 million senior note was redenominated to a new 26.5 billion Japanese yen senior note to MLIC. The 26.5 billion Japanese yen senior note matures in October 2019 and bears interest at a rate per annum of 1.72%, payable semi-annually. A $250 million senior note was also redenominated to a new 26.5 billion Japanese yen senior note to MLIC. The 26.5 billion Japanese yen senior note matures in September 2020 and bears interest at a rate per annum of 0.82%, payable semi-annually.

In April 2018, a $500 million senior note previously issued by MetLife, Inc. to various subsidiaries was redenominated to a new 53.7 billion Japanese yen senior note. The 53.7 billion Japanese yen senior note matures in July 2021 and bears interest at a rate per annum of 2.97%, payable semi-annually.

Credit and Committed Facilities

The committed facilities are used as collateral for certain of the Company's affiliated reinsurance liabilities. MetLife, Inc. maintains a committed facility which had a capacity of $200 million at March 31, 2018. At March 31, 2018, MetLife, Inc. had outstanding under this facility $200 million in letters of credit, no drawdowns outstanding and no remaining availability. In addition, MetLife, Inc. is a party and/or guarantor to committed facilities of certain of its subsidiaries, which aggregated $3.3 billion at March 31, 2018.

See "— The Company — Liquidity and Capital Sources — Global Funding Sources — Credit and Committed Facilities" for further information regarding the unsecured revolving credit facility and these committed facilities.

Long-term Debt Outstanding

The following table summarizes the outstanding long-term debt of MetLife, Inc. at:

	March 31, 2018	December 31, 2017
	(In millions)	
Long-term debt — unaffiliated	$14,638	$ 14,599
Long-term debt — affiliated	$2,000	$ 2,000

Junior subordinated debt securities	$2,454	$ 2,454

Table of Contents

Debt and Facility Covenants

Certain of MetLife, Inc.'s debt instruments and committed facilities, as well as its unsecured revolving credit facility, contain various administrative, reporting, legal and financial covenants. MetLife, Inc. believes it was in compliance with all applicable financial covenants at March 31, 2018.

Liquidity and Capital Uses

The primary uses of liquidity of MetLife, Inc. include debt service, cash dividends on common and preferred stock, capital contributions to subsidiaries, common and preferred stock repurchases, payment of general operating expenses and acquisitions. Based on our analysis and comparison of our current and future cash inflows from the dividends we receive from subsidiaries that are permitted to be paid without prior insurance regulatory approval, our investment portfolio and other cash flows and anticipated access to the capital markets, we believe there will be sufficient liquidity and capital to enable MetLife, Inc. to make payments on debt, pay cash dividends on its common and preferred stock, contribute capital to its subsidiaries, repurchase its common stock, pay all general operating expenses and meet its cash needs.

In addition to the description of liquidity and capital uses in "— The Company — Liquidity and Capital Uses," the following additional information is provided regarding MetLife, Inc.'s primary uses of liquidity and capital.

Affiliated Capital and Debt Transactions

During the three months ended March 31, 2018 and 2017, MetLife, Inc. invested a net amount of $4 million and $31 million, respectively, in various subsidiaries.

MetLife, Inc. lends funds, as necessary, to its subsidiaries and affiliates, some of which are regulated, to meet their capital requirements. MetLife, Inc. had loans to subsidiaries outstanding of $100 million at both March 31, 2018 and December 31, 2017.

Support Agreements

MetLife, Inc. is party to various capital support commitments and guarantees with certain of its subsidiaries. Under these arrangements, MetLife, Inc. has agreed to cause each such entity to meet specified capital and surplus levels or has guaranteed certain contractual obligations. See "— The Company — Liquidity and Capital Uses — Support Agreements."

Adoption of New Accounting Pronouncements

See Note 1 of the Notes to the Interim Condensed Consolidated Financial Statements.

Future Adoption of New Accounting Pronouncements

See Note 1 of the Notes to the Interim Condensed Consolidated Financial Statements.

Non-GAAP and Other Financial Disclosures

In this report, the Company presents certain measures of its performance that are not calculated in accordance with GAAP. We believe that these non-GAAP financial measures enhance the understanding of our performance by highlighting the results of operations and the underlying profitability drivers of our business.

The following non-GAAP financial measures should not be viewed as substitutes for the most directly comparable financial measures calculated in accordance with GAAP:

Non-GAAP financial measures:	Comparable GAAP financial measures:
(i) adjusted revenues	(i) revenues
(ii) adjusted expenses	(ii) expenses
(iii) adjusted earnings	(iii) income (loss) from continuing operations, net of income tax
(iv) adjusted earnings available to common shareholders	(iv) net income (loss) available to MetLife, Inc.'s common shareholders

Table of Contents

Reconciliations of these non-GAAP measures to the most directly comparable historical GAAP measures are included in the results of operations, see "— Results of Operations." Reconciliations of these non-GAAP measures to the most directly comparable GAAP measures are not accessible on a forward-looking basis because we believe it is not possible without unreasonable efforts to provide other than a range of net investment gains and losses and net derivative gains and losses, which can fluctuate significantly within or outside the range and from period to period and may have a material impact on net income. These "adjusted" non-GAAP financial measures were formerly referred to as "operating" non-GAAP financial measures.

Our definitions of the various non-GAAP and other financial measures discussed in this report may differ from those used by other companies:

Adjusted earnings and related measures:

- adjusted earnings; and
- adjusted earnings available to common shareholders.

These measures are used by management to evaluate performance and allocate resources. Consistent with GAAP guidance for segment reporting, adjusted earnings is also our GAAP measure of segment performance. Adjusted earnings and other financial measures based on adjusted earnings are also the measures by which senior management's and many other employees' performance is evaluated for the purposes of determining their compensation under applicable compensation plans. Adjusted earnings and other financial measures based on adjusted earnings allow analysis of our performance relative to our business plan and facilitate comparisons to industry results.

Adjusted earnings is defined as adjusted revenues less adjusted expenses, net of income tax. Adjusted earnings available to common shareholders is defined as adjusted earnings less preferred stock dividends.

Adjusted revenues and adjusted expenses

These financial measures focus on our primary businesses principally by excluding the impact of market volatility, which could distort trends, and revenues and costs related to non-core products and certain entities required to be consolidated under GAAP. Also, these measures exclude results of discontinued operations under GAAP and other businesses that have been or will be sold or exited by MetLife but do not meet the discontinued operations criteria under GAAP and are referred to as divested businesses. Divested businesses also includes the net impact of transactions with exited businesses that have been eliminated in consolidation under GAAP and costs relating to businesses that have been or will be sold or exited by MetLife that do not meet the criteria to be included in results of discontinued operations under GAAP. Adjusted revenues also excludes net investment gains (losses) and net derivative gains (losses). Adjusted expenses also excludes goodwill impairments.

The following additional adjustments are made to revenues, in the line items indicated, in calculating adjusted revenues:

- Universal life and investment-type product policy fees excludes the amortization of unearned revenue related to net investment gains (losses) and net derivative gains (losses) and certain variable annuity GMIB fees ("GMIB Fees");
- Net investment income: (i) includes earned income on derivatives and amortization of premium on derivatives that are hedges of investments or that are used to replicate certain investments, but do not qualify for hedge accounting treatment, (ii) excludes post-tax adjusted earnings adjustments relating to insurance joint ventures accounted for under the equity method, (iii) excludes certain amounts related to contractholder-directed unit-linked investments, (iv) excludes certain amounts related to securitization entities that are VIEs consolidated under GAAP and (v) includes distributions of profits from certain other limited partnerships that were previously accounted for under the cost method, but are now accounted for at estimated fair value, where the change in fair value is recognized in net investment gains (losses) for GAAP; and
- Other revenues are adjusted for settlements of foreign currency earnings hedges and excludes fees received in association with services provided under transition service agreements ("TSA fees").

Table of Contents

The following additional adjustments are made to expenses, in the line items indicated, in calculating adjusted expenses:

- Policyholder benefits and claims and policyholder dividends excludes: (i) changes in the policyholder dividend obligation related to net investment gains (losses) and net derivative gains (losses), (ii) inflation-indexed benefit adjustments associated with contracts backed by inflation-indexed investments and amounts associated with periodic crediting rate adjustments based on the total return of a contractually referenced pool of assets and other pass through adjustments, (iii) benefits and hedging costs related to GMIBs ("GMIB Costs"), and (iv) market value adjustments associated with surrenders or terminations of contracts ("Market Value Adjustments");
- Interest credited to policyholder account balances includes adjustments for earned income on derivatives and amortization of premium on derivatives that are hedges of policyholder account balances but do not qualify for hedge accounting treatment and excludes amounts related to net investment income earned on contractholder-directed unit-linked investments;
- Amortization of DAC and VOBA excludes amounts related to: (i) net investment gains (losses) and net derivative gains (losses), (ii) GMIB Fees and GMIB Costs and (iii) Market Value Adjustments;
- Amortization of negative VOBA excludes amounts related to Market Value Adjustments;
- Interest expense on debt excludes certain amounts related to securitization entities that are VIEs consolidated under GAAP; and
- Other expenses excludes costs related to: (i) noncontrolling interests, (ii) implementation of new insurance regulatory requirements, and (iii) acquisition, integration and other costs. Other expenses includes TSA fees.

Adjusted earnings also excludes the recognition of certain contingent assets and liabilities that could not be recognized at acquisition or adjusted for during the measurement period under GAAP business combination accounting guidance.

The tax impact of the adjustments mentioned above are calculated net of the U.S. or foreign statutory tax rate, which could differ from the Company's effective tax rate. Additionally, the provision for income tax (expense) benefit also includes the impact related to the timing of certain tax credits, as well as certain tax reforms.

Return on equity, allocated equity and related measures:

- MetLife, Inc.'s common stockholders' equity, excluding accumulated other comprehensive income ("AOCI") other than foreign currency translation adjustments ("FCTA"), is defined as MetLife, Inc.'s common stockholders' equity, excluding the net unrealized investment gains (losses) and defined benefit plans adjustment components of AOCI, net of income tax.
- Adjusted ROE is defined as adjusted earnings available to common shareholders, divided by average GAAP common stockholders' equity.
- Adjusted ROE, excluding AOCI other than FCTA, is defined as adjusted earnings available to common shareholders divided by average GAAP common stockholders' equity, excluding AOCI other than FCTA.
- Allocated equity is the portion of MetLife, Inc.'s common stockholders' equity that management allocates to each of its segments and sub-segments based on local capital requirements and economic capital. See "— Economic Capital." Allocated equity excludes the impact of AOCI other than FCTA.

The above measures represent a level of equity consistent with the view that, in the ordinary course of business, we do not plan to sell most investments for the sole purpose of realizing gains or losses. Also refer to the utilization of adjusted earnings and other financial measures based on adjusted earnings mentioned above.

Table of Contents

The following additional information is relevant to an understanding of our performance results:

- The impact of changes in our foreign currency exchange rates is calculated using the average foreign currency exchange rates for the current period and is applied to each of the comparable periods ("Constant Currency Basis").
- We sometimes refer to sales activity for various products. These sales statistics do not correspond to revenues under GAAP, but are used as relevant measures of business activity. Further, sales statistics for our Latin America, Asia and EMEA segments are on a Constant Currency Basis.
- Asymmetrical and non-economic accounting refers to: (i) the portion of net derivative gains (losses) on embedded derivatives attributable to the inclusion of our credit spreads in the liability valuations, (ii) hedging activity that generates net derivative gains (losses) and creates fluctuations in net income because hedge accounting cannot be achieved and the item being hedged does not a have an offsetting gain or loss recognized in earnings, (iii) inflation-indexed benefit adjustments associated with contracts backed by inflation-indexed investments and amounts associated with periodic crediting rate adjustments based on the total return of a contractually referenced pool of assets and other pass through adjustments, and (iv) impact of changes in foreign currency exchange rates on the re-measurement of foreign denominated unhedged funding agreements and financing transactions to the U.S. dollar and the re-measurement of certain liabilities from non-functional currencies to functional currencies. We believe that excluding the impact of asymmetrical and non-economic accounting from total GAAP results enhances investor understanding of our performance by disclosing how these accounting practices affect reported GAAP results.
- The Company uses a measure of free cash flow to facilitate an understanding of its ability to generate cash for reinvestment into its businesses or use in non-mandatory capital actions. The Company defines free cash flow as the sum of cash available at MetLife's holding companies from dividends from operating subsidiaries, expenses and other net flows of the holding companies (including capital contributions to subsidiaries), and net contributions from debt to be at or below target leverage ratios. This measure of free cash flow is prior to capital actions, such as common stock dividends and repurchases, debt reduction and mergers and acquisitions. Free cash flow should not be viewed as a substitute for net cash provided by (used in) operating activities calculated in accordance with GAAP. The free cash flow ratio is typically expressed as a percentage of annual adjusted earnings available to common shareholders.

Subsequent Events

See Note 15 of the Notes to the Interim Condensed Consolidated Financial Statements.

Table of Contents

Item 3. Quantitative and Qualitative Disclosures About Market Risk

We regularly analyze our exposure to interest rate, equity market price and foreign currency exchange rate risks. As a result of that analysis, we have determined that the estimated fair values of certain assets and liabilities are materially exposed to changes in interest rates, foreign currency exchange rates and changes in the equity markets. We have exposure to market risk through our insurance operations and investment activities. We use a variety of strategies to manage interest rate, foreign currency exchange rate and equity market risk, including the use of derivatives. A description of our market risk exposures may be found under “Quantitative and Qualitative Disclosures About Market Risk” in Part II, Item 7A, of the 2017 Annual Report.

Table of Contents

Item 4. Controls and Procedures

Based on the Company's internal review, MetLife, Inc.'s Chief Executive Officer ("CEO") and former CFO identified material weaknesses in the design and operation of its internal control over financial reporting. Management concluded that the Company has not maintained effective controls over (i) the administrative and accounting practices relating to certain RIS group annuity reserves and the timely communication and escalation of issues regarding those reserves throughout the Company, and (ii) controls over the calculation of reserves relating to variable annuity guarantees issued by a former operating joint venture in Japan and reinsured by the Company and included within MetLife Holdings. Management identified errors in reserve balances in connection with these material weaknesses. For more information on these reserve adjustments, see Note 1 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report. These material weaknesses remain unremediated as of March 31, 2018.

Evaluation of Disclosure Controls and Procedures

Management, including the CEO and current CFO, evaluated the effectiveness of the design and operation of the Company's disclosure controls and procedures pursuant to Rules 13a-15(e) and 15d-15(e) under the Exchange Act as of March 31, 2018. Solely because of the material weaknesses in internal control over financial reporting reported in the 2017 Annual Report, our CEO and current CFO concluded that as of March 31, 2018, our disclosure controls and procedures were not effective.

Remediation Status of Reported Material Weaknesses

Management is executing its plan to remediate the material weaknesses and has developed Steering Committees, project teams and working groups to lead the remediation efforts. To date, management has performed the following:

RIS Group Annuity Reserves:

- Implemented immediate changes to improve its administrative and accounting procedures and search practices to identify, contact, and record responses from "unresponsive and missing" plan annuitants and to otherwise locate missing annuitants;
- Instituted additional procedures to help address the timely communication and escalation of issues throughout the Company; and
- Engaged third party advisors who have commenced procedures associated with the comprehensive examination and analysis of the facts and circumstances giving rise to the material weakness, under the supervision of MetLife, Inc.'s Chief Risk Officer.

MetLife Holdings Assumed Variable Annuity Guarantee Reserves:

- Implemented immediate changes to the data flows and input controls into the valuation process. These changes included enhanced reconciliations and analytics.
- Engaged third party advisors who have commenced procedures associated with the comprehensive examination and analysis of the facts and circumstances giving rise to the material weakness, under the supervision of the Chief Auditor.

Management believes the remediation steps outlined above will further strengthen our internal control over financial reporting. Management will test the ongoing operating effectiveness of all new controls subsequent to implementation and consider the material weaknesses remediated after the applicable controls operate effectively for a sufficient period of time. The Company will continue to evaluate, update and improve its internal control over financial reporting as management executes on its remediation plans.

Changes in Internal Control Over Financial Reporting

There were no changes to the Company's internal control over financial reporting as defined in Exchange Act Rules 13a-15(d) and 15d-15(d) that occurred during the quarter ended March 31, 2018 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Part II — Other Information

Item 1. Legal Proceedings

See Note 14 of the Notes to the Interim Condensed Consolidated Financial Statements.

Table of Contents

Item 1A. Risk Factors

The following should be read in conjunction with, and supplements and amends, the factors that may affect the Company's business or operations described under "Risk Factors" in Part I, Item 1A, of the 2017 Annual Report, as amended or supplemented in our subsequently filed Quarterly Reports on Form 10-Q under Item 1A. Risk Factors. Other than as so amended or supplemented and as described in this Item 1A, there have been no other material changes to our risk factors from the risk factors previously disclosed in the 2017 Annual Report.

Capital-Related Risks

The following updates and replaces the similar paragraph of the risk factor entitled "Legal and Regulatory Restrictions and Uncertainty and Restrictions Under the Terms of Certain of Our Securities May Prevent Us from Repurchasing Our Stock and Paying Dividends at the Levels We Wish" included in the 2017 Annual Report.

Legal and Regulatory Restrictions and Uncertainty and Restrictions Under the Terms of Certain of Our Securities May Prevent Us from Repurchasing Our Stock and Paying Dividends at the Level We Wish

***

Trigger Events for the Restrictions on the Payment of Dividends on Our Preferred Stock and Restrictions on the Payment of Interest on Our Junior Subordinated Debentures

In addition, MetLife's Floating Rate Non-Cumulative Preferred Stock, Series A, and 5.25% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series C, and its junior subordinated debentures contain provisions that would suspend the payment of preferred stock dividends and interest on junior subordinated debentures if MetLife, Inc. fails to meet certain tests ("Trigger Events"). In such cases, and subject to the terms of the instruments, MetLife, Inc. could make payments up to the amount of net proceeds from sales of (i) common stock during the 90 days preceding the dividend declaration date or (ii) common stock or certain kinds of warrants to purchase common stock generally during the 180 days prior to the interest payment date (the "New Equity Proceeds"). If the New Equity Proceeds were insufficient to make such payments, the "dividend stopper" provisions would come into effect and we would be unable to repurchase or pay dividends on our common stock.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Issuer Purchases of Equity Securities

Purchases of MetLife, Inc. common stock made by or on behalf of MetLife, Inc. or its affiliates during the quarter ended March 31, 2018 are set forth below:

Period	Total Number of Shares Purchased (1)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number (or Approximate Dollar Value) of Shares that May Yet Be Purchased Under the Plans or Programs (2)
January 1 — January 31, 2018	7,299,195	$ 52.29	7,297,248	$ 1,380,342,336
February 1 — February 28, 2018	4,104,418	$ 47.18	4,104,418	$ 1,186,692,878
March 1 — March 31, 2018	10,003,732	$ 46.62	10,003,661	$ 720,341,388

(1) Except for the foregoing, there were no shares of MetLife, Inc. common stock repurchased by MetLife, Inc. During the periods January 1 through January 31, 2018, February 1 through February 28, 2018 and March 1 through March 31, 2018, separate account index funds purchased 1,947 shares, 0 shares and 71 shares, respectively, of MetLife, Inc. common stock on the open market in nondiscretionary transactions.

(2) On November 1, 2017, MetLife, Inc. announced that its Board of Directors authorized $2.0 billion of common stock repurchases. At March 31, 2018, MetLife, Inc. had $720 million of common stock repurchases remaining under this authorization. For more information on common stock repurchases, see "Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — The Company — Liquidity and Capital Uses — Common Stock Repurchases," and Note 15 of the Notes to the Interim Condensed Consolidated Financial Statements. See also "Risk Factors — Capital-Related Risks — Legal and Regulatory Restrictions and Uncertainty and Restrictions Under the Terms of Certain of Our Securities May Prevent Us from

Repurchasing Our Stock and Paying Dividends at the Level We Wish" and Note 15 of the Notes to the Consolidated Financial Statements included in the 2017 Annual Report.

Table of Contents

Item 6. Exhibits

(Note Regarding Reliance on Statements in Our Contracts: In reviewing the agreements included as exhibits to this Quarterly Report on Form 10-Q, please remember that they are included to provide you with information regarding their terms and are not intended to provide any other factual or disclosure information about MetLife, Inc., its subsidiaries or affiliates, or the other parties to the agreements. The agreements contain representations and warranties by each of the parties to the applicable agreement. These representations and warranties have been made solely for the benefit of the other parties to the applicable agreement and (i) should not in all instances be treated as categorical statements of fact, but rather as a way of allocating the risk to one of the parties if those statements prove to be inaccurate; (ii) have been qualified by disclosures that were made to the other party in connection with the negotiation of the applicable agreement, which disclosures are not necessarily reflected in the agreement; (iii) may apply standards of materiality in a way that is different from what may be viewed as material to investors; and (iv) were made only as of the date of the applicable agreement or such other date or dates as may be specified in the agreement and are subject to more recent developments. Accordingly, these representations and warranties may not describe the actual state of affairs as of the date they were made or at any other time. Additional information about MetLife, Inc., its subsidiaries and affiliates may be found elsewhere in this Quarterly Report on Form 10-Q and MetLife, Inc.'s other public filings, which are available without charge through the U.S. Securities and Exchange Commission website at www.sec.gov.)

		Incorporated by Reference				
Exhibit No.	Description	Form	File Number	Exhibit	Filing Date	Filed or Furnished Herewith
3.1	Amended and Restated Certificate of Incorporation of MetLife, Inc.	10-K	001-15787	3.1	March 1, 2017	
3.2	Certificate of Designation, Preferences and Rights of Series A Junior Participating Preferred Stock of MetLife, Inc., filed with the Secretary of State of Delaware on April 7, 2000.	10-K	001-15787	3.2	March 1, 2017	
3.3	Certificate of Designations of Floating Rate Non-Cumulative Preferred Stock, Series A, of MetLife, Inc., filed with the Secretary of State of Delaware on June 10, 2005.	10-K	001-15787	3.3	March 1, 2017	
3.4	Certificate of Amendment of Amended and Restated Certificate of Incorporation of MetLife, Inc., dated April 29, 2011.	10-K	001-15787	3.4	March 1, 2017	
3.5	Certificate of Retirement of Series B Contingent Convertible Junior Participating Non-Cumulative Perpetual Preferred Stock of MetLife, Inc., filed with the Secretary of State of Delaware on November 5, 2013.	10-Q	001-15787	3.6	November 7, 2013	
3.6	Certificate of Amendment of Amended and Restated Certificate of Incorporation of MetLife, Inc., dated April 29, 2015.	8-K	001-15787	3.1	April 30, 2015	

3.7	Certificate of Designations of 5.250% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series C, of MetLife, Inc., filed with the Secretary of State of Delaware on May 28, 2015.	8-K	001-15787	3.1	May 28, 2015
3.8	Certificate of Elimination of 6.500% Non-Cumulative Preferred Stock, Series B, of MetLife, Inc., filed with the Secretary of State of Delaware on November 3, 2015.	10-Q	001-15787	3.7	November 5, 2015
3.9	Certificate of Amendment of Amended and Restated Certificate of Incorporation of MetLife, Inc., dated October 23, 2017.	8-K	001-15787	3.1	October 24, 2017
3.10	Certificate of Designations of 5.875% Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series D, of MetLife, Inc., filed with the Secretary of State of Delaware on March 21, 2018.	8-K	001-15787	3.1	March 22, 2018
10.1	Form of Performance Share Agreement, effective February 27, 2018.*	8-K	001-15787	10.1	February 20, 2018
10.2	Form of Performance Unit Agreement, effective February 27, 2018.*	8-K	001-15787	10.2	February 20, 2018
10.3	Form of Restricted Stock Unit Agreement (Ratable Period of Restriction Ends in Thirds), effective February 27, 2018.*	8-K	001-15787	10.3	February 20, 2018

Table of Contents

Exhibit No.	Description	Incorporated by Reference				Filed or Furnished Herewith
		Form	File Number	Exhibit	Filing Date	
10.4	Form of Restricted Stock Unit Agreement (Three-Year "Cliff" Period of Restriction), effective February 27, 2018.*	8-K	001-15787	10.4	February 20, 2018	
10.5	Form of Restricted Unit Agreement (Ratable Period of Restriction Ends in Thirds), effective February 27, 2018.*	8-K	001-15787	10.5	February 20, 2018	
10.6	Form of Restricted Unit Agreement (Three-Year "Cliff" Period of Restriction), effective February 27, 2018.*	8-K	001-15787	10.6	February 20, 2018	
10.7	Award Agreement Supplement, effective February 27, 2018.*	8-K	001-15787	10.7	February 20, 2018	
10.8	Amendment Number 5 to the Metropolitan Life Auxiliary Savings and Investment Plan (Amended and Restated January 1, 2015).*					X
10.9	Amendment Number 6 to the MetLife Auxiliary Pension Plan (as amended and restated, effective January 1, 2008), dated March 5, 2018 (effective March 15, 2018).*					X
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
32.1	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
32.2	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
101.INS	XBRL Instance Document.					X
101.SCH	XBRL Taxonomy Extension Schema Document.					X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.					X
101.LAB						X

	XBRL Taxonomy Extension Label Linkbase Document.	
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.	X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.	X

———————

*Indicates management contracts or compensatory plans or arrangements.

Table of Contents

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

METLIFE, INC.

By: /s/ William O'Donnell
Name: William O'Donnell
Title: Executive Vice President
and Chief Accounting Officer
(Authorized Signatory and Principal
Accounting Officer)

Date: May 7, 2018