

# MOMENTUM





RGA IS BUILDING ON ITS STRONG FOUNDATION TO SHAPE THE FUTURE.

#### ON THE COVER

Top row from left: **Mark Hopfinger**, Senior Vice President, Structured Finance / **Julianne Callaway**, Strategic Research Actuary, Global Research and Data Analytics / From Global Financial Solutions: **David Addison**, Senior Vice President, Business Development; **Mark Renetzky**, Vice President, Head of Marketing and Transactions Services; **Dustin Hetzler**, Senior Vice President and Chief Pricing Actuary / **Jason Ou**, Chief Executive Officer, RGA Reinsurance Company, Shanghai Branch

Bottom row from left: From RGA Canada: **James Ciamarro**, Vice President, Longevity; **Mai-Khoi Lam**, Senior Legal Counsel / **Michael Porter**, Head of Business Development, EMEA and South Africa / **Georgio Mosis**, Head of Innovation Management, RGAx Asia / From RGA Australia: **Ben Lynch**, State Claims Manager, Victoria and Queensland; **Jaya Aiyappan**, Claims Specialist Support Team Manager



## / MOMENTUM

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# MESSAGE FROM THE CHAIRMAN

**J. Cliff Eason** Chairman of the Board



RGA leadership celebrated a landmark year in 2016 with the culmination of a five-year executive succession plan. On behalf of the Board of Directors, I would like to acknowledge the dedicated team of professionals at the center of this transition.

Greig Woodring officially stepped down as Chief Executive Officer (CEO) at the end of 2016. In Greig's three decades at the helm, he served as both an inspiring company leader and a respected industry innovator. His contributions to the extraordinary success and growth of RGA during his tenure cannot be overstated.

Anna Manning, who stepped into the CEO role in January 2017, is the right person to lead RGA into the future. With 10 years in leadership roles at RGA and more than three decades in the insurance industry, Anna brings a passion to her work and a depth of experience in all areas of our business. She combines the ability to drive results today with the vision to recognize and capitalize on tomorrow's opportunities.

Moving forward, Anna will be supported by a proven executive management team. 2016 also saw Chief Financial Officer (CFO) Todd Larson succeed long-time CFO Jack Lay. In January 2017, Alain Néemeh assumed the Chief Operating Officer (COO) role previously held by retiring COO Donna Kinnaird. The entire succession process was performed in typical RGA fashion:

thoroughly considered, collaboratively executed, and confidently achieved.

As this transition made clear, RGA builds on strength. In 2016, we established record highs in premiums, revenues, income, and earnings per share. These results were no anomaly, but rather the product of cumulative efforts spanning decades. And we see favorable conditions for continued growth.

Life reinsurance dynamics are stable, and longer lives point to favorable mortality results over time. We have a balanced portfolio of business, a global operating platform, and an exceptionally strong management team in place. From this platform, we are launching forward-looking initiatives to meet changing client demands within an evolving industry. In short, RGA is a company confident in its ability to help shape the future.

The Board wishes to thank all of our talented associates for their contributions to our success in 2016. We anticipate even greater achievements in the years ahead.



**J. Cliff Eason**

Chairman of the Board

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IN 2016, WE ESTABLISHED RECORD HIGHS IN PREMIUMS, REVENUES, INCOME, AND EARNINGS PER SHARE. THESE RESULTS WERE NO ANOMALY, BUT RATHER THE PRODUCT OF CUMULATIVE EFFORTS SPANNING DECADES.

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# MESSAGE FROM THE CEO

**Anna Manning** President and Chief Executive Officer



RGA enjoyed a successful 2016, surpassing \$11 billion in revenue and \$1.0 billion in pre-tax income. RGA's enterprise strategy and global operating platform continued to deliver innovative and effective client solutions across geographies and product lines. The year's success was driven by solid top-line performance and robust earnings, underscoring the benefits of RGA's diversified business model.

Earnings per share of \$10.79, a 45% increase over 2015, reflected strong performance in most key business segments. Return on equity was 10% and RGA's balance sheet remained strong. We achieved these results despite ongoing macroeconomic headwinds from lower interest rates and weaker foreign currencies. Net premiums increased 8% over 2015 based primarily upon solid organic growth and modest contributions from in-force transactions. Once again, balance and diversity of product offerings across a global operating model allowed RGA to overcome the challenges and generate substantial long-term value.

In the U.S., our traditional reinsurance business recovered from a difficult 2015 and delivered results in line with expectations. Net premiums increased 9% over 2015 totals to reach \$5.2 billion, marking the first time RGA's largest segment has surpassed \$5 billion in annual premiums. Pre-tax income for U.S. traditional business totaled \$371 million, a 57% increase over

2015. Results in 2016 benefited from higher variable investment income and an improvement in individual mortality experience. We expect volatility in mortality claims over the short term as a natural part of our business, while longer-term mortality results can be expected to smooth out over time. RGA ended the year with \$3.1 trillion of assumed mortality risk, with over half of that in our U.S. business.

The U.S. Group business also rebounded in 2016. Political uncertainty and a changing marketplace led to a dynamic industry landscape and helped fuel demand for voluntary products. We are well-positioned to take advantage of additional opportunities as the long-term direction of U.S. healthcare becomes more defined.

RGA maintained a leading position in the Canadian market for the tenth consecutive year by continuing to deliver valuable solutions to meet client needs. Our traditional business in Canada generated pre-tax income of \$135 million in 2016. With new capital requirements for insurance and reinsurance companies set to take effect January 1, 2018, RGA is actively engaging clients and leveraging our global expertise to help insurers adapt to the new regulatory regime.

In Asia, favorable demographic trends continued to create growth opportunities as expanding middle classes and greater individual wealth drove demand for life insurance and

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#### Return on Equity

(2016)

# 10%

#### Strong Financial Performance

Positive results across all lines of business produced an exceptional year financially. RGA ended 2016 with \$3.1 trillion of assumed life reinsurance in force, total assets of \$53.1 billion, and \$11.5 billion in total revenues. RGA also maintained high financial strength and credit ratings throughout the year.

#### Book Value Per Share Growth

(23-year CAGR, since IPO)

# 13%

#### Premium Growth

(2016 compared to 2015)

# 8%

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## EPS Growth

(5-year CAGR, 2012-2016)

# 8%

## New Standard in Facultative Underwriting

RGA remained the industry leader in large-amount and substandard risk underwriting, recognized for rapid turnaround times and superior facultative expertise. RGA underwriters reviewed a record 659,204 facultative cases in 2016:

# 504,140

International

# 113,050

United States

# 42,014

Canada

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living benefits products. RGA's leadership position in delivering innovative products to clients across the region helped generate more than \$1.7 billion in revenue in our Asia Pacific traditional segment. This segment had another successful year with pre-tax income of \$114 million, an 8% increase over 2015, primarily from favorable claims in the Asia region partly offset by the strengthening U.S. dollar. We expect to see sustained growth in this region given current trends and RGA's proven ability to leverage its strong franchise as a market leader. Our Australian operations saw increased claims volatility in the second half of the year more than offsetting the good performance in the first half, ending the year in a slightly unfavorable position.

Revenue grew to \$1.2 billion in RGA's Europe, Middle East, and Africa traditional segment. Our Middle East and South Africa offices in particular recorded solid results and were recognized as leading reinsurers in their respective markets. In the U.K., RGA retained a leading market share of retail mortality business, due in large measure to engaging clients in forward-looking projects, such as an electronic health records initiative.

Global Financial Solutions (GFS) recorded another outstanding year overall, with pre-tax income of \$433 million. All three product lines – capital-motivated reinsurance, asset-intensive reinsurance, and

longevity reinsurance – performed well. Implementation of Solvency II, which went into effect on January 1, 2016, provided the central focus for our GFS teams in Europe. Transactions under the new capital regime proved complex and time-intensive, and required educating regulators, clients, and other parties on proposed solutions. RGA nevertheless executed a number of innovative Solvency II-compliant transactions, including a first-of-its-kind longevity deal in France and the first lapse shock absorber in the Netherlands. GFS enjoyed a particularly successful year in the U.K., driven primarily by an increase in longevity transactions. We see continued opportunities to leverage RGA's strong client relationships, superior capabilities skill set, and proven ability to execute.

RGA executed a number of mid-sized and small in-force and other transactions in 2016. We continued to pursue a balanced approach to capital management by deploying approximately \$130 million in capital via transactions and \$117 million through stock repurchases. These results reflect discipline in deploying capital into deals that meet established risk standards and return hurdles. We ended the year with an excess capital position of \$1.1 billion and are well-positioned to pursue transactional opportunities in the future.

Facultative expertise remained a signature strength. RGA underwriters

reviewed more than 600,000 facultative cases for the second consecutive year to establish a new record high. To meet increased consumer demand for a more streamlined, automated insurance purchasing process, RGA teams applied their facultative expertise to explore and develop accelerated underwriting solutions for clients. The U.S. team launched Dynamic Risk Selector, an innovative tool that brings together application and evidence data, including the exclusive TransUnion TrueRisk® Life credit-based behavioral score, and applies a proprietary predictive model to speed the issuance of fully underwritten policies, often without the need for invasive and time-consuming medical tests.

To facilitate additional advances, we consolidated our regional innovation accelerators under the RGAX banner in 2016. RGAX's mandate is to develop new products and services by leveraging RGA's core reinsurance expertise. By bringing innovation teams together, RGAX associates can now leverage capacity, expertise, and experience and identify the best markets in which to scale up promising concepts.

Success in 2016 resulted from the same core philosophy of commitment to clients, focus on execution, and pursuit of innovation that has fueled RGA's momentum for more than four decades. Our strategic direction moving forward is a natural extension of this philosophy and

will adapt as the marketplace evolves. Insurers today face increased pressures and opportunities from economic trends, demographic shifts, changing consumer needs, and regulatory requirements. Our talented teams of industry experts make RGA the ideal partner to seize such opportunities. We combine a proven approach with a dynamic business model to anticipate, adapt, and achieve results.

At the end of 2016, Greig Woodring, RGA's CEO for the past 37 years, retired. I would like to acknowledge and thank him for his extraordinary vision and leadership and for the enormous value created during his stewardship of RGA. Greig leaves a legacy founded on his passion for our industry, our clients, and all our people.

I would also like to personally thank RGA's dedicated associates, clients, shareholders, and partners for their role in making 2016 a remarkable year. I look forward to what we will accomplish together in the years ahead.



**Anna Manning**

President and Chief Executive Officer

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SUCCESS IN 2016  
RESULTED FROM  
THE SAME CORE  
PHILOSOPHY OF  
COMMITMENT TO  
CLIENTS, FOCUS  
ON EXECUTION,  
AND PURSUIT OF  
INNOVATION THAT  
HAS FUELED RGA'S  
MOMENTUM FOR  
MORE THAN FOUR  
DECADES.

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## YEAR IN REVIEW

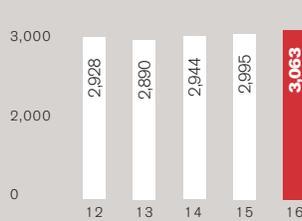
### Net Premiums

(in millions USD)



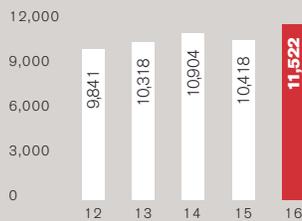
### Assumed Ordinary Life Reinsurance In Force

(in billions USD)



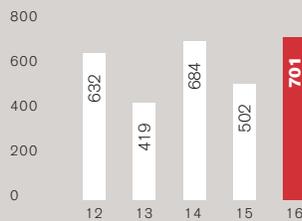
### Total Revenues

(in millions USD)



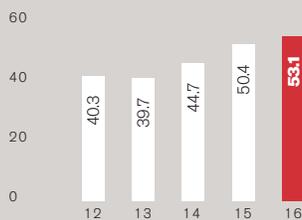
### Net Income

(in millions USD)



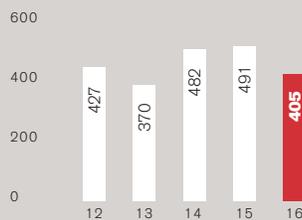
### Total Assets

(in billions USD)



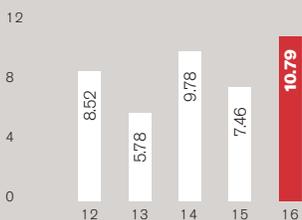
### Assumed New Business Production

(in billions USD)



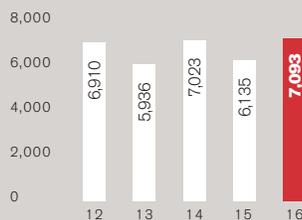
### Diluted Earnings Per Share

(in millions USD)



### Total Stockholders' Equity

(in millions USD)



## FINANCIAL STRENGTH RATINGS

RGA's U.S.-based operating subsidiary, RGA Reinsurance Company, receives high ratings for its claims-paying ability based on the company's financial condition and earnings. Its ratings as of December 31, 2016:

S&P Global Ratings

**AA-**  
Very Strong

A.M. Best Company

**A+**  
Superior

Moody's Investors Service

**A1**  
Good

RGA Americas Reinsurance Company, Ltd., RGA Life Reinsurance Company of Canada, RGA Global Reinsurance Company, Ltd., RGA International Reinsurance Company dac, and RGA Reinsurance Company of Australia Limited each have a financial strength rating of AA- from S&P Global Ratings.

RGA Americas Reinsurance Company, Ltd., RGA Life Reinsurance Company of Canada, and RGA Atlantic Reinsurance Company Ltd. each have a financial strength rating of A+ from A.M. Best Company.

### NMG Business Capability Index

# #1

In 2016, RGA was ranked #1 on NMG Consulting's Global All Respondent Business Capability Index (BCI), based on feedback from insurance executives in more than 50 countries.

### FINANCIAL OVERVIEW

Life Reinsurance In Force

## \$3.1

Trillion

Total Assets

## \$53.1

Billion

Net Premiums

## \$9.2

Billion

Total Revenues

## \$11.5

Billion

Market Capitalization

## \$8.1

Billion

### WORLDWIDE OPERATIONS



# LEVERAGING A GLOBAL PLATFORM



**Alain Néemeh**  
Senior Executive Vice President,  
Chief Operating Officer

RGA has been prudently expanding outside of the United States for 25 years and into products adjacent to individual mortality for almost 20 years. When entering new markets, we rarely had a first-mover advantage. Despite that, RGA has demonstrated an ability to compete with existing players, bring value,

and innovate, establishing successful franchises across 26 countries and serving clients in more than 80 markets. We have built our strong brand around client-centricity coupled with unmatched underwriting capabilities.

Not surprisingly, RGA again was ranked #1 globally and in 12 individual markets by cedants in NMG Consulting's All Respondent Business Capability Index. This does not happen by accident. It is driven by our commitment to the success of our clients and the application of industry-leading capabilities and global resources on their behalf.

As the only global reinsurer focused exclusively on the life and health industry, RGA has the capacity and the capabilities to deliver custom solutions to global clients as well as local insurers within each market. This was prominently demonstrated in 2016 when RGA's Global Health team implemented the largest international health transaction in company history: a multi-year International Private Medical Insurance agreement covering multiple territories and risk carriers. Winning the business was an extensive process that displayed RGA's expertise in structuring innovative transactions. It also highlighted our unique position in the industry: RGA was the only reinsurer to provide the client with one global team as the central point of contact.

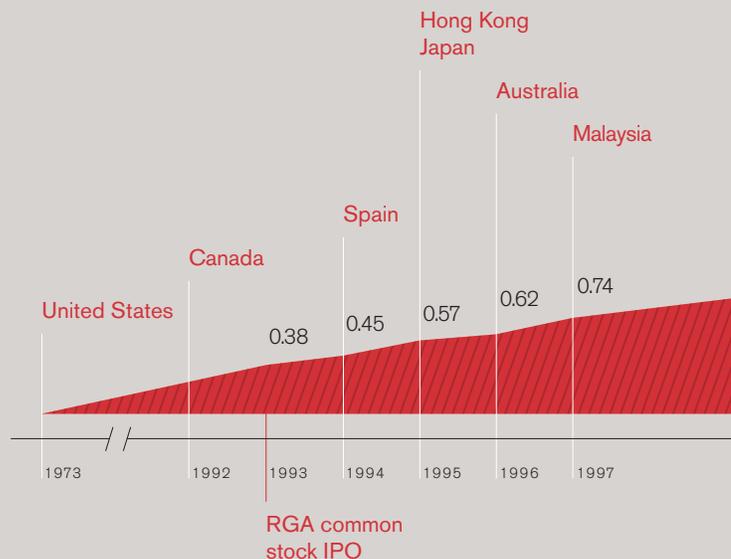
Thanks to a well-established global platform serving a loyal customer base, we have solid momentum. We will build upon our past successes by selecting and executing the most compelling opportunities in every market we serve.

2016 Net Premiums

# \$9.2B

## Historical Net Premiums and Office Openings

(in billions USD)



Net Premiums by Region

**57%**

**United States and Latin America**

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**11%**

**Canada**

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**18%**

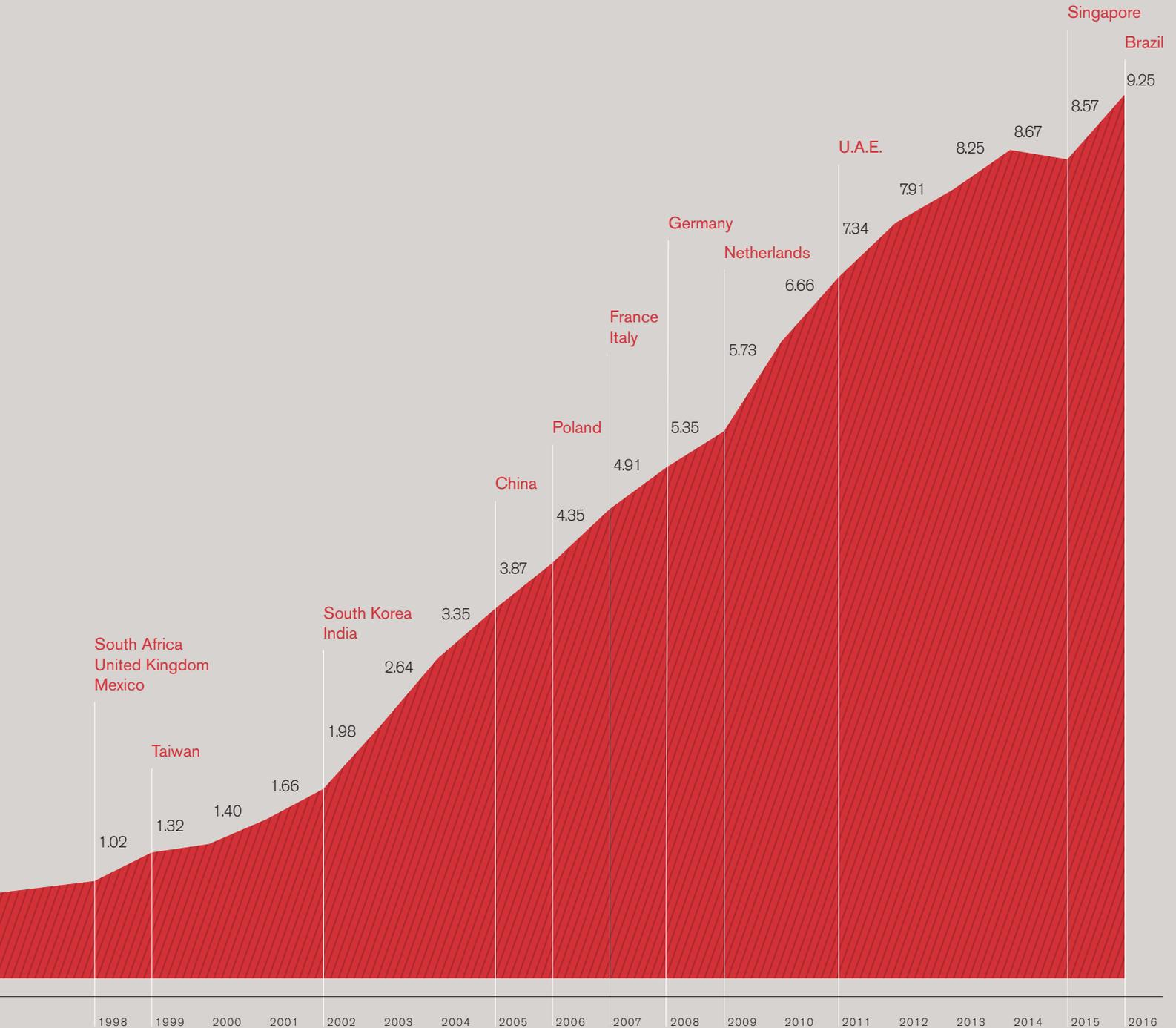
**Asia Pacific**

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**14%**

**EMEA**

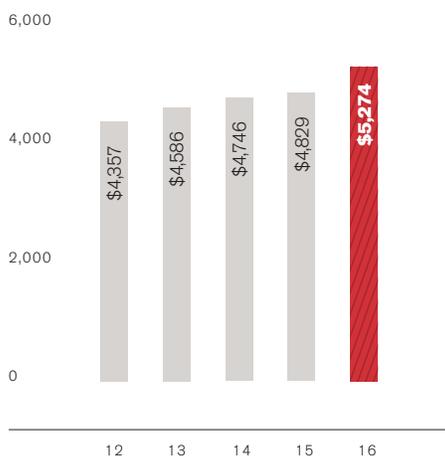
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## U.S. AND LATIN AMERICA OPERATIONS

### U.S. and Latin America Operations Net Premiums

(in millions USD)



From left, from U.S. Mortality Markets: **Lisa Renetzky**, Senior Vice President and Chief Actuary; **Jaime Correa**, Senior Vice President, USMM Underwriting.

U.S. and Latin America Operations is RGA's largest operating division, accounting for 57% of the company's net premiums in 2016. Principal products include individual and group mortality risk, group disability, health and long-term care reinsurance, asset-intensive risk coverage, and financial reinsurance. The division reported \$126 billion in assumed new business in 2016 and pre-tax income of \$655 million.

For the tenth consecutive year, U.S. individual mortality underwriters reviewed over 100,000 facultative reinsurance case submissions, which resulted in approximately \$15 billion of new life insurance placed. RGA also earned a #1 ranking as the premier facultative underwriter on NMG Consulting's 2016 Individual Life Mortality study of U.S. ceding companies.

The same NMG study recognized RGA as the leading reinsurer for innovation. Among other innovative solutions in 2016, RGA launched Dynamic Risk Selector, a tool that aggregates life insurance application information and underwriting

evidence and evaluates that data set using RGA's proprietary underwriting rules and predictive model. Dynamic Risk Selector can accelerate the underwriting process to allow insurers to accept fully underwritten cases without fluid testing, dramatically reducing the time to issue a policy.

A diversified product base helped U.S. Group Reinsurance grow net premiums by 11.5% over 2015. RGA worked closely with clients to navigate an insurance environment facing increased uncertainty. Solutions included worksite products to help group carriers meet demand, establish a competitive advantage, and increase profitability. Voluntary offerings to fill coverage gaps and better manage costs included RGA's first hospital indemnity product in the U.S.

RGA helped insurers improve capital efficiency and meet regulatory requirements through structured financial solutions, including capital-motivated, asset-intensive, and longevity reinsurance. Innovative transactions, such as a first-of-its-kind AG 48<sup>1</sup>-compliant captive reinsurance agreement, proved strong contributors to the division's performance within its diversified risk portfolio.

Geographic and product line diversification continued in Latin America. RGA obtained approval from the Brazilian regulatory authority to open a branch office in Brazil in February 2016. In Mexico, an operations base from which the company serves additional markets, RGA worked with clients to meet the requirements of the new Solvency II-based regulatory regime. As risk-based capital models permeated the market, RGA applied its established expertise in this arena on behalf of clients and developed innovative reinsurance solutions.



(1) Actuarial Guideline 48 (AG 48), adopted by the National Association of Insurance Commissioners (NAIC), defines rules to be followed for life reserve financing transactions completed after January 1, 2015.

## HIGHLIGHTS

# \$1.6T

U.S. and Latin America Operations ended 2016 with \$1.6 trillion of life reinsurance in force.

# \$6.8B

Total revenues increased 11% over 2015 to establish a record high of \$6.8 billion.

# #1

In 2016, RGA ranked #1 on NMG Consulting's All Respondent Business Capability Index in the U.S. Individual Mortality, U.S. Group Life and Disability, and Mexico Life and Health markets.

### Mike Emerson

Executive Vice President,  
Head of U.S., Latin and  
South American Markets



## Q&A

### HOW DOES RGA HELP INSURERS STAY AHEAD IN TODAY'S CHANGING MARKETPLACE?

We combine experience and innovation to achieve execution certainty for our clients. In an era of industry experimentation, RGA seeks to affect change in a responsible manner. Our teams align capabilities with client needs to partner at multiple levels and create solutions that work. For example, in 2016 RGA used its advanced mortality experience to develop new underwriting guidelines for persons living with human immunodeficiency virus (HIV). We are now able to offer facultative reinsurance support to our clients' HIV-positive life insurance applicants who meet specific criteria. This is one of many instances of RGA identifying a need and leveraging knowledge and expertise to help clients better serve customers.

### IN WHAT WAYS IS RGA EDUCATING THE INDUSTRY IN THIS MARKET?

Once again in 2016, RGA experts shared a wealth of knowledge via newsletters, webcasts, white papers, articles, presentations, trainings, and RGA-hosted events. When the Zika virus threatened the Western Hemisphere, RGA published its widely shared research bulletin "Zika Virus: The Insurance Perspective." With InsurTech promising to transform the industry, RGA made it the focus of the company's popular Innovation Series at the 2016 Society of Actuaries Annual Meeting. And as prescription drug prices made headlines, RGA released a report identifying 183 high-cost specialty drugs with an accompanying management tool for clients. Sharing insights is central to RGA's operating philosophy; it allows us to move our clients – and the industry – forward.

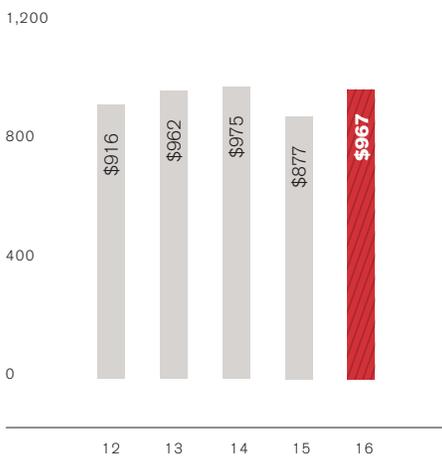
### WHAT DISTINGUISHES RGA AS A REINSURANCE PARTNER?

Our people. Talented professionals at all levels share a passion for this business and a commitment to exceed expectations. At RGA, every action and interaction is guided by one question: What do we need to do to ensure the best possible outcome for our clients? From there, expert teams of underwriters, actuaries, claims analysts, and other professionals work collaboratively across all of RGA to deliver products and services that produce results. It is our collective knowledge, skill, and client focus that make RGA such a valuable partner.

## CANADA OPERATIONS

Canada Operations Net Premiums

(in millions USD)



From left, from RGA Canada: **Brian Louth**, Senior Vice President and Chief Marketing Officer; **Candice Hung**, Assistant Vice President, Group Actuarial.

In 2016, RGA Life Reinsurance Company of Canada (RGA Canada) again solidified its leadership position in individual life and health reinsurance and capital management. RGA also continued to be a market leader in creditor, group life and health, living benefits, and longevity reinsurance.

Top-line premium growth for the Canada segment was strong in 2016, with positive contributions from both new business and persistency within in-force policies. Net premiums for the year totaled \$967 million, an increase of 10% over 2015. RGA maintained its leading market-share in 2016, reinsuring 28% of all new life insurance in Canada for a volume of \$35 billion in new assumed individual life reinsurance.

The individual life underwriting team established a new record high of 42,014 facultative cases reviewed within RGA Canada's largest business line. The strategy of diversifying into other lines of business again proved successful, with these lines contributing 36% of total 2016 premiums. Across all lines, RGA professionals

partnered with clients to capitalize on emerging growth opportunities, including new initiatives in accelerated underwriting and digital delivery solutions.

Helping clients meet changing consumer needs inspired continued innovation in product development and execution. RGA worked with clients to create direct-to-consumer insurance products, bringing new approaches to design, distribution, and underwriting. RGA also partnered with a digital marketing provider to develop an end-to-end mobile insurance distribution platform.

After completing a landmark longevity transaction in 2015, RGA Canada again provided capital management support for clients throughout 2016. Longer lives are prompting pension plans in Canada to seek reinsurance capital to mitigate longevity risk. Global expertise in executing longevity transactions enables RGA to more effectively transfer clients' long-tail liabilities for more-efficient capital deployment.

RGA reaffirmed its commitment to thought leadership and the advancement of the Canadian insurance industry in 2016. RGA events included the annual actuarial, claims, and underwriting seminar, which focused on understanding and adapting to consumer behavior, and a group forum on voluntary benefits that explored the growing customization of employee benefit programs. Through leadership roles on industry committees, presentations, publications, and individual consultations, RGA experts continued to identify and share new approaches to help insurers capitalize on the rapid and complex changes underway in this dynamic market.



**Alka Gautam**

President and Chief Executive Officer,  
RGA Life Reinsurance Company  
of Canada

**HIGHLIGHTS**

# \$356B

Canada Operations ended 2016 with \$356 billion of life reinsurance in force.

# \$1.2B

Total revenues reached \$1.2 billion, a 9% increase over 2015.

# #1

For the eighth consecutive survey, RGA Canada was ranked #1 in the Business Capability Index in NMG Consulting's 2016 Life & Health Reinsurance study of Canadian ceding companies.

**Q&A**

## HOW IS RGA HELPING INSURERS ADAPT TO CANADA'S CHANGING REGULATORY ENVIRONMENT?

In 2016, Canadian officials issued the Life Insurance Capital Adequacy Test (LICAT) guidelines. These guidelines go into effect January 1, 2018 and redefine capital requirements for insurance and reinsurance companies. We are proactively engaged with our clients in identifying the best strategies for meeting LICAT requirements while facilitating clients' sustained growth. Our experience as a Canadian reinsurance leader in capital management, coupled with RGA's established global expertise in regulatory compliance and enterprise risk management, ideally positions our team to develop effective, long-term solutions for life insurers.

## IN WHAT WAYS IS RGA CANADA HELPING CLIENTS SIMPLIFY THE CUSTOMER JOURNEY?

Today's insurance customers expect the buying experience to parallel that of other purchased goods: simple, fast, and online. RGA is working with clients to accelerate the insurance process – from acquisition through claims processing. We are moving beyond simplified issue to develop approaches that provide efficiently underwritten policies quickly and accurately. Our approach leverages technology, big data, and partnerships outside the traditional insurance space to create innovative solutions. In 2016, this included bringing TransUnion TrueRisk® Life, a credit-based insurance score that is highly predictive of mortality and lapse, to the Canadian market. Our goal: to help insurers keep pace with evolving consumer demands.

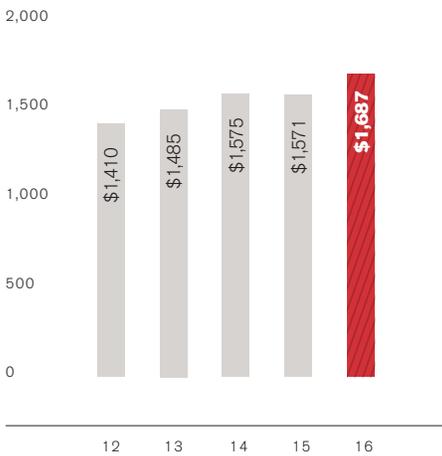
## RGA CELEBRATES 25 YEARS IN CANADA IN 2017. WHAT HAS DRIVEN THE COMPANY'S SUSTAINED SUCCESS IN THIS MARKET?

RGA's commitment to our clients has been a hallmark of our Canadian operations since day one – it is part of our DNA. This client focus has fueled our success and allowed us to grow from a five-person office into Canada's life reinsurance leader. When our clients succeed, we succeed. Helping them identify and capitalize on opportunities in a changing insurance landscape is the top priority of every RGA associate. As we enter our next quarter-century, we will continue to apply experience, expertise, and innovation to deliver tailored products and services that benefit both our clients and the industry.

## ASIA PACIFIC OPERATIONS

### Asia Pacific Operations Net Premiums

(in millions USD)



From left, from RGA Japan: **Arthur Ozeki**, Chief Executive Officer; **Jaqui Wassenaar**, Chief Marketing Officer; **Akira Sakamoto**, Vice President and Chief Underwriter.

RGA's Asia Pacific segment operates from offices in Australia, China, Hong Kong, India, Japan, Malaysia, New Zealand, Singapore, South Korea, and Taiwan. Primary business lines include individual and group life reinsurance, living benefits reinsurance, Retakaful, superannuation, annuity reinsurance, and financial reinsurance.

With aging populations driving demand, RGA solidified its position as the regional leader in critical illness (CI) reinsurance in 2016. New CI products included staged products in India, such as single-illness coverages for cancer, heart disease, and dengue fever; simplified issue offerings in Korea to meet growing market demand; and the first premium waiver product for early and intermediate stage CI in Indonesia.

Product innovation was not limited to CI coverages. In Hong Kong, RGA worked with a key client to add a first-in-market guaranteed increase option rider, called FlexiWays, to the client's top-selling product. The add-on offers flexible options for comprehensive protection and wealth

management, including a unique whole life long-term care benefit. In Taiwan, RGA teamed with a leading insurer to launch the market's first wellness product, which offers premium discounts for health status improvements.

RGA once again applied expertise and innovation in underwriting to better serve clients throughout the region. RGA Japan reviewed a record high 84,546 cases facultatively (not including e-underwriting cases or RGA's Advantage Program) and signed a facultative treaty with a key new client, giving RGA revenue-generating relationships with nine of the top 10 life insurers in Japan. Superior underwriting and pricing capabilities also enabled RGA to maintain its dominant market share in Asia's high-net-worth sector.

RGA's "Claims as a Business" initiative epitomized cross-market collaboration in 2016. First introduced in Hong Kong, the distribution strategy was later launched in Korea, with additional market introductions underway. Leveraging claims data, insurers can generate leads through cross-sell and upsell opportunities and support distribution channels more effectively. The approach has produced sales conversions many times that of standard direct marketing.

In Australia, RGA built on its leadership role in promoting more disciplined practices amid ongoing disability claims volatility. At the end of 2016, nearly 3,000 attendees had participated in RGA's Claims Management Paradigm Shift program since its 2014 launch. RGA also partnered with a major client to implement an installment-based TPD (total permanent disability) benefit that focuses on returning claimants to good health and to work through structured rehabilitation and retraining.



**Tony Cheng**Executive Vice President,  
Head of Asia**HIGHLIGHTS****\$492B**

Asia Pacific Operations ended 2016 with \$492 billion of life reinsurance in force.

**\$1.8B**

Total revenues reached \$1.8 billion, an 8% increase over 2015.

**#1**

In 2016, RGA ranked #1 on NMG Consulting's All Respondent Business Capability Index in the Asia region, and in the Hong Kong, Indonesia, Japan, Philippines, Singapore, Taiwan, and Thailand markets.

**Q&A****HOW IS RGA HELPING INSURERS IN ASIA IMPROVE CAPITAL EFFICIENCY?**

Low interest rates and reserve strain led clients to seek more-effective alternatives to manage solvency requirements as part of a longer-term capital strategy. RGA partnered with clients on multiple levels to deliver traditional reinsurance alongside structured reinsurance solutions. A comprehensive suite of products and services, as well as experience in the reinsurance of investment risk, enables RGA to deepen relationships with existing clients and create new partnerships in emerging markets. In mainland China, for example, our financial solutions team provided a unique solution to address reserve strain, while elsewhere we continued to support the capital needs of many of Asia's largest and most successful carriers.

**IN WHAT WAYS IS RGA EQUIPPING CLIENTS TO MEET THE DEMANDS OF ASIA'S AGING POPULATIONS?**

As elderly populations in Asia continue to grow, so do associated diseases, such as dementia, diabetes, and cancer. The strain of health care costs are testing governmental systems, pressuring pension plans, and increasing longevity risk for insurers. Yet within the challenges lie opportunities for those willing to innovate. RGA partnered with clients in 2016 to develop customized living benefits products, including health, disability, and critical illness, that enable consumers to meet healthcare needs while conserving assets. In Singapore, for example, RGA teamed with a leading insurer to launch a senior product with annuity payout, one of few products specially designed for this market segment.

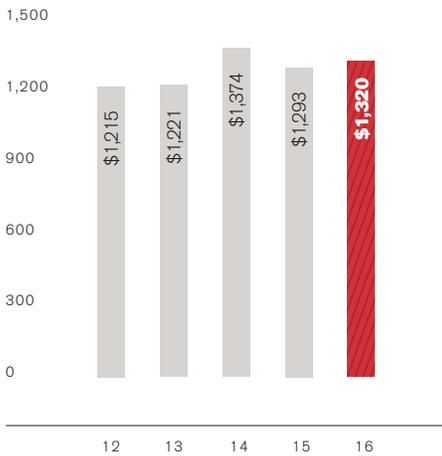
**HOW DOES RGA MAINTAIN ITS LEADERSHIP POSITION IN ASIA YEAR AFTER YEAR?**

RGA's success is built on unequaled client focus and innovative solutions, both of which require an outstanding workforce. In 2016, RGA was named Employer of the Year by the Asia Insurance Industry Awards. This is a testament to the talented team of people we have working toward one common goal: our clients' success. A new generation of leaders at all levels is bringing a new energy and fresh ideas to our already strong platform. Behind it all is a consistency of strategy that applies proven approaches to anticipate and embrace change.

## EMEA OPERATIONS

### EMEA Operations Net Premiums

(in millions USD)



From left, from RGA UK: **Simon Wainwright**, Managing Director; **Louise Hawkins**, Vice President, UK Operations.

RGA's Europe, Middle East, and Africa (EMEA) segment supports clients throughout the region, with offices in France, Germany, Ireland, Italy, the Netherlands, Poland, South Africa, Spain, the United Arab Emirates, and the United Kingdom. Services include individual and group life reinsurance, credit life and living benefits products, longevity reinsurance, and capital solutions. Despite headwinds from a strong U.S. dollar, pre-tax income totaled \$168 million in EMEA in 2016, a 7% increase over 2015.

The implementation of Solvency II, which went into effect January 1, 2016, dominated the European insurance landscape. RGA worked with clients to provide relief for the risks generating the largest capital requirements under the new regime – investment, longevity, and lapse risks. RGA France completed a market-first longevity swap with AXA France covering more than 15,000 annuitants and related commitments of nearly €1.3 billion. Other market firsts included lapse

shock absorbers in the Netherlands and the Nordic Region.

In the U.K., RGA applied superior market knowledge and expertise to execute a number of longevity transactions, building on its leading position in this area. The traditional reinsurance team remained a market leader as well, reinsuring approximately half of the new retail mortality business in the U.K. RGA's electronic health records initiative turned previously unstructured data into more useable information, allowing U.K. insurers to provide far more accurate risk pricing for consumers.

Traditional reinsurance business continued to grow steadily in Continental Europe as RGA worked with clients to develop innovative approaches based on new technologies. In Germany, RGA was ranked #1 by ceding companies on NMG Consulting's Business Capability Index. In-force transactions spurred growth in select markets. In Italy, a strong partnership with a leading insurer enabled RGA to complete a significant in-force transaction to free up capital within the client's creditor protection portfolio.

In 2016, cedants ranked RGA #1 on NMG Consulting's Business Capability Index in South Africa for the seventh consecutive year. Strong new business production resulted in a 27% increase in total revenue, highlighted by a large bancassurance treaty with one of the market's fastest-growing, most innovative banks.

RGA was named Reinsurance Company of the Year for the second straight year by the Middle East Insurance Industry Awards. As the regional life and health insurance industry continued to experience major expansion and changes to its value chain, RGA's client-centric approach fueled significant organic growth and a 31% increase in net premiums in the Middle East region.



**Olav Cuiper**Executive Vice President,  
Head of EMEA**HIGHLIGHTS****\$603B**

EMEA Operations ended 2016 with \$603 billion of life reinsurance in force.

**\$1.5B**

Total revenues exceeded \$1.5 billion, a 4% increase over 2015.

**#1**

RGA was ranked highest on NMG Consulting's 2016 All Respondent BCI for EMEA in aggregate, which is defined as the U.K. &amp; Ireland, Continental Europe, South Africa, and the countries of the GCC (Gulf Cooperation Council).

**Q&A****WHAT SEPARATES RGA AS A SOLVENCY II FINANCIAL SOLUTIONS PARTNER?**

While order is re-establishing itself in Europe's capital-motivated reinsurance market, unknowns remain. Within this dynamic climate, RGA has leveraged its market position and expertise to emerge as a leader in the initial wave of Solvency II reinsurance solutions. First-of-their-kind transactions in France, the Netherlands, and the Nordic Region accompanied an exceptional year for RGA in the U.K. As a U.S.-based company, RGA offers clients intrinsic advantages over European reinsurers operating under Solvency II. While the long-term value of these advantages will be revealed over time, one RGA trademark has made an immediate impact: our ability to innovate and execute on behalf of our clients.

**CAN YOU GIVE AN EXAMPLE OF RGA HELPING CLIENTS USE DATA TO BETTER SERVE CUSTOMERS?**

The raw power of data is clear, but insurers should take care as they embrace the big data revolution. Data we now have must be used more intelligently and responsibly, and we must seek new forms of data to better serve consumers. Wellness programs offer one potential vehicle. Wellness insurance propositions create a new dialogue: The consumer provides health and lifestyle data in exchange for truly risk-based pricing. In 2016, RGA worked with multiple partners to develop wellness programs and conducted our own wearable fitness tracker study to better understand how these devices might be used by insurers.

**HOW IS RGA HELPING INSURERS REACH YOUNGER CONSUMERS?**

In Europe, an aging industry with aging insurance agents is selling aging products to an aging population. Meanwhile, insurers struggle to find viable distribution models to reach younger generations, like the millennials. RGA is partnering to develop digital solutions to meet this growing need. In 2016, this included facilitating the launch of a digital-only credit life broker in France and mobile-first insurance concepts in the U.K. and South Africa. Projects range from mobile outreach and wellness apps to digital distribution and microinsurance—in both emerging and developed markets. RGA is widely recognized as the reinsurer to work with for these kinds of innovative solutions.

# STRENGTH THROUGH DIVERSITY



**John Laughlin**  
Executive Vice President,  
Global Financial Solutions

RGA's growth and success over more than four decades can be attributed in large part to one primary driver: an unrelenting focus on our clients. By staying nimble, flexible, and open-minded, we have responded both proactively and reactively to changing client needs. Our foundational

mortality business has continually innovated and expanded capabilities to support the industry, enabling diversification into multiple business lines.

And the industry is evolving faster than ever. Aging populations are driving increased demand for living benefits and savings products. Meanwhile, reaching the younger demographic requires innovating in the digital space and adapting to modern consumer behaviors. Insurers face added price pressure, greater demand for accelerated underwriting, and increased need to mitigate longevity risk. The macro environment brings additional challenges through demanding regulatory requirements and prolonged low interest rates.

Within this dynamic landscape, RGA innovates from a position of strength. Our talented professionals leverage established skills and capacity to develop client solutions in related areas. RGA's expertise in longevity risk assessment, for example, provides a distinct advantage in structuring innovative approaches to improve clients' capital efficiency and effectiveness. In 2016, this resulted in a first-of-its-kind longevity swap in France, a series of longevity transactions in the U.K., and new longevity initiatives in North America.

With leading capabilities and a balanced portfolio of business, RGA is well-positioned to expand and deepen an already strong operating platform. We see opportunities to innovate within traditional reinsurance and financial solutions, as well as emerging prospects beyond our core business. Moving forward, RGA's disciplined diversification will advance the same way it always has: executing on a proven strategy.

## Year of Product Introductions

(Not including individual mortality)

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**2010**

First longevity transaction in Canada

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**1995**

Entered capital-motivated reinsurance business

**2001**

Co-insurance of indexed annuities

**1997**

First asset-intensive business in the U.S.

**2007**

Long-term care in the U.S. market

**2009**

Acquired group reinsurance business from ING

## Risk Solutions

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## Capital Solutions

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## Future Solutions

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**2000**

Critical illness  
business  
in the U.K.

**2008**

Impaired  
annuities in  
the U.K.

First longevity  
transaction  
in the U.K.

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**2014**

First longevity  
“shock absorber”  
in the Netherlands

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**2016**

First longevity  
transaction in  
France

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**2016**

First capital-  
motivated  
transaction  
in China

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**2002**

Critical illness  
in Korean  
market

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**1998**

First capital-  
motivated  
reinsurance  
transaction  
in Japan

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**2013**

Wellness-linked  
products in Malaysia

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**1999**

Whole life  
medical  
products in  
Taiwan

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**2010**

Early-stage  
critical illness  
in Singapore

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**1999**

Critical illness in  
South Africa

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**1997**

First group treaty  
in Australia

## RISK SOLUTIONS

**RGA HAS BECOME AN INDUSTRY LEADER BY PARTNERING WITH INSURERS TO HELP THEM MANAGE RISK, TAKE ADVANTAGE OF EMERGING OPPORTUNITIES, AND POSITION THEIR BUSINESSES FOR LONG-TERM SUCCESS. IN 2016, RGA PROFESSIONALS COMBINED PRACTICAL EXPERIENCE AND TECHNICAL EXPERTISE TO DEVELOP INDIVIDUAL LIFE, INDIVIDUAL LIVING BENEFITS, AND GROUP REINSURANCE SOLUTIONS FOR CLIENTS WORLDWIDE.**



### **RGA Strengthens Core Mortality Business**

RGA solidified its position as an industry leader in mortality risk in 2016, ending the year with \$3.1 trillion of assumed life reinsurance in force. Reinsurance support for products including term life, whole life, universal life, joint and last survivor life, corporate-owned and bank-owned life, underwritten annuities, and many other offerings made up RGA's comprehensive portfolio of mortality risk solutions.

Responsive, industry-leading facultative services remained an RGA hallmark as underwriters reviewed a record 659,204 facultative cases worldwide in 2016. Once again, a vast database of mortality experience and established expertise in applying that data provided valuable insights for clients. An update to RGA's Global Underwriting Manual, for example, featured

a new section on occupational risk, with 34 new job groups, a rating table with new duties-based occupation classes, and an interactive risk calculator.

ASAP (Automatic Selection and Assessment Program), which provides clients with instant decisions online on impaired risks, received its 100,000th case submission in 2016. Meanwhile, SUP (Strategic Underwriting Program) again allowed clients to supplement their underwriting staff on an as-needed basis and provided expert risk assessment for 14,620 cases in the U.S. for the year. FAC Console® (Facultative Underwriting Console®) created additional efficiencies by enabling insurers to submit facultative applications to multiple reinsurers simultaneously.

Amid changing risks, data sources, sales channels, and demands for faster turnaround, RGA increased the capabilities

From left, from AURA Technologies: **Brad Butler**, Vice President, AURA Product Management; **Patti Treis**, Senior Vice President and General Manager; **Michael Casale**, Vice President, Client Services; **Shawn Crain**, Vice President, Architecture Solutions.

of AURA® (Automated Underwriting and Risk Analysis®). This proprietary e-underwriting system and rules engine equipped insurers to place more policies, capture more information, improve consistency, and reduce costs. AURA also helped power several data-driven innovations in 2016, including Dynamic Risk Selector, a pioneering accelerated underwriting solution (see sidebar).

### Diversification Brings Success in Group Reinsurance

RGA supports clients with workplace and additional group insurance products, including life, disability, medical, accident, and critical illness, as well as catastrophe coverage. In recent years, growth in RGA's U.S. group business was primarily driven by health reinsurance. As price pressures slowed momentum in the health market, it was RGA's non-medical lines fueling group premium growth in 2016. Together with improved claims experience, this diversified approach produced solid results.

The worksite/voluntary market continued to be a growing area of emphasis globally. While insurers looked to manage costs, employers sought a broader range of benefit options to meet employees' changing needs. RGA built on its proven track record by delivering client solutions in product development, underwriting support, and value-added services. In addition, applications in data analytics enabled improvements in risk management and within the underwriting process, resulting in an enhanced customer experience. RGA is focused on identifying opportunities to fill market gaps and leveraging global expertise to help insurers implement long-term solutions.

RGA's exclusive ROSE® (Reinsurance Outcomes and Service Experts) Program, a nurse-led consulting service and reinsurance-based case management consulting program, continued to serve U.S. group health clients. The ROSE program saved clients nearly \$13 million in 2016, or 9% of their reinsurance premium. ROSE also published a widely circulated report identifying 183 high-cost specialty drugs. The report and accompanying management tool serve as a resource to educate and inform healthcare professionals about high-cost drugs.

The annual ROSE Conference, a three-day seminar for health and disability professionals on improving healthcare outcomes and managing claims costs, was one of many RGA events worldwide designed

## Improving the Customer Experience with Accelerated Underwriting



**Dianne Schuetz**, Vice President, Business Initiatives, RGAx.

When it comes to purchasing life insurance, the demand for an improved customer experience is transforming the underwriting process. Traditional approaches that require testing of bodily fluids are costly for insurers, intrusive for consumers, and time-consuming for both. Accustomed to the digital marketplace, younger consumers in particular demand a faster, easier path to coverage.

Insurers, seeking to simplify the risk-assessment process while still generating enough reliable evidence to issue policies at low retail prices, are turning to accelerated underwriting. Accelerated underwriting applies advanced data analysis methods and new forms of evidence to issue policies without fluid testing. The challenge: Relying on emerging

risk-assessment data to replace the conventional information obtained from fluids poses significant risks if not executed properly.

RGA, with its superior underwriting expertise, predictive modeling skills, and access to data, is ideally positioned to fill this market need. In 2016, RGA launched Dynamic Risk Selector, a tool that combines extensive application and evidence data, and then applies proprietary underwriting rules and a proprietary predictive model. The Dynamic Risk Selector algorithm improves upon the process of applying underwriting rules to each piece of evidence independently, and thereby accelerates issuance of fully underwritten policies, often without the need for fluid testing.

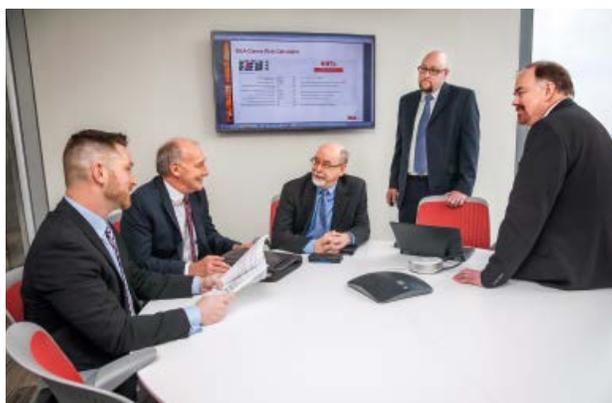
Dynamic Risk Selector aggregates evidence

92+M

TrueRisk® Life was validated using data from more than 92 million individuals.

from a range of valuable data sources, including the exclusive TransUnion TrueRisk® Life credit-based insurance score. This score is highly predictive of longevity and the likelihood the applicant will keep the policy in force. When used in combination with existing underwriting evidence, TrueRisk® Life provides insurers with a more holistic, nuanced picture of each applicant's risk profile. In 2016, RGA partnered with multiple clients to implement TrueRisk® Life, helping to accelerate the underwriting process and make more – and more competitive – offers to qualified applicants across all risk classes.

## Moving the Industry Forward Against Fraud



From left: **Ryan Barker**, Senior Project Manager, RGAX; **Alan Hobbs**, Vice President, Underwriting Services; **Mark Dion**, Vice President, Strategic Underwriting Innovation, U.S. Facultative Underwriting; **Colin DeForge**, Executive Director, Fac Exclusive ASAP, Underwriting Services; **Bob Gooderl**, Executive Director, Administration Oversight, Global Acquisitions.

As long as there is money to be made by withholding, misrepresenting, or falsifying information, preventing fraud will remain a challenge for the insurance industry. In fact, trying to meet consumer demand for faster underwriting and claims processing is opening up entirely new opportunities for fraud. The Coalition Against Insurance Fraud conservatively estimates that fraud costs insurers \$80 billion annually across all lines in the U.S. alone.

Fraudsters adapt and innovate – as one scheme is thwarted, a new scheme takes its place. RGA has taken steps to adapt and innovate ahead of the fraudsters, and in 2016 formed the Fraud Specialty Team to focus on this area. Underwriters and claims experts apply technology,

data analysis, and practical experience to develop advanced detection and prevention strategies and tools for clients.

As an example, RGA launched its Risk Scoring Model (RSM) in 2016 for insurers in India, a market with high levels of fraudulent activity. RSM is a predictive model that employs fraud profiling as the main aspect of its rule set. Using multiple weighted variables, RSM assigns a score within each variable based on historical

industry claim experience. A case's final fraud risk score is then calculated by applying the weighted values.

RGA leverages its position as a leading reinsurer to move the entire industry forward in combatting fraud – from acquisition to claim. The RGA Fraud Conference epitomizes this collaborative, comprehensive approach. The fourth annual event in 2016 welcomed a record number of professionals – underwriters, claims analysts, lawyers, even the U.S. Federal Bureau of Investigation – and covered a range of topics, from cyber fraud trends to analytics-based fraud protection. By facilitating this industry-wide discussion and equipping clients to better detect fraud, RGA is leading the way to a new era of fraud prevention.



# 125

Attendees at RGA's 2016 Fraud Conference – a new record



From left, from Global Accounts: **Anil Sanwal**, Vice President, Group Products; **Dan Lyons**, Vice President, Business Initiatives Leader.

*Continued from page 23*

to advance the industry. RGA also provided new insights via seminars, publications, and dozens of market surveys to help clients benchmark processes and standards.

### Global Health Team Prepares for Growth

The international health insurance landscape is evolving. In established markets, people are living longer and requiring additional coverage for chronic conditions. In emerging markets, a growing middle class seeks better, more advanced healthcare solutions. Across all geographies, consumerism has fueled demand for improved customer service and outcomes, as advances in medical technology and specialty drugs increase the cost of care. The resulting environment has placed healthcare providers and health insurers under intense pressure.

In 2016, RGA strengthened its commitment to support health insurance clients worldwide. The Global Health team expanded infrastructure, resources, and technology to better serve insurers in key markets. RGA professionals increased underwriting, actuarial, product development, and claims management capabilities to support traditional health products and bring innovative solutions to market. Offerings ranged from quota share arrangements to large claim (per person excess of loss) and volatility protection.

A landmark International Private Medical Insurance (IPMI) transaction completed in December 2015 marked the largest international health transaction in RGA history. Implementation of the multi-year agreement and building the infrastructure to ensure its ongoing success took place throughout 2016. RGA is now uniquely equipped to execute additional international health transactions moving forward.

U.S. individual health (long-term care) continued to represent a small but significant business line for RGA. Despite persistently difficult market conditions, a disciplined approach enabled RGA to support sustainable products that both met the needs of aging consumers and helped insurers mitigate longevity risk. /



From left, from Global Health: **Colin Weston**, Claims Manager; **Alan Watts**, Senior Vice President, Head of Global Health; **John Rutherford**, Vice President and Chief Actuary.

## Genomics, Precision Medicine, and a New Era in Insurance



From left: **Dan Zimmerman**, M.D., Vice President and Medical Director, Global Underwriting; **Dave Rengachary**, M.D., Senior Vice President, Chief Medical Director, U.S. Mortality Markets.

////////////////////  
**100**  
Number of grants funded by Longer Life Foundation as of December 31, 2016

Genomics, the study of an individual's DNA sequence (genome), has the potential to transform modern medicine. It underpins a wider movement known as precision medicine, which seeks to deliver individualized medical care based on a patient's genes, lifestyle, and environment.

Genomics can help predict an individual's disease risk, improve diagnosis and prognostication, and optimize treatment. Pharmacogenomics, for example, uses genetic information to prescribe the right drug, at the right dose, at the right time to maximize benefits and limit side effects. Other targeted therapies may offer additional benefits. In fact, CRISPR (Clustered Regularly Interspaced Palindromic Repeats) gene-editing technology could potentially cure some diseases that have a genetic basis.

For life and health insurers, the implications are clearly profound. In some markets, carriers are exploring the use of genetic testing in employee group wellness and prescription drug programs. Moving forward, precision medicine could

help reduce claims and aid in the development of targeted insurance products, among other applications.

RGA's medical staff of 35 physicians (as of December 31, 2016) is well positioned to lead the industry forward. Throughout 2016, RGA doctors presented on genetics, precision medicine, and pharmacogenomics at multiple industry events. They also counseled clients who expressed interest in incorporating genetic testing into product offerings.

Ongoing research is required to understand how precision medicine may be used to improve public health and better serve insurance customers. RGA is conducting internal studies on genetic testing and supporting investigations with academic partners. The Longer Life Foundation (LLF) has also funded studies pertaining to the use of genetics to improve patient care. The LLF is a not-for-profit partnership between RGA and the Washington University School of Medicine that supports research to enhance longevity and promote healthier lives. Learn more at [longerlife.org](http://longerlife.org).

## CAPITAL SOLUTIONS

IN 2016, MARKET CONDITIONS AND REGULATORY CHANGES LED MANY INSURERS TO REVIEW BOTH IN-FORCE PERFORMANCE AND NEW BUSINESS RETURNS TO IMPROVE CAPITAL EFFICIENCY AND REALLOCATE RESOURCES TO MORE PROFITABLE BUSINESS SEGMENTS. RGA PARTNERED WITH CLIENTS TO EXECUTE STRUCTURED TRANSACTIONS, EXPLORE CLOSED-BLOCK ACQUISITIONS, AND IDENTIFY NEW OPPORTUNITIES FOR GROWTH OR IMPROVED RETURNS.



### Ability to Execute Drives Success in GFS Business

RGA's Global Financial Solutions (GFS) business line leverages market knowledge and analytical, investment, and risk-management expertise to bring innovative structures to market. With insurers facing increased regulatory and economic pressures, GFS focuses on providing long-term value to clients by collaborating to create mutually beneficial solutions. GFS business, including capital-motivated, asset-intensive, and longevity reinsurance products, generated pre-tax income of \$433 million in 2016.

For more than 30 years, RGA's reliable, flexible approach to capital-motivated reinsurance has set the industry standard. By helping companies de-risk and optimize their businesses, RGA equips insurers to offer more competitive pricing, develop new products, meet solvency requirements, and

achieve return targets. In 2016, this included RGA's first GFS transaction in mainland China as RGA strengthened its commitment to expand the presence of its financial solutions teams in markets across Asia.

In the U.S., GFS completed an innovative transaction with a leading insurer to provide reserve financing for a block of term life insurance. Under AG 48<sup>1</sup>, primary assets are required to be held in support of a captive reinsurance agreement. By applying familiarity with the AG 48 framework and considerable expertise in financing alternatives, the RGA team was able to provide these primary assets using an affiliate of RGA, rather than through the direct insurer—making it the first transaction of its kind.

Difficult economic conditions, driven by low or even negative interest rates, led insurers to seek relief from investment-related risks in 2016. RGA helped mitigate

From left, from Global Financial Solutions: **Quentin Marsh**, Vice President, Business Development; **Michael Frings**, Vice President and Senior Actuary, Pricing.

(1) Actuarial Guideline 48 (AG 48), adopted by the National Association of Insurance Commissioners (NAIC), defines rules to be followed for life reserve financing transactions completed after January 1, 2015.

## Execution Certainty amid the Unknowns of Solvency II

From left: **David Dubois**, General Manager, RGA France; **Lionel Périnel**, Managing Director, Continental Europe; **Paul Sauvé**, Senior Vice President, Global Financial Solutions, EMEA; **Julien Chartier**, Business Developer, RGA France.



19%

Increase in total revenues in EMEA financial solutions business in 2016 compared to 2015

On January 1, 2016, Solvency II officially took effect across Europe. This new regulatory regime defines supervision, reporting, and transparency requirements for insurers, and governs the amount of capital an insurer must hold. Not surprisingly, its implementation was a central focus within the European insurance industry throughout the year.

The ultimate impact of Solvency II has yet to be seen as insurers seek more-effective strategies to optimize capital. While some clarity has been re-established in Europe's capital-motivated reinsurance market following several years of preparation for Solvency II, the overall situation continues to evolve.

Trends that emerged in 2016 included fierce competition for capital-motivated reinsurance business, selective local accommodation for capital requirements, and inconsistent regulator interpretations and implementations of the new rules.

Amid the uncertainty, proven structuring capabilities and strong client relationships positioned RGA as a trusted partner. Working collaboratively with our clients, RGA led the design of the first wave of capital-motivated reinsurance transactions under Solvency II. In the Netherlands and the Nordic Region, for example, market-first lapse risk transactions enabled clients to free up capital through the transfer of risk in a cost-effective manner.

In France, RGA and AXA completed the market's first full-duration longevity

swap, covering more than 15,000 annuitants and related commitments of nearly €1.3 billion. RGA was selected as sole reinsurer for this transaction by meeting AXA's need for competitive pricing and timely execution. Superior knowledge and capabilities ensured success. This included proven expertise in longevity coverage in other markets, as well as a clear understanding of the specificities of the French market and ability to provide treaty wording per French law in a short timeframe.

In addition to executed transactions, RGA assisted many clients with their initial investigation of the use of capital-motivated reinsurance under the new regime and expects those engagements to generate additional opportunities in the years ahead.

this exposure through asset-intensive reinsurance. Primarily structured as full coinsurance with asset transfer, these solutions provide full-risk coverage for investment-related products, including fixed and variable annuities, payout annuities, and interest-sensitive products such as universal life and corporate-owned or bank-owned life insurance. Extensive investment expertise, risk capacity, and analytic capabilities – combined with a stable, well-diversified balance sheet – have made RGA an industry leader in this area: Asset-intensive products insured by RGA totaled more than \$19 billion at the end of 2016.

The prospect of lengthening lifespans, particularly in a low interest rate environment, once again led insurers to seek longevity reinsurance support for products offered to pension plans and individual annuitants. RGA balances this business with its mortality protection business, thereby offering capital and risk-effective solutions for this long-term risk. GFS's range of capabilities includes longevity swaps and full coinsurance of longevity and investment risk, including solutions focused on supporting the underwritten annuity market.

RGA grew the notional amount of its stable value wrap portfolio to \$8.8 billion as of December 31, 2016 – a 24% increase over the previous year. RGA entered the stable value business in 2012, and has continued to selectively increase the number of provider partners and plan participants covered. Over time, the stable value team has expanded its base 401(k) coverage to also serve other defined contribution markets, such as 529 plans. In 2016, the business benefited from significant inflows into the stable value option across multiple defined contribution markets.

### Discipline in Acquisitions Brings Steady Growth

In recent years, growing risk mitigation and capital efficiency demands have compelled many insurers to consider exiting a block or line of business. RGA's Global Acquisitions (GA) team supports clients with customized approaches for divesting runoff blocks. GA professionals leverage RGA's global platform, as well as expertise in structuring, investments, and risk assessment, to deliver strategic divestiture solutions for clients. In some cases, this can include RGA assuming direct policy administration responsibility following an acquisition.

*Continued on page 29*



From left, from Global Financial Solutions, Asia Pacific: **Michael Thomas**, Executive Director, Business Development; **Gaston Nossiter**, Senior Vice President; **Ken Su**, Executive Director, Business Development.

## Strong Partnerships Turn Challenges into Opportunities



Many insurers sought new alternatives to navigate the evolving economic landscape in 2016. Partnering with a reinsurer through structured financial transactions and block acquisitions offered a cost-effective solution. At RGA, building strong partnerships extends beyond any one year; it resides at the core of the company's foundational business philosophy.

RGA has become a global reinsurance leader and capital solutions partner of choice through an unrelenting focus on clients. Experienced professionals listen to insurers and structure transactions tailored to achieve their specific goals. By identifying the "why" and not just the "what" of a situation, RGA develops solutions that emphasize long-term results over short-term gains and can survive regulatory scrutiny. Capital solutions teams adapt as insurers' needs evolve and revise treaties over time to reflect current conditions. RGA's

unparalleled success in this area is best measured by the large amount of repeat business from returning clients year after year.

In 2016, the U.K. team epitomized the effectiveness of RGA's approach. One client, with whom RGA had completed a large asset-intensive transaction in 2015, sought to free up capital to facilitate a major acquisition. A close relationship and earned reputation positioned RGA as a trusted partner to execute a capital-freeing longevity swap. Another longstanding client sought to optimize capital efficiency by eliminating redundant reserve financing. RGA leveraged a deep understanding and familiarity with the client to develop an innovative financial reinsurance structure, the first of its kind in the U.K. under Solvency II.

**Cormac Galvin**, Vice President, Business Development, Global Financial Solutions, U.K. and Ireland.

Continued from page 27

In an industry environment of continued disruption and uncertainty, RGA remained selective in the risks it assumed in 2016. The GA team pursued its work prudently, evaluating runoff and closed blocks as they became available and remaining prepared to invest when attractive opportunities arose. Potential acquisitions were assessed based on their fit within RGA's risk profile, capacity, and market position. Despite heavy negotiation activity across the market, very few deals were transacted industry-wide. This included RGA, where no major acquisitions were finalized in 2016. The breadth of GA operations in markets it serves allowed for this disciplined strategic approach.



**Gary Finkelstein**, Senior Vice President, Global Acquisitions Europe.

RGA has deployed more than \$1.2 billion into runoff blocks in the last five years, to the benefit of both RGA and its clients. Assuming in-force blocks complements other client-focused efforts, such as helping clients enter new markets and new lines of business through capital and risk support. Continuing economic and regulatory pressures are expected to generate additional opportunities for block acquisitions, and RGA is well-positioned to capitalize on these market trends while providing meaningful value to clients.

RGA's in-force optimization team also enjoyed a successful 2016. A focus on consistency in analytics and in-force management throughout the year created opportunities to enhance capital efficiency, improve risk-adjusted performance, and foster organizational growth. As RGA grows in size and complexity, in-force optimization will remain a vital component of its global enterprise strategy. /

## Expanding Investment Capabilities in a Low Interest Rate Environment

From left, from Investments: **Brian Butchko**, Senior Vice President, Head of Global Portfolio Management; **Steve Myers**, Vice President, Head of Private Debt & Equity; **Kim Grobbe**, Vice President, Head of Securities Operations.



As insurers' needs for capital solutions have increased, RGA has expanded its investment operations to help make providing these solutions possible. A growing team of investment professionals works closely with reinsurance experts to facilitate transactions, reposition assets in acquired portfolios, and optimize in-force business. This valuable in-house support enables RGA to remain nimble and flexible in meeting the capital efficiency needs of clients.

In 2016, persistent low interest rate headwinds increased interest in less-liquid, higher-yielding investments. With limited immediate liquidity needs among its liabilities, RGA was well-positioned to capitalize on this industry trend and gain access to these yield-enhancement opportunities.

RGA's Real Estate team, for example, expanded commercial mortgage loan origination capabilities, achieving a significant yield advantage over investment-grade corporate bonds. In 2016, the team closed 96 loans totaling \$1.2 billion, increased its commercial mortgage portfolio by 21% to \$3.8 billion, and extended lending services to the Canadian market.

Similarly, the Private Debt and Equity group nearly doubled the number of investment professionals on staff, enabling it to grow both fund and direct investments by 18% to \$504 million, with investment income of \$42 million. Eight new private equity funds were added to the portfolio totaling \$125 million of new commitments.

In the U.K., RGA built on its growing portfolio of assets denominated in British pounds. Moving

forward, the U.K. investments team seeks broader diversification and is exploring additional opportunities to invest in commercial mortgage loans and direct corporate lending.

To support success and expansion for all of these efforts, RGA implemented an investment front-end and accounting system for private investments. This system is the latest example of progress on Project TRADE, a multi-year, foundational effort to improve management of securities and complex assets. Project TRADE improves RGA's investment capabilities and infrastructure through business process enhancements, new system implementations, data cleansing, and data management centralization to support RGA's strategic initiatives.



## FUTURE SOLUTIONS

IN 2016, DISRUPTIVE INNOVATION CONTINUED TO REDEFINE THE COMPETITIVE LANDSCAPE OF THE INSURANCE INDUSTRY. WITHIN THIS DYNAMIC ENVIRONMENT, RGA WORKED TO IDENTIFY OPPORTUNITIES TO IMPROVE THE CUSTOMER JOURNEY AND HELP LEAD THE INDUSTRY INTO A NEW ERA.



### Innovation Goes Global with RGAX

Change in the insurance industry continues to build momentum as trends in demographics, technology, and consumer behavior converge. More and more people, for example, are living longer, engaging with the world via smartphones, and transacting business online. Solutions at the intersection of these trends are redefining the way insurance is bought and sold.

Innovation, always a key differentiator for RGA, has helped fuel the company's sustained success for decades. In recent years, this drive to move the industry forward has taken on a new identity. RGAX, a wholly owned subsidiary of RGA, was formed in the U.S. in 2015 to build and accelerate

transformational businesses in the life insurance industry. Its mission: to create tools, data, products, and digital platforms that advance consumer-centric solutions and improve the insurance buying experience.

In 2016, RGA developed innovation engines around the world under the RGAX name and branding. By creating regional teams—RGAX Americas, RGAX EMEA, and RGAX Asia—under one global mandate, associates will realize efficiencies and opportunities through shared knowledge, capacity, and capabilities. RGAX will leverage its global platform to determine the most promising markets in which to introduce new initiatives and transfer successful ideas from one market to another.

From left: **Mark Showers**, Interim CEO, RGAX Americas and Chief Solutions Officer, RGAX; **Sandi Hubert**, Vice President and Chief Operating Officer, RGAX Global.

### RGAx Americas Reaches Out to the Underinsured

The ultimate goal of RGAx Americas is to improve trust and transparency between the buyers and sellers of insurance in order to facilitate a simple, engaging, and valued consumer experience. In North America, that goal is pursued relentlessly by teams of RGAx associates with various professional backgrounds and skill sets. Through dozens of partnerships, investments in other companies, and original business models, these teams are bringing insurance innovation to market.

In 2016, RGAx partnered with insurance carriers and leading digital concept development and digital execution companies to launch a number of forward-thinking

From left, from RGAx: **Tim Rozar**, Senior Vice President; **Farron Blanc**, Vice President, Innovation Studio.



Continued on page 32

## Big Data Brings Big Opportunities, Bigger Responsibilities



From left, from Global Research and Data Analytics: **Mike Lane**, Vice President and Actuary, Head of Global Experience Analytics; **Scott Rushing**, Vice President and Actuary, Head of Global Research; **Peter Banthorpe**, Senior Vice President, Head of Global Research and Data Analytics; **Brad Lipic**, Vice President, Data Strategy; **Richard Xu**, Vice President and Actuary, Head of Data Science.

Insurance has entered the era of Big Data. Carriers are gathering more data and investing in analytical capabilities to help facilitate everything from product development to claims processing. As more data becomes available, the more important it becomes to balance opportunity with responsibility. Advances in applied data must be pursued with a heightened awareness of potential regulatory scrutiny and a sensitivity to privacy concerns. RGA has the capacity and expertise to help clients develop data-driven solutions, as well as the experience to help them navigate the obstacles and risks of bringing those solutions to market.

RGA's Global Research and Data Analytics (GRDA) team supported important initiatives worldwide in 2016. GRDA analysts devised the predictive model for Dynamic Risk Selector, the U.S. market's accelerated underwriting tool. When RGA Asia was in need of a data solution to move forward cost-effectively with an existing-customer engagement initiative, GRDA delivered it. The team also investigated new factors for rating risk and applied data sets to improve medical underwriting, among other contributions.

////////////////////////////////////  
**130+**

Number of experience studies conducted by RGA's global research team in 2016

GRDA worked outside RGA to advance the industry as well. This included delivering more than 170 pieces of content (papers, presentations, etc.) and conducting more than 130 experience studies (not including additional studies conducted throughout the RGA enterprise). Data scientists also engaged directly with clients to provide analytical support and build custom models based on new data sets.

RGA's wearable fitness tracker study epitomized the company's commitment to experience over theory in data collection and analysis. The 2016 study, which included around 1,000 participants from 23 countries, now provides a platform from which to advise clients. RGA has since initiated a program to gather more data and develop meaningful conclusions in the wellness space.

## Reaching Today's Consumer Through Digital Distribution



As it has in almost every other industry, digital technology is disrupting the traditional insurance distribution process. Today's consumers, particularly the younger generations, expect to initiate and complete purchases entirely online. Although channels including agents, brokers, and banks continue to dominate sales for now, insurers are increasingly turning to the internet and mobile devices to carry out the sales process – from marketing to policy issuance.

The need for carriers to adapt their business models and explore digital distribution channels is clear.

In the U.S., for example, the average age of a life insurance agent is close to 60, and many of these agents are struggling to reach consumers 18-45, prime ages to purchase life insurance. Meanwhile, the internet is already fundamentally re-shaping consumer behavior as insurance customers look online to research products, seek advice, obtain quotes, make purchases, and receive ongoing support.

RGAx is developing forward-looking solutions in multiple markets to help clients meet growing demand for web-based life insurance services.

In 2016, RGAx Americas launched My Life Covered™, a digital distribution initiative. Initially focused on high-intensity fitness advocates, the platform is designed to serve multiple affinity groups moving forward. By targeting specific demographics, the marketing efforts, content, user interface, and insurance products can be customized for those segments to improve the consumer experience.

From left: **Holly Reinen**, Technology Lead, RGAx; **Chase Huey**, Manager, Digital Ventures, RGAx; **Julianne Callaway**, Strategic Research Actuary, Global Research and Data Analytics; **Steve Helfer**, Execution Manager, RGAx.

*Continued from page 31*

consumer businesses. These online platforms leverage social media and other digital channels to connect with consumers around their interests and life events as a precursor to a conversation about life insurance needs. Far from simply generating leads, these platforms provide content and communications designed to educate consumers and prepare them for a life insurance purchase decision.

RGAx also partnered with and invested in cutting-edge companies and innovation accelerators in 2016. These investments provided opportunities to more quickly develop capabilities and create products and services to bring value to insurance companies and consumers. They also enabled RGAx associates to gain knowledge and experience in areas adjacent to the life insurance industry. Everplans™, for example, offers a suite of content and product services for online estate and legacy planning, including tools for consumers to organize their digital lives. RGAx is exploring ways to leverage this platform to reach the millions of underinsured U.S. households and promote the value of life insurance.

### EMEA Team Works to Make Insurance Mobile

RGAx EMEA worked with a wide range of clients and partners in 2016 to develop pioneering digital tools and distribution models. In Africa, for example, associates again teamed with Inclusivity Solutions to expand that company's mobile microinsurance platform, this time into Uganda. Inclusivity Solutions links up insurers and mobile operators to deliver digital insurance services to mobile consumers in emerging markets. Meanwhile in the U.K., the RGAx team explored microinsurance for developed markets, challenging the common misconception that life insurance is expensive and complicated. This initiative seeks to minimize costs and remove inconveniences in buying coverage to make the decision to purchase much easier for consumers.

The U.K. team also partnered with a key client to expand the customer base for QuickCover, an insurance application website designed specifically for a mobile device. Launched in 2015, QuickCover provides a user-friendly life insurance application journey and a start-to-finish underwriting process to dramatically improve mobile sales conversions.

RGAx joined partner roadtohealth, a digital health company based in the U.K., on a major update to the Quealth™ app in 2016.

Quealth is a mobile health app originally launched in 2015 that provides users with a score to measure their relative health and ways to improve it. The updated version adds the ability to set clear health goals and engage the Quealth Coach, a chatbot-like interface, to achieve them. RGA is studying how users interact with Quealth, what the data reveals, and how insurers might use digital health apps to create and fulfill demand for life and health coverage.

### **RGAx Asia Invests in the Future**

RGAx Asia's Innovasia initiative during the first half of 2016 united associates from all areas of the business around a shared set of strategic goals. The team worked through a variety of process and best-practice considerations to develop the innovation methodology to guide their work moving forward.

RGAx Asia made forward-looking investments and developed strategic partnerships throughout 2016. In Japan, for example, the team is working with a Silicon Valley-based start-up company to digitize health checks and applicant declarations. In related work, associates are developing a continuous risk-assessment engine. With the expected flood of new data sets in the coming years, RGAx is preparing the infrastructure now to be able to convert that data into practical insurance solutions. /



From left, from RGAx EMEA: **Richard Verdin**, Managing Director; **Andre Dreyer**, Director, Investment Solutions; **Jonathan Hughes**, Vice President, Strategic Development.

## **InsurTech Reshaping the Future of Insurance**



Tech investors and outside developers have taken a keen interest in disrupting the traditional insurance model. Venture capitalists invested an estimated \$740 million in insurance technology (InsurTech) in 2014. One year later, that figure jumped to \$2.7 billion. More than 500 start-up companies are already crowding more established insurance providers in this space.

RGA and RGAx are leading the industry forward in developing practical InsurTech applications for today's consumers and mapping a course to efficiently and responsibly realize InsurTech's tremendous potential for the future. RGA's popular Innovation Series at the Society of Actuaries Annual Meeting focused on InsurTech in 2016. Attendees learned firsthand from pioneering entrepreneurs about bringing new ideas to market and discussed the challenges of innovating within the traditional insurance industry.

From the most basic fitness tracker already in use to the most complex artificial intelligence breakthrough yet to be discovered,

the most transformative ideas will be those that best connect technology to a growing societal need. RGAx is working to make those connections and to leverage InsurTech breakthroughs to help clients enter new markets and better serve existing customers.

In 2016, RGAx partnered with K4Connect, a technology company focused on empowering older adults and people living with disabilities. The partnership is exploring new ways to address the cost of long-term care by merging K4Connect's technology with insurance-based products and services. In Asian markets in particular, where aging populations and limited resources to meet their needs are inflating the cost of care, solutions emerging from such partnerships have the potential to reshape the future of insurance.

From left, from RGAx Asia: **Greg Goodfliesh**, Managing Director; **Georgio Mosis**, Head of Innovation Management; **Christopher Pile**, Product Lead; **Raimondo Guerra**, Head of Strategic Innovation.

## SELECTED CONSOLIDATED FINANCIAL AND OPERATING DATA

As of or For the Years Ended December 31, (in millions, except per share and operating data)	2016	2015	2014	2013	2012
<b>Income Statement Data</b>					
Revenues:					
Net premiums	\$ 9,248.9	\$ 8,570.7	\$ 8,669.9	\$ 8,254.0	\$ 7,906.6
Investment income, net of related expenses	1,911.9	1,734.5	1,713.7	1,699.9	1,436.2
Investment related gains (losses), net:					
Other-than-temporary impairments on fixed maturity securities	(38.8)	(57.4)	(7.8)	(12.7)	(15.9)
Other-than-temporary impairments on fixed maturity securities transferred to (from) other comprehensive income	0.1	–	–	(0.2)	(7.6)
Other investment related gains (losses), net	132.9	(107.3)	194.0	76.9	277.6
Total investment related gains (losses), net	94.2	(164.7)	186.2	64.0	254.1
Other revenues	266.5	277.7	334.4	300.5	244.0
Total revenues	11,521.5	10,418.2	10,904.2	10,318.4	9,840.9
Benefits and expenses:					
Claims and other policy benefits	7,993.4	7,489.4	7,406.7	7,304.3	6,666.0
Interest credited	364.7	337.0	451.0	476.5	379.9
Policy acquisition costs and other insurance expenses	1,310.6	1,127.5	1,391.4	1,300.8	1,306.5
Other operating expenses	645.5	554.0	538.4	466.7	451.8
Interest expense	137.6	142.9	96.7	124.3	105.3
Collateral finance and securitization expense	25.8	22.6	11.5	10.5	12.2
Total benefits and expenses	10,477.6	9,673.4	9,895.7	9,683.1	8,921.7
Income before income taxes	1,043.9	744.8	1,008.5	635.3	919.2
Provision for income taxes	342.5	242.6	324.5	216.4	287.3
Net income	\$ 701.4	\$ 502.2	\$ 684.0	\$ 418.9	\$ 631.9
<b>Earnings Per Share</b>					
Basic earnings per share	\$ 10.91	\$ 7.55	\$ 9.88	\$ 5.82	\$ 8.57
Diluted earnings per share	10.79	7.46	9.78	5.78	8.52
Weighted average diluted shares, in thousands	64,989	67,292	69,962	72,461	74,153
Dividends per share on common stock	\$ 1.56	\$ 1.40	\$ 1.26	\$ 1.08	\$ 0.84
<b>Balance Sheet Data</b>					
Total investments	\$ 44,841.3	\$ 41,978.3	\$ 36,696.1	\$ 32,441.1	\$ 32,912.2
Total assets	53,097.9	50,383.2	44,654.3	39,652.4	40,338.1
Policy liabilities <sup>1</sup>	37,874.0	37,370.8	30,892.2	28,386.1	27,886.6
Long-term debt	3,088.6	2,297.5	2,297.7	2,196.1	1,798.8
Collateral finance and securitization notes	840.7	899.2	774.0	480.9	646.1
Total stockholders' equity	7,093.1	6,135.4	7,023.5	5,935.5	6,910.2
Total stockholders' equity per share	110.31	94.09	102.13	83.87	93.47
<b>Operating Data</b> (in billions)					
Assumed ordinary life reinsurance in force	\$ 3,062.5	\$ 2,995.1	\$ 2,943.5	\$ 2,889.9	\$ 2,927.6
Assumed new business production	404.8	491.0	482.0	370.4	426.6

(1) Policy liabilities include future policy benefits, interest-sensitive contract liabilities, and other policy claims and benefits.

# LEADERSHIP

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**Alain P. Néemeh**  
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## GLOSSARY OF TERMS

### **Accelerated underwriting**

A form of underwriting designed to be both less invasive and faster from the time of application to issue by relying on more non-traditional techniques, including the use of predictive models and new data sources, to rate certain applicants.

### **Actuary**

A specialist in the mathematics of risk, especially as it relates to insurance calculations such as premiums, reserves, dividends, and insurance and annuity rates.

### **Allowance**

An amount paid by the reinsurer to the ceding company to help cover the ceding company's acquisition and other costs, especially commissions. Allowances are usually calculated as a large percentage (often 100%) of first-year premiums reinsured and smaller percentages of renewal premiums reinsured.

### **Annuity**

A contract that provides for income payments to an insured at regular intervals, either for a specific period or for the lifetime of the insured, in exchange for premiums.

### **Attending Physician Statement (APS)**

A report by the treating physician or medical facility regarding the medical condition of a patient who applies for insurance. This is one of the most common sources of medical background information used in underwriting.

### **Asset-intensive reinsurance**

A transaction (usually coinsurance or funds withheld, and often involving reinsurance of annuities) where performance of the underlying assets, more so than any mortality risk, is a key element.

### **Assumed reinsurance**

Insurance risk that a reinsurer accepts (assumes) from a ceding company.

### **Automatic reinsurance**

A reinsurance arrangement whereby the ceding company and reinsurer agree that all business of a certain description will be ceded to the reinsurer. Under this arrangement, the ceding company performs underwriting decision-making within agreed-upon parameters for all business reinsured.

### **Bancassurance**

The provision of insurance and banking products and services through a common distribution channel and/or to the same client base.

### **Capital-motivated reinsurance**

Reinsurance, including financial reinsurance, whose primary purpose is to enhance the cedant's capital position.

### **Captive insurer**

An insurance or reinsurance entity designed to provide insurance or reinsurance coverage for risks of the entity or entities by which it is owned or to which it is affiliated.

### **Ceding company**

*(also known as cedant)*

An insurer that transfers, or cedes, risk to a reinsurer.

### **Cession**

The insurance risk associated with a policy that is reinsured from an insurer to a reinsurer.

### **Claim**

Demand on an insurer or reinsurer for payment under the terms of an insurance policy.

### **Closed-block acquisition**

The acquisition of a block of insurance products that are discontinued but still have active policyholders.

### **Coinsurance**

*(also known as original terms reinsurance)*

A form of reinsurance under which the ceding company shares its premiums, death claims, surrender benefits, dividends, and policy loans with the reinsurer and the reinsurer pays expense allowances to reimburse the ceding company for a share of its expenses.

### **Counterparty**

A party to a contract requiring or offering the exchange of risk.

### **Counterparty risk**

The risk that a party to an agreement will be unable to fulfill its contractual obligations.

### **Critical illness (CI) insurance** *(also known as dread disease insurance)*

Insurance that provides a guaranteed fixed sum upon diagnosis of a specified illness or condition such as cancer, heart disease, or permanent total disability. The coverage can be offered on a standalone basis or as an add-on to a life policy.

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

An enterprise-wide framework used by a firm to assess all risks facing the organization, manage mitigation strategies, monitor ongoing risks, and report to interested audiences.

### **Expected mortality**

The number of deaths predicted to occur in a defined group of people.

### **Face amount**

The amount payable at the death of the insured or at the maturity of the policy.

### **Facultative reinsurance**

A type of reinsurance in which the reinsurer underwrites an individual risk submitted by the ceding company for a risk that is unusual, large, highly substandard, or not covered by an automatic reinsurance treaty. Such risks are typically submitted to multiple reinsurers for competitive offers.

### **Financial reinsurance**

*(also known as financially-motivated reinsurance)*

A form of capital-motivated reinsurance that satisfies all regulatory requirements for risk transfer and is often designed to produce very predictable reinsurer profits as a percentage of the capital provided.

### **Group life insurance**

An insurance policy under which the lives of a group of people, most commonly employees of a single company, are insured in accordance with the terms of one master contract.

### **Guaranteed issue life insurance**

Insurance products that are guaranteed upon application, regardless of past health conditions.

### **In force sum insured**

A measure of insurance in effect at a specific date.

### **Individual life insurance**

An insurance policy that insures the life of usually one and sometimes two or more related individuals, rather than a group of people.

### **InsurTech**

*(also insurtech and instech)*

A collection of companies and technologies seeking to streamline the insurance application and claims management process, enhance the consumer experience, and increase competition.

### **Longevity product**

An insurance product that mitigates longevity risk by providing a stream of income for the duration of the policyholder's life.

**Longevity swap**

An insurance, reinsurance, or derivative contract designed to exchange ("swap") a fixed payment stream for a variable payment stream dependent on the longevity or survival of a defined group of lives. For example, the variable payment stream can be defined as the benefit payments to be paid under a defined benefit pension plan, or to the annuitant under an insurance contract. The fixed payment stream would be the expected payment stream plus a margin.

**Modified coinsurance**

A variant on coinsurance in which the ceding company retains all the reserves, as well as assets backing reserves, and pays the reinsurer interest on the reinsurer's share of the reserves.

**Morbidity**

A measure of the incidence of sickness or disease within a specific population group.

**Mortality experience**

The actual number of deaths occurring in a defined group of people.

**Mortality risk reinsurance**

Removing some of the major mortality or lapse risk associated with life insurance from the client company.

**Novation**

The act of replacing one participating member of a contract with another, with all rights, duties, and terms being transferred to the new party upon consent of all parties affected.

**Original terms reinsurance**

See *coinsurance*.

**Portfolio**

The totality of risks assumed by an insurer or reinsurer.

**Predictive modeling**

(*also known as predictive analytics*)

A process employing algorithms and statistics by which current or historical facts are used to create predictions about future events or behaviors.

**Preferred risk coverage**

Coverage designed for applicants who represent a better-than-average risk to an insurer.

**Premium**

The amount paid to insure a risk.

**Primary insurance**

(*also known as direct insurance*)

Insurance business relating to contracts directly between insurers and policyholders. The insurance company is directly responsible to the policyholder.

**Quota share**

(*also known as 'first dollar' quota share*)

A reinsurance arrangement in which the reinsurer receives a certain percentage of each risk reinsured.

**Recapture**

The right of the ceding company to cancel reinsurance under certain conditions.

**Reinsurance**

The transfer of insurance risk from an insurer, referred to as the ceding company, to a reinsurer, in conjunction with the payment of a reinsurance premium. Through reinsurance, a reinsurer 'insures' an insurer.

**Reserves**

The amount required to be carried as a liability in the financial statement of an insurer or reinsurer to provide for future commitments under outstanding policies and contracts.

**Retakaful**

A form of reinsurance that is acceptable within Islamic law. See *Takaful*.

**Retention limit**

The maximum amount of risk a company will insure on one life. Any amount in excess of the retention limit must be reinsured.

**Retrocession**

A transfer of reinsurance risk from a reinsurer to another reinsurer, referred to as the retrocessionaire, in conjunction with the payment of a retrocession premium. Through retrocession, a retrocessionaire reinsures a reinsurer.

**Retrocessionaire**

A reinsurer that reinsures another reinsurer. See *retrocession*.

**Securitization**

The structuring of financial assets as collateral against which securities can be issued to investors.

**Simplified issue life insurance**

Insurance products with limited face amounts that require no or minimal underwriting.

**Stable value wraps**

Contracts within a stable value fund that provide a limited guarantee on a high-quality, diversified portfolio of fixed income assets. These contracts in combination with the fixed income assets provide principal protection like a money market fund, while targeting returns similar to short-term bond funds.

**Statutory capital**

The excess of statutory assets over statutory reserves, both of which are calculated in accordance with standards established by insurance regulators.

**Takaful**

A form of insurance that is acceptable within Islamic law, and that is devised upon the principles of mutual advantage and group security.

**Tele-underwriting**

A telephone interview process, during which an applicant's qualifications to be insured are assessed and an underwriting decision is rendered.

**Treaty**

(*also known as a contract*)

A reinsurance agreement between a reinsurer and a ceding company. The three most common methods of accepting reinsurance are automatic, facultative, and facultative-obligatory. The three most common types of reinsurance treaties are YRT (yearly renewable term), coinsurance, and modified coinsurance.

**Underwriting**

The process by which a company assesses the risk inherent in an application for insurance prior to acceptance of the policy.

**Valuation**

The periodic calculation of reserves, the funds that insurance companies are required to hold in order to make good on all future insurance obligations.

**Variable life insurance**

A form of whole life insurance under which the death benefit and the cash value of the policy fluctuate according to the performance of an investment fund. Most variable life insurance policies guarantee that the death benefit will not fall below a specified minimum.

**Yearly Renewable Term (YRT)**

1. A type of reinsurance which covers only mortality risk, with each year's premium based on the current amount of risk.

2. A level term life insurance product with annually increasing premiums, commonly known as annually renewable term (ART).

## DISCLAIMERS

This 2016 Annual Review contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 including, among others, statements relating to projections of the strategies, earnings, revenues, income or loss, ratios, future financial performance, and growth potential of RGA (which we refer to as "we," "us," or "our"). The words "intend," "expect," "project," "estimate," "predict," "anticipate," "should," "believe," and other similar expressions also are intended to identify forward-looking statements. Forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified. Future events and actual results, performance, and achievements could differ materially from those set forth in, contemplated by, or underlying the forward-looking statements. See "Item 7 – Management's Discussion and Analysis of Financial Condition and Results of Operations – Cautionary Note Regarding Forward-Looking Statements" of RGA's Annual Report on Form 10-K.

RGA's 2016 Form 10-K is available for download via our website: [www.rgare.com](http://www.rgare.com)

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