

Letter to Shareholders

By Kevin O'Donnell
President and Chief Executive Officer

Each entity in the Integrated System has a separate and defined purpose and strategic advantage, which maximizes our ability to match the most desirable risk with the most efficient capital.

Dear Shareholders,

In so many ways, 2018 was one of our strongest years to date. Our performance was the result of solid execution, continued investment in strategic imperatives and, in another active year for natural catastrophes around the world, application of our Gross-to-Net Strategy and Integrated System. We furthered our lead as the preferred market for reinsurance buyers, and solidified our recognition as the best underwriter by brokers, customers, investors and partners. At the same time, we crossed a significant milestone, exceeding \$3 billion of gross premiums written.

I. Our Performance in 2018

Financial Performance

In 2018, we reported net income available to RenaissanceRe common shareholders of \$197 million and operating income available to RenaissanceRe common shareholders of \$367 million. Our book value per common share increased by 4.4% and our tangible book value per common share, plus change in accumulated dividends, increased by 6.4%. For the full year, our return on average common equity was 4.7% and our operating return on average common equity was 8.8%.

Throughout the year, we found several meaningful opportunities to invest in our business, and consequently we did not repurchase any of our common shares. Since our formation, however, we have consistently demonstrated good stewardship of our shareholders' capital, returning over \$3.5 billion in share buybacks and \$1 billion in common share dividends. In 2019, we raised our quarterly dividend for the 24th consecutive year in a row.

2018 Losses

Once again, we were reminded that ours is a volatile business, with industry-wide insured catastrophe losses approaching \$80 billion. Our results in 2018 benefited from solid underwriting, smart portfolio construction and decades of experience. Additionally, our strong emphasis on a robust Gross-to-Net Strategy reflected our philosophy that it is better to make slightly less money in good years to ensure we are prepared for active ones.

An important consideration impacting any reinsurer's performance is the development of significant losses. When losses big or small occur, we rely on, and expect, our customers to manage their claims appropriately. Continuing adverse loss development, however, has compounded the impact of back-to-back large loss years. Most notably, industry losses associated with 2017's Hurricane Irma continue to grow well over a year following the event, raising significant questions about the long-term health of the Florida market. Absent some large-scale changes to this market, I anticipate its role in our portfolio will continue to diminish. Thankfully, we have preferred access to the best insurance companies in Florida, who have been good partners with us over the years, and with whom we hope to continue to do business in the future.

Gross-to-Net Strategy

In 2018, our Gross-to-Net Strategy was a critical factor in our outperformance. While losses were not as severe as those in 2017, the difference between our gross and net positions was still substantial, resulting in our ceding approximately 70% of the gross losses from the year's catastrophic events. Several years ago, I said there is a cost for doing the right thing. So, while retro purchases may look expensive when there are no losses, it is in years like 2018 where we can reap substantial benefits.

The Gross-to-Net Strategy underpins our corporate strategy in several important ways. Rather than merely assuming business, we construct portfolios of risk. While starting with attractive risk is necessary, it is not sufficient. We need to thoroughly understand the risk characteristics of the assumed business and combine these individual risks into portfolios we design to meet defined capital requirements. These portfolios are then matched with the most appropriate capital, which could include using our rated balance sheets, vehicles we manage for our partners, traditional retrocessional covers (for both ourselves and our partners), or insurance linked securities such as cat bonds. Our Gross-to-Net Strategy may also encompass more innovative routes, such as structured reinsurance products with long-term partners and various aspects of our Integrated System.

The remaining net position is consequently more capital efficient, and therefore more profitable, allowing us to maximize our return on equity. The advantages to our shareholders are significant and our risk partners receive a well-underwritten portfolio that provides them with the benefits of adding diversifying risk to their often much larger portfolios. Less obvious, but equally important, our Gross-to-Net Strategy enables us to provide consistent, efficiently-priced protection to our customers, year after year, regardless of market cycles.

The Integrated System

In addition to our Gross-to-Net Strategy, I frequently discuss the importance of our Integrated System as one of the many unique components of our corporate strategy. I believe our Integrated System critically distinguishes us from our competitors, creates shareholder value and explains our strong long-term performance. As such, I would like to take a little time to explain an important aspect of it in more detail.

If you recall, last year in my letter to shareholders, I discussed the concept of Pareto optimality. A closely related concept is the Pareto efficient frontier, which is the theoretical curve that represents the optimal set of tradeoffs a company can make between different operating parameters. On the Pareto efficient frontier, you cannot improve one parameter without worsening another. It is the point where there are no free lunches, and a company is operating as efficiently as possible given its chosen tradeoffs between activities to deliver a unique mix of value.

Our Integrated System seeks Pareto outcomes by employing multiple balance sheets and funds which occupy different positions on the Pareto efficient frontier, each designed to provide a different, and optimal, mix of value to our customers. Each entity in the Integrated System has a separate and defined purpose and strategic advantage, which maximizes our ability to match the most desirable risk with the most efficient capital. Defining the purpose and benefit of each entity is critical, as it provides the allocation framework and allows us to manage the conflicts inherent in having multiple sources of capital from diverse partners.

Letter to Shareholders (continued)

A good example of the Integrated System is our newest joint venture balance sheet, Vermeer Re, which we manage for PGGM, a leading Dutch pension fund. Vermeer Re will write risk-remote, and therefore capital intensive, U.S. property business. The portfolio we plan to construct for Vermeer Re would be capital consumptive on our existing vehicles, so this addition to our platform fills a gap in our offering and brings a new and more efficient product to our customers. Given our decades of experience, we are capable of effectively structuring vehicles. Once we identified this opportunity, we were able to bring additional, efficient coverage to our customers while making high-quality risk available to an important partner.

Taking a step back to the beginning, the foundation for the Integrated System is our original balance sheet — Renaissance Reinsurance Ltd., which we refer to as “RRL”. RRL is our flagship, rated balance sheet, and is the largest balance sheet for our risk. Every other entity we formed was created to solve a problem more effectively than RRL could.

For example, one of the first additions to our Integrated System was Top Layer Re in 1999, our joint venture with State Farm. We had access to international, risk-remote, property catastrophe risk that was attractive, but capital consumptive on RRL's balance sheet, which made it a less efficient solution for our customers' needs. This business, however, was diversifying against U.S. risk, and thus ideal for a partner like State Farm. So, we created Top Layer Re, with a majority of the capital provided by State Farm in the efficient form of a \$3.9 billion stop-loss agreement.

DaVinci Re is another good example. We formed this balance sheet because we had access to more desirable risk than our RRL balance sheet could efficiently assume, as it was not sufficiently diversifying against RRL's existing book. Additionally, market capacity was constrained and DaVinci Re supplied new, diversifying capital to this desirable risk, while providing a separate, rated balance sheet to our customers.

It is a similar case with Upsilon. Certain types of business, such as worldwide aggregate retro, provide broad coverage and therefore are capital consumptive against a rated

balance sheet such as RRL. We had access to a deep pool of this risk and are recognized experts in underwriting it, so in 2013 we formed Upsilon, a collateralized balance sheet. Upsilon, as an unrated vehicle, posts a dollar of collateral for every dollar of limit provided, and therefore occupies a very different position on the efficient frontier from a rated balance sheet, providing desirable risk to ILS capital and a greater supply of efficient protection to our customers.

We also have several wholly owned, rated balance sheets, the largest of which are our Lloyds' Syndicate 1458 and Renaissance Reinsurance U.S. Inc. For certain lines of business, we needed to be closer to the customer. Syndicate 1458 and Renaissance Reinsurance U.S. helped us accomplish that goal. The Lloyds' market is licensed in over 100 countries around the world and has great access to business that requires a market presence. Similarly, Renaissance Reinsurance U.S. is licensed or authorized in all 50 states.

Over the years, we formed several other ventures occupying unique positions on the Pareto efficient frontier. Having served their purpose, they were retired. Many of these were created to fulfill a short-term need, and thus their winding down was the expected conclusion to their limited life cycles. The combination of owned balance sheets and both short-term and long-term managed vehicles allows us to nimbly respond to opportunities and solve more customer problems. Importantly, we never compromise on our underwriting or the discipline required to service each mandate with precision, transparency and a deft ability to manage increasingly complicated conflicts.

Fees and the Integrated System

One of the benefits of our Integrated System is it allows us to earn fees for bridging the gap between risk and capital. The starting point for raising capital and creating entities, however, is always to meet customer needs. We believe the industry yardstick of assets under management as a measure of success is misplaced and can lead to unintended, and potentially deleterious, outcomes. Our vehicles are structured to deliver efficient capital in order to service customers, not to maximize assets under management or fees. So for us, fees are a serendipitous outcome of using our Integrated System to benefit our customers.

Total fee income was about \$90 million in 2018, which is up over a third year-on-year. The true earning power of this business is likely higher, given that the catastrophe losses experienced in both 2017 and 2018 reduced our fee income. This is significant for several reasons. First, this is risk-free income against which we do not need to hold capital, which boosts not only our bottom line, but also our return on equity. Second, these vehicles benefit from the underwriting work we already undertake for our wholly owned balance sheets. Since we only need to underwrite a risk once, we can leverage a pre-existing risk curve against many sources of capital. Undoubtedly, there are some marginal costs related to running our fee generating businesses, but these are relatively small. So, not only do we generate a material amount of fee income, but much of it goes straight to our bottom line.

Third-Party Capital & the Price of Risk

While we believe third-party capital is an important component of our business, due to the inherent risk of conflicts of interest, I believe this capital needs to be intermediated by strong underwriting. Strong underwriting is critical because it helps answer the question, “What is the correct price of risk?” As important as the answer to this question is, it is *a priori* unknowable, and *ex post facto* unactionable.

The best and simplest definition of “risk” I have seen is from Elroy Dimson of the London Business School — “Risk means more things can happen than will happen.” So, to best understand risk, we build stochastic models that generate probability distributions of outcomes from very good (no loss) to very bad (total loss), and we use these distributions to estimate the price necessary for us to assume a given risk. This pricing process requires us, as underwriters, to determine a final distribution that best represents the set of outcomes that can happen. I highlight this because many market participants have focused solely on expected loss, or mean of the distribution, both of which are fancy ways of saying “the average”. This is a single number, which we believe is insufficient to understand, much less price, the

assumed risk. It is the equivalent of saying, “Many very different things can happen, so let’s take the average and assume that is what will happen.” In our business, you almost never get the average.

As an example closer to home, assume we are in a world where an underwriter has a choice between two contracts. Each contract has a limit of \$100, premium of \$2 and expected (average) loss of 1%. In reinsurance terms, each contract has a 50% loss ratio, meaning on average \$1 is earned every year. Using only this expected loss statistic, these contracts are indistinguishable. However, with more information about the shape of the risk distribution for each contract, we see they are, in fact, very different.

Assume contract 1 has no standard deviation, so every year you collect \$2 in premium and pay \$1 in loss. Contract 2, on the other hand, has two possible outcomes. The first outcome is 99% chance of no loss, so you keep the \$2 premium most of the time. The second outcome is a 1% chance that you lose \$100, which is what we call tail risk, the risk of extreme outcomes. So, both contracts still make \$1 per year on average, but, I think with this additional information, a good underwriter would select contract 1 with its guarantee of making \$1. In addition, in order to responsibly write contract 2, the underwriter must hold at least \$100 in capital, because she never knows when the bad year will happen and must be able to settle the potential for a total loss at any time.

Obviously, this is a simplified view of the world, but it does highlight that understanding the full distribution of potential outcomes, especially the tail risk, is required to appropriately price and underwrite risk, and defaulting to a single measurement is never a good idea. Due to the growing recognition of the importance of underwriting in the third-party capital market, we are increasingly seeing more sophisticated diligence conducted by investors in order to assess the underwriting expertise of their managers. Ultimately, I expect the market to migrate to the hybrid model of rated and collateralized capacity we pioneered with our Integrated System. The benefits of the hybrid model are increasingly recognized, and provide us a significant competitive advantage.

Letter to Shareholders (continued)

Enhancing Relationships with Key Partners

State Farm

We had a successful year in 2018, building and enhancing relationships with important partners. For example, State Farm agreed to take a substantial equity position, investing \$250 million in our common shares. Our association with State Farm stretches back decades. They are founding investors in our joint ventures Top Layer Re and DaVinci Re. This most recent investment establishes them as one of our largest shareholders. Going forward, we believe partnering with the strongest companies in the value chain, like State Farm, will be of increasing importance.

TMR Acquisition

One of our most significant strategic achievements for 2018 was our agreement to acquire Tokio Marine's reinsurance business — Tokio Millennium Re, or TMR. Acquisitions are rare for us, with our last one being Platinum Underwriters Holdings Ltd. in 2015. Given our industry reputation, we have been approached to acquire businesses in the past, but, due to the strength of our culture and insistence on strong enterprise risk management, we prefer building businesses from the bottom up. Occasionally though, we have the opportunity to acquire a good business at a competitive price.

The TMR transaction accelerates our strategy by providing greater penetration into the reinsurance market at a time when desirable risk remains scarce, while also permitting us to offer more comprehensive solutions to a larger number of customers. This transaction also enhances our relationship with Tokio Marine, a key partner since 1994. As of this writing, we had not yet closed the TMR transaction, but, if TMR's tangible book value is unchanged from June 30, 2018, we expect to pay a total of about \$1.5 billion in cash (including a pre-closing dividend) and stock, or slightly over TMR's tangible book value. We still have work to do in order to realize these benefits, but I feel confident that we have the best team in the business and that TMR will make it even stronger.

II. Looking Forward

Virtual Insurance Enterprises

A critical aspect of our strategy is using our skills to support our partners' efforts. In the future, we believe this partnership model will mark its apex in what we call "Virtual Insurance Enterprises," where specialists who are best-in-breed in complementary zones of expertise partner to successfully bridge an evolving value chain. A key implication of these Virtual Insurance Enterprises is the recognition there will be more than one winner in any future state, and it will not be possible for one organization to successfully occupy all the links in the value chain. Our competitive advantages lie in creating and pricing portfolios, and sourcing the most efficient capital to back them. Understanding this, we believe we can best maximize shareholder value by focusing on our competitive advantages and bringing them to market in an industry-leading way.

Our identity is quite simply, "To be the best underwriter." We know who we are and what we are good at; consequently, we consistently strive to be the preferred market for matching desirable risk with efficient capital. Put bluntly, if underwriting is no longer valuable, we are no longer valuable. Thankfully, we have always been able to add value through underwriting and believe we always will. We have a strong record of being a good partner, and I believe we will best maximize shareholder value in the future by focusing on our strengths and sourcing our risk through partnerships with successful insurers, thereby building Virtual Insurance Enterprises that are more effective and efficient than any actual insurance enterprise.

Market of the Future

I believe, in order to remain relevant, the insurance market must mature, with the most significant advancements focused in two areas. First, the supply chain must become more efficient. Second, providers of risk capital must manage the frictional cost of matching risk and capital more efficiently. From our perspective, we have spent the last five years focusing on the second of these imperatives, working diligently to increase our ability to efficiently match risk with capital. We recognized, as our market matured and

became more competitive, we needed to reduce the cost of our capital. We accomplished this by moving quickly to increase both our scale and our investment and capital leverage. By doing so, we returned these efficiencies to our equity investors through higher margins. We find continuing success in this effort. Over the previous five years, we more than doubled our gross premiums written while growing shareholders' equity approximately 30% and holding the sum of operational and corporate expenses flat.

We expect our operational and capital leverage will continue to improve moving forward and adding the TMR portfolio will allow us to continue to leverage our platforms. While I am delighted with our performance to date, I note, even with the expected contribution of the TMR deal to increased efficiency, you should not expect us to continue to improve at the same pace. We believe we are at a point where our existing resources are constrained, and any continued future growth will require an expanded expense base. Our goal, however, is to grow premium faster than expenses.

Why did we choose to focus on our operational efficiency rather than on supply chain efficiency? Primarily for two reasons:

First, we retain greater control over both the process and the benefit of the efficiencies of an improved platform, which is permanent to us. Others may also close the gap to become more efficient operationally, but that simply reduces our alpha to the market; it does not reduce the benefit accrued to our shareholders.

Second, we believe focusing on the supply chain is less advantageous for us over the long run. Changes that improve the efficiency of the supply chain are likely to become transparent to competitors, and quickly adopted by all market participants, especially if they do not involve any countervailing tradeoffs. Consequently, any benefit will eventually be mutualized, with fleeting advantages to a first mover. Supply chain efficiencies are ultimately competed away, and typically inure to the long-term benefit of the consumer.

Board Evolution

We recently announced the nomination of Cynthia Trudell to our Board of Directors. Cynthia will be a great addition and brings a wealth of experience as a chief executive and leader of organizational talent. Cynthia's expertise and proven experience in Board leadership will contribute significantly to our stewardship of the organization on behalf of all of our shareholders.

We also announced the planned retirement of Edward J. Zore at the end of his term in May 2019, after nearly a decade of service. Ed's industry experience, investment acumen and general wise counsel have been invaluable to me and my team. I would like to thank Ed for his many years of distinguished service.

In Closing

2018 was a difficult year for the industry; however, we outperformed across the board, both financially and strategically. Once again, we benefited from our industry-leading ability to construct efficient portfolios of risk through superior underwriting and the application of our Gross-to-Net Strategy and Integrated System. In 2019, we face the challenges of successfully integrating TMR while continuing to grow the business and maximizing shareholder value, but I believe we will rise to that challenge, just as we did in 2018.

Sincerely,



Kevin J. O'Donnell

President and Chief Executive Officer