



# 2017

Annual Review



**RGA**<sup>®</sup>



The security of experience. The power of innovation.



At RGA, our strength is our people. Every day, talented teams of dedicated professionals around the globe relentlessly pursue one common goal: the long-term growth and success of our client partners.

**On the Cover**

Left side, clockwise: **Lionel Périnel**, Managing Director, Continental Europe; **Julien Chartier**, Business Developer, RGA France / **Melissa Tilford**, Vice President, Reinsurance Underwriting, U.S. Group Reinsurance / From RGA Canada: **Annie Girard**, Assistant Vice President and Actuary, Research; **Damien Lapointe Nguyen**, Director, New Products/ **Shih-Nin Low**, Senior Vice President, Managing Director, Southeast Asia Markets

Right side, from top: **Michelle Ma**, Vice President, Operations, RGA Capital Partners / **James Smalley**, Pricing Analyst, Global Financial Solutions, U.K.; **Sam Chesterton**, Director, Product Development Europe, Global Financial Solutions

**Inside Cover**

Top row, from left: From RGA Japan: **Tomoe Kawamura**, Administration; **Keiko Kato**, Senior Manager, Administration / **Kevin Peters**, Client Solutions Consultant, Business Initiatives, U.S. Markets / From RGA Australia: **Marnie McConnell**, Chief Legal Counsel; **Nadine Gooderick**, Chief Operating Officer; **Johanne Taylor**, Coordinator, Strategic Initiatives / **Quentin Marsh**, Vice President, Business Development, Global Financial Solutions

Bottom row, from left: **Jay Doshi**, Senior Pricing Analyst, Global Financial Solutions, U.K. / From Global Acquisitions: **Richard Leblanc**, Senior Vice President; **Matt Easley**, Senior Vice President; **Mark Kirsch**, Vice President / **Lesley CayCe-Turner**, Business Data Analyst, U.S. Individual Health / **Arjan van der Velden**, Chief of Staff, EMEA; **Olav Cuiper**, Executive Vice President, Head of EMEA

**Executive Review**

- 02 Message from the CEO
- 06 Financial Highlights
- 08 Year in Review
- 10 Corporate Overview

**Worldwide Operations**

- 12 U.S. and Latin America Operations
- 14 Canada Operations
- 16 Asia Pacific Operations
- 18 EMEA Operations

**Business Lines**

- 20 Risk Solutions
- 24 Capital Solutions
- 28 Future Solutions

**Resources**

- 32 Selected Consolidated Financial and Operating Data
- 33 Leadership
- 34 Worldwide Locations
- 37 Glossary of Terms



## Message from the CEO



**Anna Manning**  
President and Chief Executive Officer

**R**einsurance Group of America (RGA) enjoyed another successful year in 2017, establishing records for premium, revenue, income, and earnings per share. These strong results were broad-based, reflecting significant contributions from all of our business segments across RGA's diversified global platform. The year's performance once again demonstrates the strength of our enterprise strategy as RGA professionals worked to deepen and build upon our core businesses, capitalized on emerging opportunities, and improved our operational efficiency and effectiveness. I am particularly proud of how this year's accomplishments underscore the talent, passion, and urgency RGA employees bring every day to execute our vision of being an integral and trusted partner, a respected leader, and a long-term value creator.

Net income in 2017 reached \$1,822 million, or \$27.71 per diluted share, versus \$701 million, or \$10.79 per diluted share in 2016. The Tax Cuts and Jobs Act of 2017, enacted in the U.S. on December 22, 2017, created a tax benefit that RGA recognized as a one-time increase in net income of approximately \$1.0 billion, or \$15.72 per diluted share. This increase provided a significant boost to our balance sheet and capital position, and we expect ongoing benefits from a reduced effective tax rate for RGA as well as a more level playing field with our global competitors.

Pre-tax income totaled \$1,143 million, a 9% increase over 2016 and the highest level ever achieved by RGA. Net premiums were \$9.8 billion, a 6% increase over 2016, and thanks to significant contributions from our diversified portfolio of businesses, revenues reached \$12.5 billion, representing a 9% year-over-year increase.

Our U.S. and Latin America traditional operations built on a strong 2016 to deliver results in line with expectations. Net premiums surpassed \$5 billion for the second consecutive year reaching \$5.4 billion, with pre-tax income totaling \$373 million. Notably, the U.S. individual mortality underwriting team received its three millionth facultative case in 2017, an unprecedented milestone and a testament to RGA's long-standing leadership in this market.

Relatively flat premiums coupled with unfavorable claims experience in healthcare excess business resulted in a challenging year for our U.S. group operations, following a favorable 2016. We expect this short-term volatility to level out over time. Client retention remained strong, and with expansion into promising new market segments, we see positive long-term growth opportunities. RGA is working closely with our clients to develop sustainable solutions given the uncertainty surrounding the U.S. healthcare landscape.

RGA celebrated our 25th anniversary in Canada with an 11th straight year as the market's individual life reinsurance leader, producing pre-tax income of \$120 million in traditional lines of business. We are partnering with our clients to expand their breadth of offerings to meet market demand, particularly in the living benefits space. We are also leveraging our expertise with regulatory regimes in other markets to develop innovative reinsurance structures and customized capital solutions to help our clients with upcoming regulatory changes in Canada.

A HISTORY OF  
STEADY GROWTH  
(As of December 31, 2017)

**Total Assets**  
**\$60.5 Billion**

**18%**↑  
(24-year CAGR, since IPO)

**Book Value Per Share**  
**\$148.48**

**13%**↑  
(24-year CAGR, since IPO)

**Market Capitalization**  
**\$10.1 Billion**

**14%**↑  
(24-year CAGR, since IPO)

Our Asia Pacific operations produced an outstanding year. Pre-tax income in the region's traditional business totaled \$149 million, a 31% increase over 2016, driven primarily by organic business growth. Net premiums increased 22% over 2016 to reach \$2.1 billion, marking the first time this segment surpassed \$2 billion in annual net premiums. We see continued growth opportunities in the region as demographic trends drive consumer demand for innovative product solutions, an area in which RGA is well-positioned to assist our clients.

“

This year's accomplishments underscore the talent, passion, and urgency RGA employees bring every day to execute our vision of being an integral and trusted partner, a respected leader, and a long-term value creator.”

We also see positive developments in Australia as ownership of insurance operations shifts from banks to global insurers, offering greater potential for a long-term sustainable market. RGA is well-positioned in Australia, providing a sound platform for profitable growth.

RGA's Europe, Middle East, and Africa (EMEA) traditional segment finished the year with pre-tax income of \$71 million compared with \$30 million in 2016. Our operations in France and Italy celebrated their 10th anniversaries as we continued to strengthen our position in Continental Europe. Across EMEA, RGA is leveraging our broad range of capabilities to meet the risk and capital needs of clients through ongoing product development and innovative reinsurance solutions.

Global Financial Solutions (GFS) once again performed very well, generating pre-tax income of \$555 million, a 28% increase over 2016. Notable transactions included an asset-intensive transaction in the U.S. that increased RGA's invested asset base by approximately \$2.3 billion and an asset-intensive transaction in the U.K. through which RGA is reinsuring over \$1 billion in individual annuity business. GFS also executed a number of other transactions around the globe, contributing to particularly strong performances by our capital-motivated line in the U.S. and growing asset-intensive business in Asia. RGA deployed over \$225 million into in-force transactions in 2017 and ended the year with \$1.4 billion in excess capital. The pipeline for our transactions business is active and we believe U.S. tax reform and the potential for higher interest rates could create additional global opportunities.

To increase our ability to execute larger transactions, we created RGA Capital Partners (RCP) in 2017. RCP launched its first reinsurance vehicle, Langhorne Re, in partnership with RenaissanceRe Holdings Ltd. (RenaissanceRe) and is targeting large in-force life and annuity blocks.

Langhorne Re entered 2018 with \$780 million of long-term capital commitments, including commitments from RGA, RenaissanceRe, and third-party investors. We are excited about the potential for Langhorne Re to bring additional competitive and flexible solutions to market.

RGAX, a subsidiary of RGA and our global innovation accelerator, worked with clients and partners worldwide to combine technology, new sources of data, and other advances in order to develop a new generation of consumer-focused insurance solutions. In January 2018, RGAX entered into an agreement to acquire LOGiQ<sup>3</sup> Inc., a group of companies providing technology, consulting, and outsourcing solutions primarily to the North American life insurance and reinsurance industry. With the addition of LOGiQ<sup>3</sup>, RGAX has significantly expanded our capacity and capabilities across the insurance value chain.

As we look to the future, RGA is well-positioned to anticipate and capitalize on the ongoing changes in the life and health insurance industry. We have a strong balance sheet, a diversified portfolio of businesses, and a global operating platform from which we continue to innovate. We bring a proven strategy and a long track record of successful execution. Our people, culture, and strong multi-level relationships with our clients give us great optimism for a bright future.

Together with CEOs of many of the world's leading companies, I had the privilege this past year to add my name to the CEO Action for Diversity & Inclusion™, a pledge to advance diversity and inclusion in the workplace. At RGA, diversity goes beyond considerations such as gender and ethnicity to encompass the way we think, the way we behave, and the culture we foster. We understand that our strength stems from our people and that the more inclusive we are of the diverse views and opinions held by our employees, the better the outcomes for our clients. It is this understanding that has fueled our expansion into new markets, new product lines, and new business models and will drive our continued growth and success in the years ahead.

I would like to thank RGA's dedicated employees, clients, shareholders, and partners for making 2017 an outstanding year. I look forward to continue working together to build a stronger company and a more resilient and sustainable industry for the many people who depend on our solutions.



**Anna Manning**  
President and Chief Executive Officer

## 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 673,850 facultative cases in 2017:

**529,185**

International

**105,391**

United States

**39,274**

Canada



## Strong Financial Performance

Positive results across all lines of business produced an exceptional year financially. In 2017, RGA established record highs in key financial metrics.



### Net Premiums

**\$9.8B**

### Total Revenues

**\$12.5B**

### Net Income

**\$1.8B**

### Total Assets

**\$60.5B**

### Market Capitalization

**\$10.1B**

### Life Reinsurance In Force

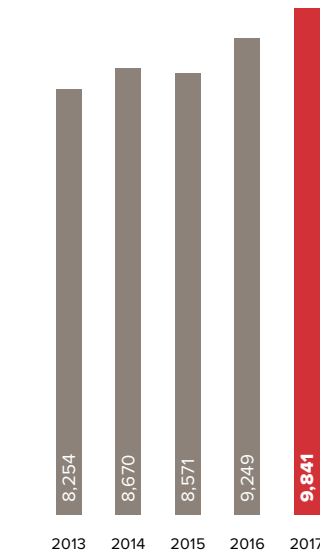
**\$3.3T**

Note: B = billion, T = trillion. Results as of December 31, 2017.

# Year in Review

## Net Premiums

(in millions USD)



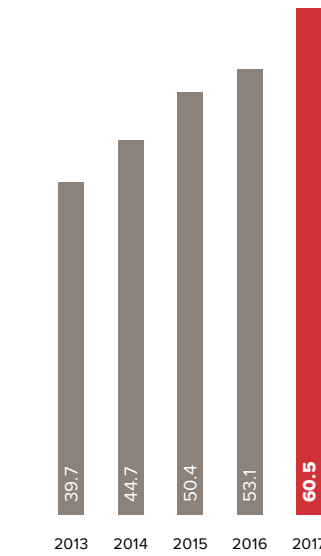
## Total Revenues

(in millions USD)



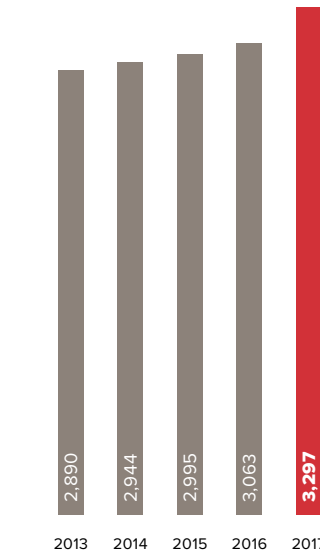
## Total Assets

(in billions USD)



## Assumed Ordinary Life Reinsurance In Force

(in billions USD)



\*The estimated impact of the Tax Cuts and Jobs Act of 2017 enacted in the U.S. on December 22, 2017 was recognized in the fourth quarter, increasing net income and total stockholders' equity by approximately \$1.0 billion, or \$15.72 per diluted share.

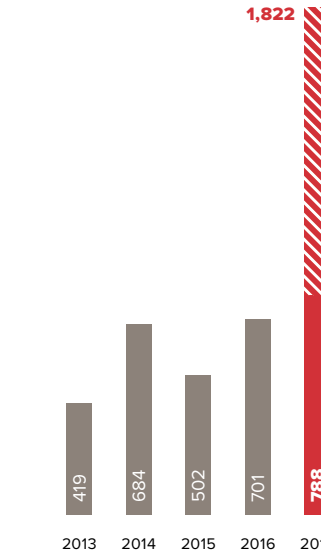
## Assumed New Business Production

(in billions USD)



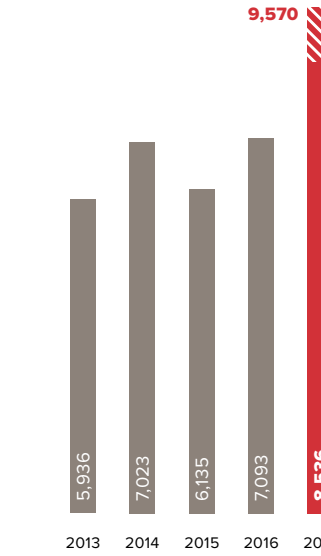
## Net Income\*

(in millions USD)



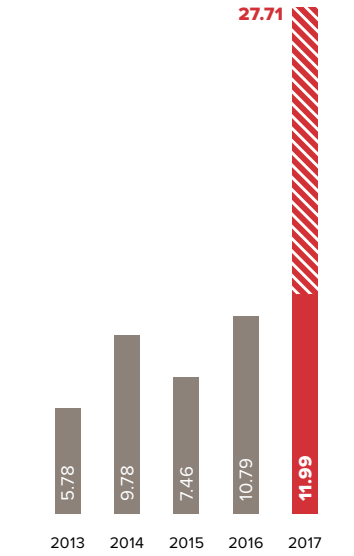
## Total Stockholders' Equity\*

(in millions USD)



## Diluted Earnings Per Share\*

(USD)



## Financial Strength Ratings

RGA Reinsurance Company, RGA's U.S.-based operating subsidiary, receives high ratings for its claims-paying ability based on the company's financial condition and earnings. Its ratings as of December 31, 2017:

**S&P Global Ratings**  
Very Strong

**AA-**

**A.M. Best Company**  
Superior

**A+**

**Moody's Investors Service**  
Good

**A1**

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.

## Industry Recognition

### #1 in Business Capability Index

In 2017, RGA was ranked #1 for the sixth consecutive year on NMG Consulting's Global All Respondent Business Capability Index (BCI), based on feedback from insurance executives in more than 50 markets.

### Life Reinsurer of the Year

RGA was recognized by *Asia Insurance Review* as "Life Reinsurer of the Year" at the 2017 Asia Insurance Industry Awards for demonstrating leadership through innovation and thought leadership, and enhancing the stability, security, and image of the industry.

### Most Innovative Reinsurer of the Year

RGA was named "Editor's Choice - Most Innovative Reinsurer of the Year" by *Life Insurance International* for developing innovations that are substantially improving the user experience, as well as increasing business efficiency and profitability.

### Top Brand

RGA was awarded grand prize in the service brand category of the 6th Korea Top Brand Awards. Sponsored by the Korea Journalists Association and the Service Marketing Society, these annual awards recognize exceptional client service and innovation. RGA was the only reinsurer to be honored.

### Outstanding Reinsurance Scheme

RGA was recognized by the Hong Kong Federation of Insurers with the Outstanding Reinsurance Scheme Award at the 2017 Hong Kong Insurance Awards for the company's commitment to clients, focus on execution, and pursuit of innovation.

## 2017 Milestones

### #246

RGA ranked #246 on the 2017 Fortune 500 list, moving up 25 positions from its 2016 rank and marking the first time the company entered the Fortune 250. The annual list, published by *Fortune* magazine, ranks U.S.-based companies by total revenue.

### 3 million

On September 28, RGA's U.S. underwriting team received its 3 millionth facultative case since the company began tracking these statistics in 1979. RGA's vast database of mortality experience and expertise in risk assessment have established the company as the market leader in facultative underwriting.

### 25 years

This year marked the 25th anniversary of RGA launching operations in Canada. Since entering the Canadian market, RGA has become a recognized leader in delivering innovative risk and capital solutions.

### \$2 billion

In 2017, RGA Asia Pacific surpassed \$2 billion in annual net premiums for the first time. Since opening offices in Hong Kong and Japan in 1995, the division has expanded to serve clients throughout the region as a leading life and health reinsurer.



## Powered by People



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

**F**rom our humble beginnings more than four decades ago, RGA has had a passion for offering clients compelling value. Our growth and success are the direct result of empowering our employees to effectively respond to market needs. The real work occurs on the ground, where talented and dedicated RGA professionals cultivate relationships and collaborate with our clients.

RGA's global strategy is driven by our teams of local experts who work closely with clients to understand their challenges and identify opportunities, develop customized solutions, and deliver results. We leverage our global platform, applying insights learned in one market to adapt solutions for clients in other markets. We also build on established skills and capacity to expand our capabilities and diversify into adjacent product lines as clients' needs dictate. Carrying out this strategy requires laser sharp execution against credible competition.

In 2017, implementation of an array of innovations – from data-driven digital solutions to market-first capital structures – combined the expertise and experience of teams throughout the RGA enterprise. With every new innovation, RGA professionals created more value for clients, and in the process, enhanced our brand and franchises across the markets in which we operate. Once again, the quality of our people and solutions was recognized by clients as verified by independent industry surveys. For the fifth consecutive year, on both a global and local office level, RGA maintained a top three market share and business capability ranking in our key markets.

It was a great year for RGA, and we expect our successful journey to continue. Ultimately, our success depends upon our clients' success. Our obsession with helping them achieve their goals drives our relentless pursuit of suitable solutions, which has proven effective year after year. Clients know that when they partner with RGA, they are joining forces with industry experts dedicated to delivering results. Examining RGA's history of sustained growth – and 2017 in particular – it is evident that we have forged a successful strategy.

### EVOLUTION OF A GLOBAL PLATFORM

#### Annual Growth in Total Revenues

**15%↑**  
(24-year CAGR, since IPO)

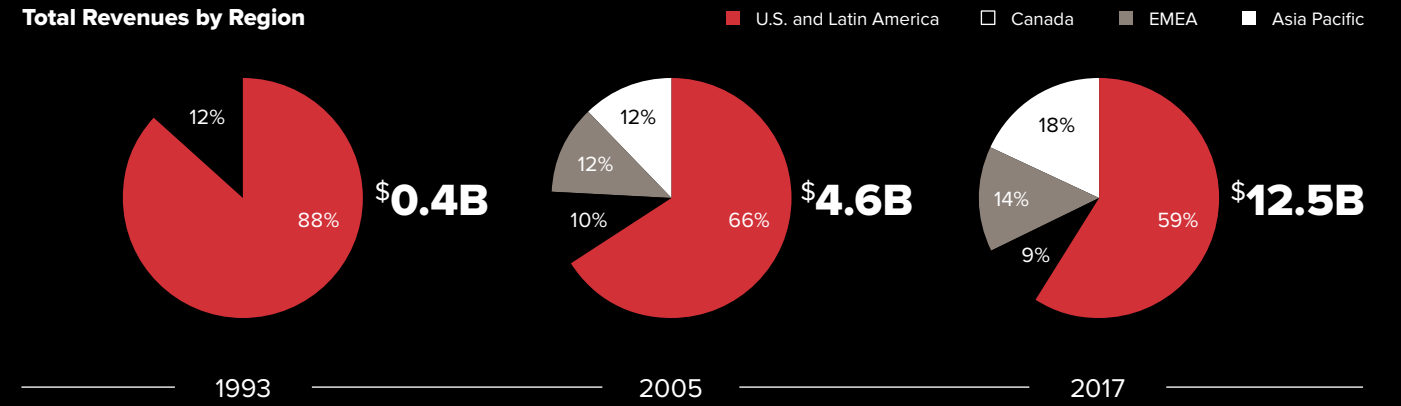
Through decades of steady global expansion, RGA has grown to become one of the leading life and health reinsurers in the world, serving customers in more than 80 countries.

#### Worldwide Operations



“Clients know that when they partner with RGA, they are joining forces with industry experts dedicated to delivering results.”

#### Total Revenues by Region



Note: Percentages exclude Corporate.

- Australia
- Barbados
- Bermuda
- Brazil
- Canada
- China
- France
- Germany
- Hong Kong
- India
- Ireland
- Italy
- Japan
- Malaysia
- Mexico
- Netherlands
- New Zealand
- Poland
- Singapore
- South Africa
- South Korea
- Spain
- Taiwan
- United Arab Emirates
- United States
- United Kingdom

# U.S. and Latin America Operations



The U.S. and Latin America segment, RGA's largest operating division, reported another solid year in 2017 with pre-tax income of \$775 million. Key business lines include individual life; group life, health, and disability; long-term care; and asset-intensive and capital-intensive reinsurance.

RGA's industry leadership in facultative underwriting reached an unprecedented milestone in 2017: The U.S. individual mortality underwriting team received its 3 millionth facultative case since RGA began tracking these statistics in 1979. For the 11th consecutive year, U.S. underwriters reviewed over 100,000 facultative case submissions, resulting in approximately \$16 billion of new life reinsurance placed.

Cross-functional teams throughout the enterprise incorporated new sources of data to fuel innovation. TransUnion TrueRisk® Life, a credit-based insurance score validated by RGA, gives insurers a powerful new piece of evidence to better assess risk, accelerate the underwriting process, and speed policy issue. Launched in late 2017, DriverRisk<sup>SM</sup> Life improves the standard process of evaluating an applicant's driving history, yielding cost savings and unique insights for insurers. RGA worked with an expanding list of partners to explore and implement additional big data solutions across the life insurance policy life cycle.

Premiums for U.S. Group Reinsurance remained relatively flat overall due to continued price pressures in the health market. Yet strong retention of existing business, particularly large in-force clients, provided stability amid general market uncertainty. RGA's expansion into new group segments in recent years gained further momentum in 2017. This diversification, coupled with the application of data analytics, enabled the launch of new life and health reinsurance initiatives and created a platform for future growth.

The division further supported insurers' risk and capital management needs through asset-intensive and capital-motivated reinsurance solutions. A range of structured transactions in the U.S. enabled clients to optimize capital efficiency and meet regulatory requirements, and provided strong contributions to RGA's financial performance. A noteworthy asset-intensive transaction executed on a client's closed block of annuity business increased RGA's invested asset base by approximately \$2.3 billion.

Amid a sustained competitive environment, RGA Latin America solidified its position in the region and its market leadership in Mexico, where RGA ranked #1 on NMG Consulting's Business Capability Index for the seventh consecutive year. Activities in Latin America focused primarily on closing the widespread insurance protection gap through close collaboration with clients, leveraging technology's role in driving change in the region, and expanding into new business segments.



## U.S. and Latin America Net Premiums

(in millions USD)



## Q&A

**Mike Emerson**  
Executive Vice President,  
Head of U.S. and Latin American Markets



### What made 2017 such a successful year for your division?

In the U.S. and Latin American markets, we renewed our focus on execution and delivery. Insurers face constant disruption in today's marketplace: new data sources, new technologies, new medical advances, and the list goes on. We provide expertise, guidance, and reliability amid the noise. Our efforts are directed at helping insurers not only adjust to change, but to derive maximum benefit from it. That requires continual innovation, expansion of our capabilities, deep subject matter expertise, and meticulous execution. Ultimately, it requires talented teams of professionals dedicated to supporting the changing needs of our clients.

### RGA received its 3 millionth facultative case in the U.S. in 2017. How do you envision the future of underwriting?

We see a convergence happening between fully underwritten traditional policies (less expensive but more time-consuming for customers) and simplified issue life insurance (more expensive but also more convenient). These two ends of the spectrum are moving toward the middle, driven by accelerated underwriting and digital distribution. New sources of underwriting evidence, such as TransUnion TrueRisk® Life, are accelerating the issuance of fully underwritten policies and can also provide more protective value to simplified issue products. Digital distribution, meanwhile, can homogenize the marketplace, allowing for targeted products and services. Consumers will be the big winners, as will insurers who adapt to meet consumer needs.

### How is RGA working to move the industry forward?

It starts with education. Take fraud prevention, a growing area of concern for insurers and a prime illustration of RGA's thought leadership. RGA conducted surveys, published white papers, and shared strategies addressing this important topic throughout 2017. Our fifth annual Fraud Conference, the premier cross-discipline fraud event for the insurance industry, drew record attendance. We also hosted the RGA Innovation Series at the Society of Actuaries Annual Meeting, educated young underwriters through RGA University, and launched the Life of a Cession Client Forum focused on accurate data management. And RGA leaders continue to serve on industry committees, boards, and associations. In short, we believe in the noble purpose of insurance, and are committed to assuring its long-term significance.

## HIGHLIGHTS

\$ **1.6T**

U.S. and Latin America Operations ended 2017 with \$1.6 trillion of life reinsurance in force.

\$ **7.3B**

Total revenues increased 7% over 2016 to exceed \$7 billion for the first time.

# **1**

In 2017, RGA was ranked #1 by ceding companies on NMG Consulting's All Respondent Business Capability Index in both the U.S. and Mexico.

Opposite page from left, from U.S. Mortality Markets: **Kim Lancaster**, Vice President, Underwriting Operations; **Lisa Waggoner**, Vice President, Facultative Exclusive Underwriting.



# Canada Operations



In 2017, RGA Life Reinsurance Company of Canada (RGA Canada) marked its 25th year in operation and proudly celebrated this significant milestone with both clients and associates. Partnering with clients to develop successful long-term risk and capital management solutions, the division maintained strong momentum across all business lines, writing the largest share of individual life recurring new business for the 11th consecutive year. RGA Canada also provided leading creditor, group life and health, individual health, living benefits, and longevity reinsurance services.

Amid an increasingly competitive marketplace, net premiums remained stable in 2017 at \$940 million, representing 10% of RGA net premiums globally. RGA reinsured 27% of all new life insurance in Canada for a volume of \$36 billion in assumed new business. The individual life underwriting team reached a new milestone, reviewing its 700,000th facultative case since the opening of RGA Canada in 1992.

Diversification into complementary product lines continued to generate growth, with reinsurance offerings outside of individual life making up 30% of total premiums. The living benefits sphere in particular proved to be fertile ground for product development opportunities. RGA Canada launched an innovative critical illness product in 2017 targeting high severity impairments as an alternative to the prevailing generalized approach, producing very positive early results.

Across all lines, RGA worked with clients to address market challenges and seize emerging opportunities. With the passage of genetic testing and privacy legislation in Canada in 2017, teams proactively engaged with insurers to discuss implications and provide guidance. RGA continued to leverage new technologies and new sources of data to assist clients in developing innovations in design,

distribution, and underwriting that simplify the customer journey.

Canada's Life Insurance Capital Adequacy Test (LICAT) guidelines, which redefine capital requirements for insurance and reinsurance companies, went into effect on January 1, 2018. Throughout 2017, RGA's financial solutions experts leveraged the company's global experience in regulatory compliance to help clients develop LICAT-compliant reinsurance structures that optimize long-term capital efficiency.

RGA Canada continued its ongoing support for the Canadian insurance industry in 2017. RGA events included the annual Actuarial, Claims, and Underwriting Seminar; Canadian Longevity Seminar; and Group Underwriting Forum. Knowledge-sharing efforts extended to research studies, benchmarking surveys, and thought leadership articles. Through their leadership positions among industry organizations, RGA professionals advanced the collaborative dialogue shaping the future of insurance.



## Canada Operations Net Premiums

(in millions USD)



## Q&A

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



### What is RGA's strategy for continued growth in Canada?

Our approach in Canada mirrors RGA's global enterprise strategy as we work to deepen, broaden, and sharpen our capabilities. For instance, to deepen relationships with clients, we are working proactively to study the market and communicate with clients to anticipate their needs even before issuance of a formal request for proposal. We are broadening our portfolio of product offerings, particularly in the living benefits space, to meet evolving market demand. We continue to leverage innovation and operational efficiency to elevate our level of service and optimize client outcomes.

### What distinguishes RGA Canada as a reinsurer of choice?

RGA celebrated 25 years in Canada in 2017. We have written more individual life business than any other company in the past decade and have been consistently ranked #1 by insurers in business capability over the same period. We measure our success through our clients' success and work alongside them in pursuit of common goals. We are partnering to meet changing consumer needs by accelerating the insurance process. As capital and regulatory requirements evolve, we are adapting the use of reinsurance to develop customized solutions for each client. This client-centric philosophy is fundamental to the way we do business.

### How can insurers stay ahead in today's dynamic marketplace?

We live in an economy driven by innovation and technology. The insurance industry must adapt and evolve to keep pace and meet the changing demands of consumers. Our old barriers are obsolete, creating new opportunities. Innovation units – like RGAX – are changing how we develop our businesses. At RGA we are forming new relationships with companies as we create mutually beneficial alliances, with the ultimate intention of bringing new solutions to our insurance clients to help them respond to the dynamic and increasingly digital environment. The nature and style of insurance must inevitably adjust, along with the definition and metrics of success. Winners will be those who not only adapt to this change but help accelerate its arrival. RGA is ready to lead the way.

## HIGHLIGHTS

\$ **394B**

Canada Operations ended 2017 with \$394 billion of life reinsurance in force.

\$ **1.2B**

Total revenues in Canada reached \$1.2 billion in 2017.

# **1**

For the ninth consecutive survey, RGA Canada was ranked #1 in the All Respondent Business Capability Index in NMG Consulting's 2017 Life & Health Reinsurance study of Canadian ceding companies.

Opposite page from left, from RGA Canada: **Jean-Pierre Cormier**, Vice President, Product Development and Pricing; **Martyn Gilling**, Vice President, Business Development; **James Ciamarro**, Vice President, Longevity.

# Asia Pacific Operations



Asia Pacific operations support clients throughout the region from RGA offices in Australia, China, Hong Kong, India, Japan, Malaysia, New Zealand, Singapore, South Korea, and Taiwan. Principal reinsurance products include individual and group life, living benefits, Retakaful, superannuation, annuity, and financial solutions. In 2017, RGA was named “Life Reinsurer of the Year” at the Asia Insurance Industry Awards.

Asia Pacific operations enjoyed a landmark year in 2017, surpassing \$2 billion in net premiums for the first time, representing an increase of 22% over 2016. Growth was primarily organic, driven by new product development in response to aging populations and changing consumer demands.

Innovations in critical illness (CI) and impaired lives coverage remained a hallmark of RGA throughout Asia. In Singapore, RGA helped a key client introduce market-first CI coverage for diabetics. A comprehensive protection plan for impaired lives (diabetes, high cholesterol, high blood pressure) in Hong Kong incorporated a wellness program into medical, CI, and life coverage. In India, RGA developed new CI offerings while also introducing the first product to cover dengue fever, malaria, and chikungunya.

Innovation extended to all markets, across product lines, and along every step of the insurance value chain – often accelerated by cross-market collaboration. Wellness projects gained momentum as RGA developed first-in-market programs in Taiwan and supported additional wellness solutions throughout the region. “Claims as a Business” initiatives leveraged claims data to explore high-return cross-sell and upsell opportunities in a growing number of markets. Other noteworthy advances included a health management program for seniors in Korea and innovative level premium reinsurance structures in Hong Kong.

Once again, RGA combined established underwriting expertise, modern technologies, and new sources of data to accelerate the customer journey. In Japan, where RGA reviewed a record 85,008 cases facultatively in 2017 (not including e-underwriting cases or RGA’s Advantage Program), digitization of health checks provided a new opportunity to speed the underwriting process and facilitate preferred pricing. RGA Korea remained a preferred partner for simplified issue (SI) products, reinsuring a leading share of the market’s SI business.

In Australia, continued strengthening of RGA’s portfolio of business generated improved results amid challenging market conditions. RGA Australia remains focused on long-term growth, building on a strong position in the group reinsurance market while exploring innovation opportunities in data analytics and digital solutions. As ownership of local insurance operations shifts to global insurers and a more sustainable market takes shape, RGA is well-positioned to meet emerging client needs.



## Asia Pacific Operations Net Premiums

(in millions USD)



## Q&A

**Tony Cheng**  
Executive Vice President,  
Head of Asia



### Why was 2017 such a successful year for RGA Asia Pacific?

We succeeded in 2017 the same way we have succeeded for more than two decades: relentless client focus. When you see the market from the client’s perspective and approach your work with a true partnership mindset, it drives you to innovate constantly and seek new ways to meet market needs. This leads to novel product development and expansion into related product lines. In 2017, we combined our vast mortality and morbidity experience with new sources of information to generate data-driven solutions. We developed holistic products requiring RGA’s cross-functional expertise as well as partnerships with third-party service providers. Overall, we strengthened clients’ capacity and amplified their capabilities to meet changing consumer demand.

### How do RGA Asia Pacific teams collaborate across business lines?

Collaboration across markets and business lines is fundamental to RGA’s operational philosophy – in Asia Pacific and around the globe. As we pursue emerging opportunities, this collaboration becomes even more vital to success. In 2017, one of our biggest transactions in Asia grew out of a yearly renewable term product we launched a few years ago. As that product generated more income for our client, it also created significant capital challenges. RGA’s traditional reinsurance experts worked with our Global Financial Solutions team to develop an innovative reinsurance structure to meet the client’s needs. It is a great example of the unique capabilities that distinguish RGA.

### What is your vision for RGA’s future role within the Asian insurance industry?

I have always envisioned RGA as the recognized intellectual center of the life and health industry in Asia – insurers’ go-to resource for next-generation solutions. Consistent successes in product development, underwriting innovation, and data analytics indicate we are well on our way. As we bring RGA’s global experience and expertise in financial solutions to bear in Asian markets, our value to clients only increases. I see RGA as a catalyst in bringing about structural and regulatory change in the region that will benefit insurers and consumers alike. Our approach is already producing remarkable results, and we are ideally positioned to build on this momentum in the years to come.

Opposite page from left, from RGA India: **Vinayak Pai**, Director, Business Development; **Deepak Panchal**, Chief Manager, Claims; **Sakthikumar Jagannathan**, Associate Director, Valuation and Re-Admin.

## HIGHLIGHTS

\$ **552B**

Asia Pacific Operations ended 2017 with \$552 billion of life reinsurance in force.

\$ **2.3B**

Total net revenues surpassed \$2 billion for the first time, representing a 25% increase over 2016.

# **1**

In 2017, RGA ranked #1 on NMG Consulting’s All Respondent Business Capability Index in the Asia region in aggregate for the sixth consecutive year, and in the Hong Kong, Japan, Malaysia, Philippines, Singapore, South Korea, Taiwan, and Thailand markets.



# EMEA Operations



The Europe, Middle East, and Africa (EMEA) segment operates from RGA offices in France, Germany, Ireland, Italy, the Netherlands, Poland, South Africa, Spain, the United Arab Emirates, and the United Kingdom. Primary services include individual and group life reinsurance, credit life and living benefits products, longevity reinsurance, and capital solutions.

In 2017, the division reported a 7% increase in assumed new business over the previous year, reflecting solid momentum across all lines. Pre-tax income of \$194 million, a 15% increase over 2016, benefitted from strong earnings by traditional reinsurance throughout EMEA and transactional business in the U.K.

Continental Europe's traditional business maintained its steady growth trajectory, highlighted by a strong year for Italy's credit life mortgage business. In the U.K., RGA solidified its market leadership position, once again reinsuring approximately half of all new retail mortality business.

Local teams in multiple European markets pursued future growth opportunities through technology-driven innovation, including an electronic health records tool in the U.K, a predictive modeling initiative in Spain, and a digitally underwritten long-term disability product in Germany.

In the Middle East, a strategic focus on specific markets, client segments, and products – credit life in Saudi Arabia, long-term individual life in Egypt, and individual life and health in the United Arab Emirates (UAE) – generated very positive results. RGA enjoyed a high-growth year in the region, with premiums increasing 52% over 2016.

RGA South Africa produced a strong 2017 as well, with revenue growth in local currency of 14% over 2016. For the eighth consecutive year,

ceding companies in South Africa ranked RGA #1 on NMG Consulting's Business Capability Index.

RGA's Global Financial Solutions (GFS) teams in Continental Europe worked closely with clients in overcoming regulatory hurdles and remained selective in pursuing transactions in line with RGA's disciplined risk profile. As Solvency II continues to settle into the market, deep market knowledge and execution expertise position RGA to capitalize on future opportunities.

In the U.K., the GFS team developed innovative approaches to deliver cost-effective solutions for clients within an increasingly competitive market environment. A novel flow structure, for example, allowed clients to transact with RGA on pre-established terms for smaller pieces of longevity business. The team also executed of a number of larger longevity and asset-intensive transactions, producing a solid year in line with expectations.

## EMEA Operations Net Premiums

(in millions USD)



## Q&A

**Olav Cuiper**  
Executive Vice President,  
Head of EMEA



### To what do you attribute the strong growth for RGA Middle East in 2017?

Our Middle East operations have grown steadily since opening in 2011; however, 2017 was phenomenal. In a market flooded with top-line opportunities, RGA remained focused on adding value for our clients and driving bottom-line growth. As in all of EMEA, our key differentiators in the Middle East include having a strong local presence, a trusted brand, and experienced associates with deep knowledge of the local markets. Focusing on certain opportunities in specific markets and partnering with larger clients – as well as governmental and financial entities – has proven very successful. As a result, we are optimistic about continued growth in the region in the years ahead.

### How is RGA pursuing innovation in EMEA?

The term "innovation" too often sounds like "something extra" to insurers. But really it is their future business, which simply must adapt to compete. RGA is working with clients and partners to build on existing successes, explore new possibilities, and bring novel solutions to market. In 2017, for example, we hosted Technovate labs in Italy and Portugal to showcase promising insurtech startups. Meanwhile in Germany, we partnered with such a startup, Getsurance, to launch a digital long-term disability product featuring fully digital algorithmic underwriting and a robo-advisor to manage the customer journey. Our strategy: lead the inevitable evolution of the industry.

### How is RGA positioning itself for growth in the region?

In 2017, we optimized our leadership team in EMEA to advance positive change among the evolving business environments in our key markets. The goal is to enhance RGA's trademark ability to work closely with clients locally while leveraging our extensive regional and global resources and expertise. RGA has grown to become an established leader throughout EMEA for risk and capital solutions. We are native players, we are innovators, and we are here to stay. In fact, RGA celebrated our 10-year anniversaries in Italy and France in 2017. In the decades ahead, we will build on our strong foundation and seize new opportunities as markets evolve and new client needs arise.

## HIGHLIGHTS

\$ **739B**

EMEA Operations ended 2017 with \$739 billion of life reinsurance in force.

\$ **1.7B**

Total revenues increased 9% over 2016 to reach \$1.7 billion.

# **1**

RGA was ranked #1 on NMG Consulting's 2017 All Respondent BCI for the EMEA region in aggregate for the fifth consecutive year, and in the Central and Eastern Europe, Germany, Middle East, and South Africa markets.

Opposite page from left, from RGA Middle East: **Ashraf Al Azzouni**, Managing Director; **Karunanidhi Muthuswamy**, Chief Actuary; **Amr Affi**, Director, Business Development.

## Risk Solutions

As a leading life and health reinsurer, RGA partners with insurers around the world to more effectively and profitably manage risk. In 2017, RGA applied global resources and local market knowledge to develop customized individual and group life, health, and living benefits reinsurance solutions.

From left: **Lydia Lee**, Executive Director, Claims, RGA Hong Kong and High Net Worth; **Tina Paap**, Vice President, Claims, RGA Asia Pacific; **Eriko Kaneko**, Associate Director, Head of Claims, RGA Japan.



## Mortality Business Builds on Strength

Ending 2017 with \$3.3 trillion of life reinsurance in force, RGA reaffirmed its position as an industry leader in mortality risk, the company's primary business line. A comprehensive portfolio of mortality products included term life, whole life, universal life, joint and last survivor life, corporate-owned and bank-owned life, and underwritten annuities, among many other offerings.

Unmatched underwriting capabilities again provided a competitive advantage for RGA. Underwriting teams reviewed a company record 673,850 facultative cases worldwide in 2017, combining a vast mortality database with industry-leading expertise in risk assessment. To meet consumer demand for a more convenient insurance experience, RGA applied new sources of data to help clients accelerate the underwriting process and provide a more streamlined customer journey.

AURA® (Automated Underwriting and Risk Analysis®), RGA's proprietary SaaS (Software as a Service) based e-underwriting platform, positioned clients to evolve with the industry, delivering a robust rules engine and predictive elements for additional insights. Innovations powered by AURA in 2017 included an electronic health records program in the U.K., a risk scoring model using claims data to help detect fraud in India, and several client-led initiatives using AURA as the supporting technology.

## Emerging Data, Accelerated Solutions

**Dianne Schuetz**  
Vice President, Business Initiatives,  
U.S. Markets



Insurers continue to take steps toward more-efficient processes, lower costs, and a streamlined consumer experience. The boundaries of these incremental innovations are expanding as the use of big data grows and we harness its power to improve risk insights.

Over the past decade, RGA has pioneered a series of breakthroughs in applying emerging data resources – from prescription histories through motor vehicle records and beyond. This now includes establishing the connection between certain credit attributes and mortality.

TrueRisk® Life, TransUnion's credit-based insurance score validated by RGA, is propelling insurers' innovation initiatives forward. This predictive tool complements medical sources of data by reflecting the behavioral side of risk, thus enabling more-accurate risk assessment and accelerating the underwriting process.

Over the past year, insurers have rapidly adopted TrueRisk® Life to help achieve consumer-, process-, and mortality-related goals. RGA has leveraged the expertise of multidisciplinary team members to facilitate the implementation of this transparent and easy-to-use tool for a number of uses, such as improving insights and launching acceleration programs. We anticipate broadened use of TrueRisk® Life in the years ahead as our clients further realize the benefits it offers across the policy lifecycle.

Moving forward, RGA will continue to choose wisely as new sources and new uses of data are discovered to ensure that we are meeting demand for change while preserving the accuracy of risk assessment. The combination of a thoughtful approach guided by industry experts and best-practice adherence will ensure long-lasting success that ultimately enhances and transforms both insurer outcomes and the consumer experience.

From left, from U.S. Mortality Markets: **Tricia Peters**, Vice President and Managing Actuary; **Minyu Cao**, Associate Actuary; **Taylor Pickett**, Associate Actuary.



ASAP (Automatic Selection and Assessment Program – also powered by AURA), which delivers instant decisions online for impaired risks, completed a decision criteria enhancement in 2017, offering an option for preferred class on 10 key impairments – from elevated triglycerides to avocations such as SCUBA diving. FAC Console® (Facultative Application Console®) again enabled insurers to submit facultative applications to multiple reinsurers simultaneously, while SUP (Strategic Underwriting Program) supplemented clients' underwriting staff as needed, reviewing 14,844 cases in the U.S. on the year.

## Group Reinsurance Expands Platform for Growth

RGA's group reinsurance lines support insurers with workplace and other group products, including life, disability, medical, accident, critical illness, and catastrophe coverage. RGA built on its proven capabilities in the group space in 2017 by delivering client solutions in product development, underwriting support, and value-added services.

In the U.S., ongoing price pressures in the medical market resulted in flat premiums overall compared to 2016, but excellent retention of existing clients provided a strong foundation for future growth. RGA launched Managed Care Stop Loss TurnKey Solutions, a strategic initiative designed to support clients and expand RGA's



## Engaging Today's Insurance Customer



**Jaqui Wassenaar**  
Chief Marketing Officer,  
RGA Japan

Consumer engagement is no longer a nice-to-have for insurers; it is a necessity. In 2017, RGA worked with clients around the world in improving their level of engagement through a variety of proven strategies:

### Products that reward customers for achieving goals.

Monetary incentives may attract new customers, but long-term engagement requires a more holistic approach. RGA is developing products to help clients become a bigger part of their customers' lives, including impaired lives coverage that rewards policyholders for health improvements.

**Leveraging existing data.** Life insurers can use data they already collect to engage policyholders and capitalize on upsell and cross-sell opportunities – delivering the right product to the right customer at the right time. RGA's "Claims as a Business" initiative leverages hospital claims data to produce upsell rates many times that of the industry average.

**A uniquely personal life insurance journey.** This requires targeting policyholders with the most appropriate product through the most effective channels. RGAX, the innovation arm of RGA, is partnering to create platforms that provide mobile users with start-to-finish processes to dramatically improve sales conversions.

**Building on the basics.** Ultimately, successful engagement is about making the customer happy. It starts with getting the basics right by making underwriting and claims processes as simple, seamless, and positive as possible. At RGA Japan, we are working to speed up the underwriting process by digitizing annual health checks and applying machine learning to replicate human underwriting decisions.

The era of consumer engagement in insurance has arrived, and with it the opportunity to improve outcomes for consumers and insurers alike.

From left, from RGA Japan: **Haruhisa Takahashi**, Executive Director, Head of Blue Sky; **Kensuke Itakura**, Senior Manager, Pricing; **Shin Yagisawa**, Executive Director, Business Development; **Yoko Yamada**, Senior Manager, Underwriting; **Takeru Fujisaki**, Associate Director, Business Development.



*Continued from page 21*

footprint in the U.S. health reinsurance market as a complement to existing excess medical and quota share business. Employer stop loss clients benefitted from an enhanced data analytics suite of reports as well as insights shared at RGA's third annual Stop Loss Symposium. The group team also laid the groundwork for bringing TransUnion TrueRisk® Life, already an established risk-assessment tool in the U.S. individual life market, to group clients.

RGA's ROSE® Consulting Group, a nurse-led medical risk consulting program, saved U.S. health insurers more than \$13 million in 2017 – or 12% of their reinsurance premium. The program's broad range of publications, events, webinars, and tools to meet urgent client needs included the ROSE Opioid Use Disorder Case Management Guide, an updated high-cost drug management tool, and the 33rd Annual ROSE Conference aimed at improving healthcare outcomes and managing medical and disability claims.

RGA worked with clients worldwide to expand group reinsurance support within targeted markets, focusing primarily on worksite/voluntary solutions. To fill market gaps amid changing demographics and shifting consumer demand, group reinsurance experts applied emerging technologies, data analytics, and RGA's extensive global resources. France joined the growing list of RGA offices to have implemented Raptor, an automated group business administration platform designed to leverage experience, expertise, and consistent risk management across business units and geographies. Globally, RGA provided insights to help advance the industry through a growing number of events, publications, and market benchmarking surveys.



From left, from U.S. Group Reinsurance: **James Rathburn**, Senior Vice President, Life, Accident, and Disability; **Michelle Fallahi**, Senior Vice President, Healthcare Excess; **Dean Abbott**, Senior Vice President, Head of U.S. Group Reinsurance; **Jeff Birkholz**, Senior Vice President, Operations.

## Innovating at the Speed of Science



**Dave Rengachary, M.D.**  
Senior Vice President, Chief Medical  
Director, U.S. Mortality Markets

The Longer Life Foundation\*, a not-for-profit research partnership between RGA and the Washington University School of Medicine, funded a recent study on early-adulthood predictors of mortality and morbidity. The essential findings: Simple physiological measurements (blood pressure, blood glucose, weight, BMI) have broader lifespan-predictive value for adults of all ages than previously indicated, and incorporating information from multiple time points can further increase that predictive capacity.

Why is this significant? It speaks to our rapidly evolving understanding of human health, the way diseases behave over time, and the opportunities this presents for life and health insurers.

Consider this: The American Heart Association and American College of Cardiology published new guidelines in 2017 that lower the definition of high blood pressure to allow for earlier intervention. Coupled with the dawn of wearable health trackers, electronic health records, and other technologies, we can expect people to be much more aware of their blood pressure in the future. What effect will this awareness, fueled by consistent measurement over time, have on morbidity and mortality outcomes?

Questions like this are moving the industry away from life insurance with a single purpose; insurers are realizing the need to engage customers at a deeper, health-management level. Among other innovations, a new generation of products is emerging, offering policies at improved rates for people who achieve desired health states – a win for both insurers and policyholders.

RGA is leveraging its vast experience database, expertise in risk management, and knowledge of medical advances to help clients navigate this changing landscape. As medical science and medical technology race ahead, we are dedicated to helping the insurance industry keep pace.

*\*In 2018, the Longer Life Foundation celebrates 20 years of supporting innovative research by scientists, academicians, medical doctors, and public health experts to make discoveries that will enhance longevity and promote healthier lives. Learn more at [longerlife.org](http://longerlife.org).*



From left: **Nic Lempriere-Hogg**, Senior Vice President, Global Underwriting Solutions; **Peter Barrett**, Senior Vice President, Head of Global Underwriting, Claims and Medical Support Team.

## Global Health Team Gains Momentum

The Global Health team strengthened its support for health insurers worldwide in 2017 as part of RGA's strategic initiative to advance health capabilities and capacity in select markets. Aging populations, increasing rates of chronic illnesses, and changing national healthcare policies further disrupted an already dynamic industry landscape. Digitalization – electronic health records, wearable monitors, remote treatment – continued to move health carriers from simply mitigating risk to partnering with customers in maintaining good health. To help clients optimize these market drivers, RGA invested in improved capabilities and technologies, including an enhanced data analytics function.

RGA expanded further in the Southeast Asia health market in 2017, installing additional specialist personnel, infrastructure, and resources to develop market-specific solutions for more accessible and affordable care. In Italy, a cancer reimbursement product – adapted from a similar product RGA successfully launched in Hong Kong – filled a lingering coverage gap within Italy's universal health care system. In the Middle East, Latin America, and China, RGA continued to increase market share through local expertise and client-focused support. Global Health professionals worldwide collaborated across functions and markets to both support traditional health products and spur innovation.

U.S. individual health (long-term care) remained a significant business line for RGA and maintained a disciplined approach amid ongoing uncertainty. The team worked closely with clients to help them navigate a difficult market environment and meet the needs of aging consumers. Initiatives launched in 2017 sought to innovate long-term care product development and potentially expand into complementary product lines. ■

From left, from U.S. Mortality Markets: **Valerie Kaufman**, M.D., Vice President and Medical Director; **Lisa Duckett**, M.D., Vice President and Medical Director; **Dave Rengachary**, M.D., Senior Vice President, Chief Medical Director; **Elyssa Del Valle**, M.D., Vice President and Medical Director.



## Capital Solutions

RGA built on its industry leadership in the use of reinsurance as a financial management tool in 2017. Amid increased regulatory and economic pressures, capital solutions experts partnered with clients to execute structured transactions, improve capital efficiency, and increase profitability.

From left, from Global Financial Solutions, EMEA: **André de Vries**, Vice President, Business Development; **Paul Sauvé**, Senior Vice President; **Rolf Lukas**, Director, Structuring.



## Client Focus Drives GFS Business

RGA's Global Financial Solutions (GFS) team combines local market knowledge and expertise with global experience and resources to help clients de-risk portfolios, optimize capital, and strengthen their businesses. An unrelenting focus on delivering long-term value to clients fuels innovation across all product lines, including capital-motivated, asset-intensive, and longevity reinsurance solutions. GFS enjoyed an outstanding year in 2017, generating pre-tax income of \$555 million, a 28% increase over 2016.

In the U.S., a proactive approach of identifying client needs, educating them on possibilities, and being the first to propose solutions resulted in another market-leading year. GFS generated a wide range of new business and added several new clients, including insurers executing their first financial reinsurance transaction. To complete an innovative asset-intensive transaction with a U.S. subsidiary of a large multinational client, GFS collaborated with RGA Investments in structuring the deal, which increased RGA's invested asset base by approximately \$2.3 billion. RGA also explored future opportunities in

## Innovation by Design

**Hamish Galloway**  
Senior Vice President,  
Global Financial Solutions, U.K.



At RGA, innovation in capital management does not happen by accident. Experienced teams of experts listen closely to clients, identify opportunities and risks within those clients' markets, and structure transactions tailored to achieve their specific goals. This client-centric approach has enabled RGA to pioneer many market-first innovations around the world.

An asset-intensive transaction in 2017 covering deferred lives in the U.K. provides a prime example. "Deferred lives" refers to younger-age annuitants who have not yet started receiving payments from their policies. Under Solvency II, such blocks of business carry heavy capital charges, so the demand for solutions to free up these liabilities is clear.

RGA identified the need and began to work closely with one of our client partners on a solution. This required overcoming several challenges:

- All previous RGA deals in this space are heavily weighted to annuities already in payment, so covering a block that was largely deferred was new to us – and, in the desired structure, to the market at large.
- Deferred insurance annuities bring additional behavioral risk: who decides to annuitize, for what proportion of their benefits and when, what proportion of benefits is taken as a lump sum, and other considerations.
- No means exist to track actual deferred lives that do not take at least part of their benefits as a series of scheduled payments.

Undeterred, we devised a novel structural mechanism to address the behavioral risk that both met client requirements and maintained our risk profile, incorporating the younger-aged deferred block into our existing portfolio of older lives.

RGA's innovative design broke new ground, meeting the needs of our client and potentially paving the way for future deferred lives transactions – in the U.K., Continental Europe, and around the world.

the emerging U.S. pension risk transfer market, where longevity and asset-intensive expertise position RGA as a potential solutions provider of choice.

In Canada, reinsurance support for longevity products offered to pension plans and individual annuitants remained the primary focus. With the implementation of Canada's Life Insurance Capital Adequacy Test (LICAT) guidelines, GFS is leveraging global experience in regulatory compliance and working in collaboration with the RGA Canada team of experts to identify LICAT-compliant strategies that optimize clients' capital efficiency.

A disciplined and selective approach defined the year for GFS in Continental Europe. As Solvency II further settled into the market and many insurers sought to complete transactions strictly for regulatory

*Continued on page 26*

From left, from Global Financial Solutions: **Hamish Galloway**, Senior Vice President, U.K.; **Laura Hardy**, Business Development Director, U.K.; **David Lipovics**, Business Development Actuary, U.K.; **Cormac Galvin**, Senior Vice President, Business Development, U.K. and Ireland; **Martin Ashmore**, Vice President, Product Development, Europe.





## A Long-Term Capital Solution



**Andrew Edwardson**  
Managing Director,  
RGA Capital Partners

Throughout RGA's decades-long expansion into new markets and new business lines, our fundamental approach has remained unchanged: identify client needs and develop novel solutions to meet them. In 2017, this approach led to the formation of RGA Capital Partners and the subsequent creation of Langhorne Re.

Officially announced in January 2018, RGA has partnered with RenaissanceRe to launch Langhorne Re, a global reinsurer targeting large in-force life and annuity blocks. Langhorne was designed to complement RGA's existing client solutions. It is focused on larger asset-intensive and longevity transactions than RGA has chosen to pursue in the past. The need for such a vehicle is clear: Insurers seeking to free up capital from large blocks of business face very limited options. Langhorne Re directly addresses widespread market demand with a solution uniquely tailored to life insurers.

The long-term nature of Langhorne Re's capital is particularly advantageous. Since life insurance liabilities are also long-term, both ceding companies and regulators look more favorably on corresponding capital. The vehicle launched with \$780 million of long-term capital commitments from RGA and RenaissanceRe and other third-party pension fund and life insurance company commitments, and can raise additional capital if required.

RenaissanceRe's experience in structuring similar vehicles in the property and casualty (P&C) space complements RGA's expertise in life reinsurance. Through Langhorne Re, RGA has greatly expanded our risk-taking capacity and ability to provide competitive and flexible solutions to our clients.

As interest rates begin to rise worldwide, insurers' desire to free up capital from large blocks of business will only increase. Langhorne Re is ideally positioned to capitalize on this global market trend.



*Continued from page 25*

capital, RGA pursued opportunities providing the greatest long-term value from a reinsurance perspective. Following years of market-first innovations in longevity, lapse risk, and other capital-motivated structures, RGA is well-positioned to combine expertise with discipline in achieving lasting results for clients in Europe.

The U.K. team produced another strong year, solidifying RGA's position as a market leader for innovative capital solutions. Significant contributions from larger transactions included an asset and longevity risk transfer that resulted in RGA reinsuring over \$1 billion in individual annuities. For smaller pieces of longevity business, an innovative small-schemes flow structure enabled clients to partner with RGA on pre-established terms, greatly enhancing transactional efficiency.



From left, from Global Financial Solutions: **Keith Politte**, Vice President, Business Development, North America; **Wenan Fei**, Vice President and Actuary; **Xueli Zhang**, Vice President and Actuary; **Ryan Stevens**, Vice President, Structuring and Product Specialist.

In Asia, GFS significantly advanced its key strategic initiative to grow asset-intensive business in the region, highlighted by the completion of a multi-currency transaction with a large multinational. RGA's long-standing relationship with the client enabled a collaborative solution to free up capital and improve returns. As the potential for capital-motivated and asset-intensive reinsurance in Asia becomes clearer, RGA is capitalizing on emerging opportunities and investing in future growth.

Part of GFS operations, RGA's dedicated stable value team continued to provide wrap coverage to 401(k) and other defined benefit plans, enabling plan participants to preserve principal while achieving a steady return on investment. Since entering the stable

From left, from RGA Capital Partners: **Michelle Ma**, Vice President, Operations; **Scott Nicholas**, Director, Strategic Delivery; **Paul van Neerven**, Vice President and Actuary; **Andrew Edwardson**, Managing Director.

## RGA Investments: Sound Strategy Produces Results



**Timothy Matson**  
Executive Vice President  
and Chief Investment Officer

"Low interest rate headwinds" was again a common phrase in 2017. Interest rates increased following the U.S. presidential election and it was thought that consistently strong employment and GDP growth, coupled with hikes in the federal funds rate, would propel rates higher. However, benign inflation growth and ongoing central bank buying of securities left rates largely unchanged for the year. Compounding the challenge for RGA Investments was additional tightening of credit spreads over the risk-free rate, making it more difficult to generate income from the investment portfolio.

Despite these challenges, RGA Investments was able to meet income targets as it reaped the benefits of earlier investments in private asset classes such as real estate joint ventures and private equity funds. Our investment capabilities continued to develop in 2017 as we added direct corporate and commercial mortgage lending denominated in pound sterling to support our business activity in the U.K.

While we are eager to add new asset classes to reach our income targets, Investments maintains a close watch on the credit quality and risk aspects of our portfolios. Our credit analysts review major asset sectors and follow individual corporate issuers to identify credit trends and relative value. Similarly, our commercial real estate group focuses on the ability of existing and new mortgage borrowers to perform throughout the business cycle. The investment risk team assesses our credit exposure and regularly analyzes trends in our overall risk profile.

Significant enhancement of our investment operations and IT platform was achieved in 2017. Our multi-year infrastructure project implemented two new systems: one to improve our use and monitoring of derivatives and one that helps with management and performance measurement of alternative assets. Both systems are complemented by the completion of an expanded investment data warehouse. These platform enhancements increase RGA Investments' capacity to support a growing and evolving business.



value business in 2012, RGA has selectively increased the program size and broadened the scope of the type of defined benefit plans covered. As of December 31, 2017, the notional amount of the company's stable value wrap portfolio reached \$10.1 billion, a 14% increase over the previous year.

## RGA Optimizes Strategic Growth Opportunities

RGA's work in acquisitions is a natural extension of the company's traditional reinsurance businesses, leveraging expertise in analytics and modeling, knowledge of underlying risks, and long-term partnerships to provide strategic divestiture solutions. RGA professionals support clients with customized approaches for reallocating capital and assumed risk from in-force business and seek strategic partnerships to capitalize on emerging opportunities.

In 2017, exploring potential acquisitions and new ventures represented an important component of the company's disciplined growth and diversification strategy. Most significant was the creation of RGA Capital Partners and subsequent launch of Langhorne Re, a global reinsurer targeting large in-force life and annuity blocks (see sidebar on page 26). Setting up the new company, established through a partnership between RGA and RenaissanceRe, required RGA experts to help guide the process and coordinate collaboration among professionals throughout both organizations.

As the RGA enterprise has grown larger, as well as more varied and complex, in-force optimization has become vital to ongoing success. In 2017, the in-force team focused on portfolio management and consistency of analytics company-wide in order to boost risk-adjusted performance, maximize scale, and improve capital efficiency. ■



**Rene Cotting**, Senior Vice President, Product Development, Global Financial Solutions.

From left, from Investments: **Daniel Wieman**, Vice President, Real Estate Credit Risk Management; **Amy Gibson**, Vice President, Credit and Trading; **Gang Ma**, Vice President, Risk Management and Quantitative Analysis.



## Future Solutions

Innovation at RGA, a foundational differentiator for the company, remained a strategic priority in 2017. Alongside and in combination with innovations in traditional reinsurance and capital management, RGA developed next-generation solutions to anticipate and help define the future of the insurance industry.

From left, from Data Solutions: **Derek Kueker**, Vice President and Senior Actuary, RGAX Americas; **Abigail Doolittle**, Vice President, Advanced Analytics Marketing Science, RGAX Global; **Carolyn Balfany**, Vice President, Business Initiatives Lead, RGAX Global.



## RGAX Americas Expands Capabilities

Change in life and health insurance continues to build momentum, propelled by advances in technology, data analytics, and an improved understanding of human behavior. The mission of RGAX, a wholly owned RGA subsidiary and global innovation accelerator, is to advance transformational capabilities and businesses in order to help people everywhere live longer, healthier, more financially secure lives. The RGAX team works collaboratively with colleagues across the RGA enterprise in order to conceive and develop new ideas and bring forward-looking solutions to market.

In 2017, RGAX professionals came together around a collective global mission while rededicating themselves to local pursuit of market-driven innovation. For RGAX Americas, one of three regional teams along with RGAX EMEA and RGAX Asia Pacific, this pursuit resulted in expanded capabilities, new and stronger partnerships, and a range of promising initiatives to deliver consumer-centric solutions and improve the insurance buying experience.

In a deal finalized in January 2018, RGAX acquired LOGIQ<sup>3</sup> Inc., its subsidiaries, and joint venture interests, a group of companies primarily serving the North American life insurance and reinsurance industry that include:

- LOGIQ<sup>3</sup> Corp, a reinsurance administration, underwriting, and claims outsourcing and consulting company
- TAI (Tindall Associates, Inc.), the U.S. market leader in reinsurance software and consulting services
- APEXA, a centralized online solution for advisor contracting and compliance in Canada
- Cookhouse Lab, an insurtech-focused innovation lab

The acquisition provides RGAX with an expansive new suite of technology and service offerings with which to support clients, drive innovation, and ultimately advance positive change in the industry.

RGAX also became the primary distributor of the Everplans™ platform to all U.S. life insurance carriers in 2017. Everplans is the industry-leading provider of digital tools to help people organize, store, and securely share life and legacy planning information. RGAX

*Continued on page 30*

RGAX Board of Directors, from left: **Tony Cheng**, Executive Vice President, Head of Asia; **Mark Stewart**, Managing Director, RGA Australia; **Alka Gautam**, President and Chief Executive Officer, RGA Canada; **Olav Cuiper**, Executive Vice President, Head of EMEA; **Mike Emerson**, Executive Vice President, Head of U.S. and Latin American Markets.

## Focus on the Future of Insurance

**Dennis Barnes**  
Chief Executive Officer,  
RGAX



When I joined RGAX in August 2017, it was like diving into a swift-flowing current. Dozens of initiatives were already underway around the globe, new opportunities were emerging daily, and the possibility of acquiring LOGIQ<sup>3</sup> Inc. was looming. That swift current resulted from the momentum of RGA's decades-long commitment to innovation channeled into the transformational vision of RGAX.

RGAX boasts some of the brightest minds in the industry: talented and passionate professionals with whom major organizations are eager to engage. The intersection of that talent and our clients' needs makes our purpose and future lines of business very clear. RGAX's purpose is to help people around the globe live longer, healthier, more financially secure lives. We will achieve that by helping our partners harness their data and leverage analytics to more effectively engage consumers.

The strength of our purpose and focus stems from the well-established culture of entrepreneurship and innovation that have made RGA one of the world's leading reinsurers. RGAX's advantage over others in the innovation space is our clear commitment to life and health, and decades of trust established with some of the most well-respected brands in the world.

In 2017, RGAX associates came together to articulate a global vision, which we committed to pursue relentlessly at the local level. As the industry prepares for disruption from far-reaching social and market forces – big data, artificial intelligence, genomic medicine, and the list goes on – RGAX will be here to help our partners navigate the seas of change.





## Creating Value Today for Life Insurance Customers



**Jonathan Hughes**  
Vice President,  
Strategic Development, RGAX EMEA

Despite our industry's many advances, one fundamental challenge remains: Each year, fewer than 1% of customers actually receive a monetary benefit from owning term life insurance. Of course, the principal value of life insurance comes from peace of mind and long-term protection for loved ones. Still, the fact remains that more than 99% of customers actually see nothing tangible but a bill.

No wonder customer engagement remains a challenge and industry innovators are investing in solutions that provide the 99% of customers who do not claim with relevant, meaningful, and tangible benefits.

At RGAX, we work with partners across the globe to create, catalyze, and accelerate access to industry solutions that life insurers can offer to new and existing customers. We are active in many different areas in which we see opportunities – from the Quealth™ mobile-centric digital health coach to the Everplans™ suite of digital estate planning services.

Insurers have an opportunity to combine such value-added services with improvements in the purchasing and distribution process, including a frictionless, smartphone-friendly underwriting experience. In addition, microinsurance (smaller scale) propositions, intergenerational protection sales, and other product-focused innovations can help insurers both attract current non-consumers and better serve existing customers.

In the age of mass communication, life insurers need to create propositions that are truly remarkable: so good that customers want to talk about them. At RGAX we know that developing products and services that provide immediate benefits for the 99% is the best way to get the conversation started.



*Continued from page 29*

deployed a team dedicated to building out industry partnerships and helped multiple insurers implement Everplans as a value-added service to improve customer engagement.

Additional RGAX partnerships, investments in other companies, and original business models endeavored to bring further insurance innovation to market. As a growing number of U.S. individual life carriers implemented TransUnion's TrueRisk® Life credit-based insurance score, RGAX professionals provided technical expertise and explored opportunities for expansion of this data-driven tool into international markets and the U.S. group space.



**André Dreyer**, Director, Investment Solutions, RGAX EMEA.

## EMEA Innovators Embrace the Future

In its first full year under the RGAX brand, the EMEA team sought to establish brand recognition among innovators within insurance and startup ecosystems. Together with *Cover* magazine, RGAX EMEA launched its first annual Big Ideas Competition, inviting participants worldwide – in sectors ranging from high tech to higher education – to submit original insurance concepts for potential implementation. The program advanced the industry dialogue on innovation and positioned RGAX as a leader in driving change.

RGAX EMEA again teamed with a variety of clients and partners to develop forward-looking digital solutions to address ongoing and emerging industry challenges. With online home loan price comparison sites disrupting the traditional mortgage broker insurance sales channel, for example, RGAX partnered with a startup digital mortgage advice service to reintroduce insurance into the sales process.

To create a platform for future progress, the RGAX EMEA team expanded the scope and geographic reach of their work, pursuing a range of diverse initiatives in markets throughout the region. The team

From left, from RGAX Americas: **Donna Jermer**, Vice President, Distribution Lead; **Lauren Farmer**, Digital Marketing Manager; **Andrew Blinn**, Executive Director, Customer Experience; **Clare Carlson**, Campaign Management Director; **Bobby Obmaces**, Execution Manager; **Julia Dinh**, UX/UI Designer.

also worked to establish a life insurance vehicle that will enable testing of the validity of new ideas in market, empowering RGAX to approach clients with proven concepts and uniquely positioning RGAX EMEA as a solutions provider.

## RGAX Asia Partners for Growth

RGAX Asia further explored and developed promising new business models related to data analysis and risk assessment. As the flood of new data sources and resulting analytics continued to accelerate, the team focused on creating measurable value for clients. Initiatives to develop health scores in collaboration with insurance, tech, and medical partners opened the possibility for more precise risk classification, potentially allowing for more preferred classes in markets currently offering very few.



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

Change continues to build momentum in the Asia insurance industry, driven by accelerating trends in demographics, technology, and consumer behavior. As the innovation arm of a leading global reinsurer, RGAX is ideally positioned with the resources, relationships, and expertise to develop solutions at the intersection of these trends. In Japan, RGAX partnered with a machine learning/artificial intelligence company to digitize health checks and automate steps of the underwriting process. Such collaborative solutions have the potential to transform the way insurers operate and shape the future of the industry. ■

From left, from Global Research and Data Analytics: **Jeff Heaton**, Lead Data Scientist; **Jordan Durlleston**, Director, Data Strategy; **Kyle Nobbe**, Associate Actuary; **Micah Canaday**, Senior Assistant Actuary.

## Taking the Long View on Data Analytics



**Peter Banthorpe**  
Senior Vice President,  
Head of Global Research and Data Analytics

The application of big data and analytics is creating extraordinary opportunities for insurers – and potentially even greater risks. In an industry saturated with “bright shiny objects,” success in data analytics requires devoting the time and resources to develop clearly defined use-cases, principles, and well-thought-out processes, including implementation plans. In 2017, RGA's Global Research and Data Analytics (GRDA) team continued to grow and made great strides in establishing a global strategy and developing the capabilities and the people to remain an industry leader for the long term.

GRDA succeeds by collaborating with our colleagues throughout RGA on initiatives that drive innovation. In 2017, this included supporting enterprise-wide projects in predictive modeling, data privacy and protection, experience study analysis, and much more.

Above all, we are investing in knowledge and insights. One noteworthy example from 2017 was the launch of a research project on the U.K. Biobank in partnership with Kings College. The U.K. Biobank is the premier global database for analysis of lifestyle, health, and genetic factors and their influences on mortality and morbidity outcomes. The project will model outcomes using a very comprehensive dataset from a cohort of 500,000 people. The goal is to demonstrate how the quality of risk prediction changes using different combinations of data types, particularly genetic data. We hope to use the research to inspire a more informed debate about the impact of advancing genomic medicine in an industry environment in which insurers may not have access to the genetic information applicants do.

After another successful year of developing new research data sets and applying them to expand our knowledge base, RGA is well-prepared to meet our clients' data analytics needs and help move the industry forward.



## Selected Consolidated Financial and Operating Data

As of or For the Years Ended December 31, (in millions, except per share and operating data)	2017	2016	2015	2014	2013
<b>Income Statement Data</b>					
Revenues:					
Net premiums	\$ 9,841.1	\$ 9,248.9	\$ 8,570.7	\$ 8,669.9	\$ 8,254.0
Investment income, net of related expenses	2,154.7	1,911.9	1,734.5	1,713.7	1,699.9
Investment-related gains (losses), net:					
Other-than-temporary impairments on fixed maturity securities	(42.6)	(38.8)	(57.4)	(7.8)	(12.7)
Other-than-temporary impairments on fixed maturity securities transferred to (from) other comprehensive income	–	0.1	–	–	(0.2)
Other investment-related gains (losses), net	210.5	132.9	(107.3)	194.0	76.9
Total investment-related gains (losses), net	167.9	94.2	(164.7)	186.2	64.0
Other revenues	352.1	266.5	277.7	334.4	300.5
Total revenues	12,515.8	11,521.5	10,418.2	10,904.2	10,318.4
Benefits and expenses:					
Claims and other policy benefits	8,518.9	7,993.4	7,489.4	7,406.7	7,304.3
Interest credited	502.1	364.7	337.0	451.0	476.5
Policy acquisition costs and other insurance expenses	1,466.7	1,310.6	1,127.5	1,391.4	1,300.8
Other operating expenses	710.7	645.5	554.0	538.4	466.7
Interest expense	146.0	137.6	142.9	96.7	124.3
Collateral finance and securitization expense	28.6	25.8	22.6	11.5	10.5
Total benefits and expenses	11,373.0	10,477.6	9,673.4	9,895.7	9,683.1
Income before income taxes	1,142.8	1,043.9	744.8	1,008.5	635.3
Provision for income taxes <sup>(1)</sup>	(679.4)	342.5	242.6	324.5	216.4
Net income	\$ 1,822.2	\$ 701.4	\$ 502.2	\$ 684.0	\$ 418.9
<b>Earnings Per Share</b>					
Basic earnings per share	\$ 28.28	\$ 10.91	\$ 7.55	\$ 9.88	\$ 5.82
Diluted earnings per share	27.71	10.79	7.46	9.78	5.78
Weighted average diluted shares, in thousands	65,753	64,989	67,292	69,962	72,461
Dividends per share on common stock	\$ 1.82	\$ 1.56	\$ 1.40	\$ 1.26	\$ 1.08
<b>Balance Sheet Data</b>					
Total investments	\$ 51,691.2	\$ 44,841.3	\$ 41,978.3	\$ 36,696.1	\$ 32,441.1
Total assets	60,514.8	53,097.9	50,383.2	44,654.3	39,652.4
Policy liabilities <sup>(2)</sup>	43,583.0	37,874.0	37,370.8	30,892.2	28,386.1
Long-term debt	2,788.4	3,088.6	2,297.5	2,297.7	2,196.1
Collateral finance and securitization notes	783.9	840.7	899.2	774.0	480.9
Total stockholders' equity	9,569.5	7,093.1	6,135.4	7,023.5	5,935.5
Total stockholders' equity per share	148.48	110.31	94.09	102.13	83.87
<b>Operating Data</b> (in billions)					
Assumed ordinary life reinsurance in force	\$ 3,297.3	\$ 3,062.5	\$ 2,995.1	\$ 2,943.5	\$ 2,889.9
Assumed new business production	395.4	404.8	491.0	482.0	370.4

(1) 2017 includes the effect of U.S. Tax Reform. See Note 9 - "Income Tax" in the Notes to Consolidated Financial Statements of RGA's Annual Report on Form 10-K for additional information.

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

## Leadership

### Board of Directors

**J. Cliff Eason**  
**Chairman of the Board**  
 Retired President and Chief Executive Officer, Southwestern Bell Telephone SBC Communications, Inc.

**Arnoud W. A. Boot**  
**Director**  
 Professor of Corporate Finance and Financial Markets, University of Amsterdam and Director, Amsterdam Center for Law & Economics

**John F. Danahy**  
**Director**  
 Retired Chairman and Chief Operating Officer, May Merchandising Company and May Department Stores International

**Christine Detrick**  
**Director**  
 Former Director and Head of Americas Financial Services Practice, Bain & Company, Inc.

**Patricia L. (Tricia) Guinn**  
**Director**  
 Retired Managing Director, Risk and Financial Services, Towers Watson

**Alan C. Henderson**  
**Director**  
 Retired President and Chief Executive Officer, RehabCare Group, Incorporated

**Anna Manning**  
**Director**  
 President and Chief Executive Officer, Reinsurance Group of America, Incorporated

**Frederick J. Sievert**  
**Director**  
 Retired President, New York Life Insurance Company

**Stanley B. Tulin**  
**Director**  
 Retired Vice Chairman and Chief Financial Officer, AXA Financial, Inc. and AXA Equitable Life Insurance Company

**RGA Honored for Gender Diversity**  
 RGA was honored in November 2017 by the Women's Forum of New York as a Corporate Champion for leading the way to increase female representation on corporate boards. RGA was among a select group of companies that have at least 30% female representation on their board.

### RGA Executive Committee



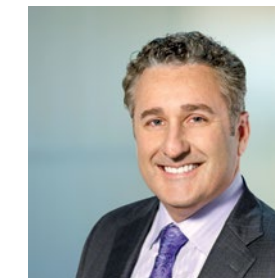
**Anna Manning**  
 President and Chief Executive Officer



**Todd C. Larson**  
 Senior Executive Vice President and Chief Financial Officer



**Alain P. Néemeh**  
 Senior Executive Vice President and Chief Operating Officer



**Dennis Barnes, Jr.**  
 Executive Vice President, Chief Executive Officer, RGAX



**Gay Burns**  
 Executive Vice President and Chief Human Resources Officer



**Scott D. Cochran**  
 Executive Vice President, Corporate Development



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



**Timothy Matson**  
 Executive Vice President and Chief Investment Officer



**Jonathan Porter**  
 Executive Vice President and Global Chief Risk Officer



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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.

**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.

**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.

**Assumed reinsurance**

The 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.

**Big data**

A term generally referring to datasets so large they require specialized software tools and expertise to capture, store, or process the information. The five dimensions ("the five V's") of big data are Volume, Variety, Velocity, Veracity, and Value. In life and health insurance, big data can reveal more complex patterns and trends related to mortality, morbidity, and the propensity of insurance consumers to purchase or retain protection products.

**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.

**Excess of loss reinsurance**

A form of non-proportional reinsurance in which the reinsurer indemnifies a ceding company for losses exceeding a specified limit.

**Expected mortality**

Number of deaths predicted to occur in a defined group of people.

**Face amount**

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.

**Impaired life**

An applicant who represents an underwritten risk for life insurance that is higher than an underwritten risk at standard rates. An applicant can be considered impaired due to medical condition, hazardous activities, or other reasons.

**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.

**Insurance-linked wellness program**

An insurance program designed to promote improved health and customer engagement. Health tracking often relies on data from wearable devices and biometric screenings to monitor progress. Typically participants are offered premium discounts, cash rewards, or other incentives to participate.



**Insurtech**

(also *insuretech* 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.

**Living benefits**

A life insurance benefit enabling the policy owner to access the cash value and/or death benefit of a policy while still living, generally when the insured faces terminal, critical, or chronic illness or disability.

**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**

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**

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 2017 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 2017 Form 10-K is available for download via our website: [www.rgare.com](http://www.rgare.com)

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