Prudential PLC Investor Conference (Day 2)

Company Participants

- Barry Lee Stowe, Executive Director and Chairman & CEO of North American Business Unit
- Brad Harris, Unknown
- Chantal Waight, Director of IR
- Clare Jane Bousfield, CFO of M&G Prudential
- John William Foley, Executive Director
- Mark Thomas FitzPatrick, CFO & Executive Director
- Michael Andrew Wells, Group Chief Executive & Executive Director
- Nicolaos Andreas Nicandrou, Executive Director
- Paul Chadwick Myers, Executive VP & CFO
- Raghunath Hariharan, Former Director of Strategy and Capital Market Relations
- Steve Binioris, Unknown
- Stuart James Turner, Group Chief Risk Officer & Executive Director
- Unidentified Speaker, Unknown

Other Participants

- Abid Hussain, Research Analyst
- Andrew Baker, Analyst
- Andrew Hughes, Insurance Analyst
- Andrew John Crean, Managing Partner, Insurance
- Barrie James Cornes, Insurance Analyst
- Blair Thomson Stewart, Head of the UK and European Insurance
- Colm Kelly, Director, Co
- Greig N. Paterson, MD, SVP and U.K. Analyst
- Johnny Vo, MD
- Jonathan Michael Hocking, MD
- Lance Montague Burbidge, Partner, Insurance
- Oliver George Nigel Steel, MD
- Scott Russell, Head of Financials Research, Asia
- Unidentified Participant, Analyst

Presentation

Barry Lee Stowe {BIO 15021253 <GO>}

Good morning. I hope everyone enjoyed yesterday, enjoyed the dinner last night. And are looking forward to an informative and entertaining day today. And that's what we aim to provide. We're bringing the slides up. Okay. Thank you. Sorry, we had a slight technical malfunction up here.

I'm Barry Stowe, I'm the Chief Executive of Jackson. And I want to provide some opening comments around our business before we delve into the details. So most of you, I think, are familiar with our U.S. operations, which is essentially 2 entities: Jackson National Life Insurance Company and PPMA, our asset management business. I think most of you are familiar, some of you maybe who are new to us, some of this data is new. But most of you have seen all of this before, it's a well-worn path. All of these attributes that we use to describe ourselves are all true. The way I think about Jackson, about our North American business in total, is that we are America's leading retirement company. We're the leading company in terms of our historical track record. We're the leading company in terms of our strategy for the future. We're the leading company in terms of our execution capabilities. And we lead in a marketplace that is vast. Mike touched on this. He talked a little bit about the scale of the opportunity. And as big as the retirement of the baby boomers has already become in terms of an economic and social dynamic, we're just at the beginning of it. It's growing by 10,000 new retirees every day, reaching age 65. So the opportunities are vast. And we are brilliantly well-placed.

So I mentioned in our track record. This is one of the evidences, if you will, of our leadership. So let's start with that. Again, this is a well-worn path. You're familiar with these charts. Pretty much every time we're together you see this data.

What does it mean? I'll tell you what it means to me, this track record of performance from every perspective. It means. And I'm absolutely convinced of this, that variable annuities are a virtuous product with enormous social utility. Consumers who purchase these products under the right structure, get fantastic market-leading returns with protection. There's no other product in the marketplace that does it. There's no other marketplace that is as important and necessary for retiring Americans.

I think what we've also proven is that this product is manageable, that our model for operating this, for addressing the risks entailed in this insurance product, is durable. And that's based on over a decade of experience at scale, through cycles, including some of the most complicated and volatile times in macroeconomic history over the last hundred years, including times of relative to almost complete absence of volatility. In a wide variety of cycles and environments, we have consistently delivered for consumers and we have consistently delivered for shareholders more than $5 billion in dividends, a rapid trajectory of profit growth and capital generation.

Now, there's always a lot of excitement around our business, which is puzzling to me because I was thinking last night, if you had to come up with a single word that describes our business, what would that word be relative to the marketplace in which we operate? And the word I kept coming back to was dull. We've never had drama in this business. You know, I was thinking about it's like going to an amusement park. It's like going to an amusement park. And you walk in and you see a merry-go-round. And you think, well, that might be nice to ride. It's pretty and there's music and the horses go up and down. And you pretty much know exactly where it starts and ends. You know exactly what's going to happen on a merry-go-round. And so lots of people ride the merry-go-round but they might find it dull. Others, many others, prefer other rides like something called Space Mountain or trip to the moon or something like that, that has some very exotic name that may or may not describe exactly what it is. And that ride feels great at first. And then all of a sudden, it's like, whoa, what happened? I've never been on a ride quite like this. And when you get off at the end of the ride, you're not -- maybe you don't exactly remember what happened and you might be a little sick to your stomach, you might be a little queasy, might not have been exactly what you expected.

We're the merry-go-round of the retirement industry. That is who we are. But it occurs to me that to continue to earn your confidence, we have to work hard every year to reassure you that the merry-go-round is in good working order. And so that's what we aim to do today. And so we're going to spend most of the day talking about the mechanics of what we do and how we do it and why it is so durable and then at the end, I will come back. And I will talk a little bit about the future and our strategy and why this opportunity is so immensely attractive and why we are so well-prepared, uniquely well-prepared, to exploit the opportunity.

So we have 3 people that are not present to you today: Brad Harris is our Chief Risk Officer, Steve Binioris is responsible for ALM and, of course, Chad Myers, as you know, is our CFO. And they're going to talk about a variety of different things, one -- some of it are topics you've seen before so it will be updates, some of it sort of correcting perceptions that seem to have gotten in the marketplace over the last year or so. And one bit of it, by having Brad, who's our Chief Risk Officer, present, that's something new. That's not something we've not done before because what we also want you to understand that in addition to having this incredibly effective quantitative risk management function with this fantastic track record of success, there is also an extraordinary governance process in place that sits on top of that. And that's Brad's responsibility. I want you to know that the questions that you think about with respect to the mechanics of our business, we think about too, our board thinks about too. And we have governance in place that ensures that those questions are answered. So that's a new dimension in terms of the presentations we've made to you in the past. And so what I'd like to do now is begin by asking Brad to come and talk about risk management. Thanks.

Brad Harris {BIO 20364978 <GO>}

Thanks, Barry. Good morning. I'm Brad Harris, Chief Risk Officer of Jackson. I've been at Jackson for three years in this role. Prior to that, I spent nine years with our Asian operations. I was in the regional office in PCA in Hong Kong. So I've been with the company for 12 years. There's 3 general topics that I'm going to cover today. The first is going to be what is our framework around the merry-go-round? How do we ensure that it continues to go around and there is no events they need to be worrying about? And the governance and the controls around that. The second piece that I want to cover today is to take you into a little bit of detail of how we use this framework, especially the limits that we have in place, to manage our equity risk and our credit risk. Then I want to spend a little bit of time digging into a little bit more and expanding upon what Mark did yesterday on our credit risk, give you a view of our portfolio. And then the last piece than I'm going to wrap up with today is going to be walking through how do we look at our experience every year? How do we set our assumptions? What's the governance around that? Then where do we expect to go in 2018, related to our assumption changes?

So I'm going to start with the North American risk framework. As Barry have said. And as Mike had said yesterday. And you hear a continuous conversation around that Jackson has had a long track record of a very robust and disciplined risk management culture. However, as the business has continued to grow, at the same time, we have continued to enhance our risk management capabilities and culture.

So what I'm going to walk you through here are the 4 key pillars. This framework is what we use across all of North America. So not only do we use the framework within Jackson, we use the framework within PPM America. But I'm going to specifically dig into Jackson today.

So out of the 4 key pillars, the first pillar is 3 lines of defense. And you've heard that many, many times from many companies. And what that means is that we've got a first line that owns the risk and manages the risk. We have a second independent oversight function, the second line. And the third line provides assurance. So the key thing you need to remember is that when you implement a 3 lines of defense model is that you need to have a strong independent risk function with the right capabilities. At the same time, what you need to ensure is that as you are building out the risk function, you do not take away the responsibilities of managing the risk and owning the risk from a first-line perspective. They are the ones that are doing it day in, day out. The risk function is truly a second line providing oversight above the first line.

The second piece that I'd like to talk about is the governance structure that we have. And so our governance structure is built around a proper Board, the Board committees and all of the risk policies that we have to support those and all of the risk standards.

And so we've made some enhancements in this space also. And so if we look at this particular area, the item that we've enhanced in 2016 is that we have added nonexecutive directors to the Jackson Board, we've also added a nonexecutive Chairman. At the same time, we have also reconstituted both our Risk Committee and our Audit Committee to ensure that the membership was 100% comprised of nonexecutive directors. So it's a very robust governance framework that we have in place today. And at the same time, we have a full list of Jackson-specific risk policies across all the risk in which we are subjected to and then standards and guidance underpinning those. So again, a very robust, mature governance process.

The third pillar of our risk framework is Jackson has a specific Jackson-specific risk appetite statement and associated limits and triggers underpinning that risk appetite statement. So the risk appetite statement within Jackson is owned by the Board and it has statements on economic capital, statutory capital. It looks at liquidity. It looks at external ratings. It looks at operational risk, just to name some of the components of our risk appetite statement. At the same time, we have a full list, again, of Jackson-specific limits and triggers. And so what we do is that every year, we map out all of the risk in which we are held accountable and all of the risk that can impact our business. We look at our risk appetite statement. And we do a mapping to ensure that we have the appropriate limits and triggers so that every single one of these risks are covered by the limit triggers to ensure that we will not have a breach of our risk appetite statement. So it's a very holistic process.

The fourth pillar that we have within our risk management framework is risk monitoring reporting. And what this means is that we are continuously reporting and monitoring all of our risk. We are showing reports to all the senior management on a regular basis. We're showing all of our risk reports and the details when it comes to the Board, all of the Board committees. So that as we are monitoring risk and we're understanding the risk of the business, that is being communicated in an open and transparent way across all aspects of the business. So that every single business decision that we make is made in a fully informed manner and understanding all the risk entailed with making those business decisions. One of the items that we also use within this particular pillar, is we use risk deep dives. And that's an opportunity for the independent risk function to take a step back, look at a particular area, do the research, look internal, benchmark external. And really understand the way that Jackson is managing that risk. And then we can facilitate the conversations around that risk and how we manage it, both at the senior management level, at the Board and the Board committees. Again, this ensures that we are comfortable with the way that we are managing this risk. And if there are any ways that we can improve it, this is the time when we can have those conversations so that we are continually making improvements in the way that we manage our risk on a day-to-day basis.

So again, in summary, as you can see, not only have we have the proper risk framework in place, the right governance. And we've been building it out for many, many years. We started building an independent risk function in 2013. And today, we have a fully-staffed function that has expertise across all operational and financial risk to include hedging, pricing, investments. And at the same time, not only do we have the structure within Jackson, we're held accountable to the group risk framework. And so we have the independent framework that monitors Jackson in Jackson. Group has its own group risk framework that we're held accountable to. It has its risk appetite statement. It has its limits. It has its triggers. It has specific limits on Jackson. So again, it's a belt and braces approach. So what I would like to do now is I'm going to walk you through 2 of the risks in which Jackson is exposed. I'm going to walk you through the equity risk first and one of our key risk limits, the way we manage equity, then I'm going to walk you through credit next.

So on the equity side, we have many limits which we utilize to manage our equity exposure. We have them on a statutory basis. We have them on an economic basis. We look at equity on its own. We look at equity combined with other risk, for example, equity and interest rates at the same time; equity, interest rates, policyholder behavior at the same time. But what I want to focus on here today is one of the key limits that we use within our hedging program. This limit is based upon the amount of capital Jackson is willing to put at risk in a severe stressed equity environment. This is an economic view of our liabilities and the stresses is based upon a AA or roughly 1 in 200 probability. The stress that we use is 40%, instantaneous without any rebalancing. At the same time, we have an increase in equity volatility on top of it. So it is a very severe stress. As you can tell from looking at the historical amount of capital that we are willing to put at risk for this stress, it's remained relatively flat. So even though our variable annuity business has been growing tremendously since 2007, you'll see that the amount of capital that Jackson is willing to put at risk for an equity exposure over that same time period has not grown at the same pace. You'll see a slight increase in it. I'm going to pause on that. I'm going to tell you about that when I get to the credit. But you will notice that relatively it's been flat with a tiny increase over time.

So jumping on straight to credit. Credit is the same as equity, meaning we have multiple ways to look at credit. I'm going to focus on one of our limits here that, again, is very similar to the limit that we just saw on the equity side. This limit on credit is how much of our capital are we willing to put at risk in a stressed credit environment? Our definition of a stressed credit environment is 10 times the expected annual default rates. And again, as what you saw on the last slide, we have kept this stable since 2007. And as you have seen, it's even gone down a little bit. The way that we manage these risks is that Jackson looks at all of our risk and it allocates capital to those risk. And so over time, as our variable annuity business has grown, we have allocated slightly more of our capital to equity risk. At the same time, we've made a commensurate reduction in the capital that we're willing to put at risk for credit. And so in total, across all of our risk categories, we've been putting the same amount of risk for these shocks across all our risks, the same amount of capital is being put at risk from 2007 to 2018.

So again, the key features: The business has grown. We are keeping the same amount of capital that we are willing to put at risk from 2007 pre-crisis through today. So it is a very conservative way to manage it.

Now, I'm going to dig in a little bit deeper on credit. Mark showed you some slides yesterday that talked about our credit portfolio. And right now on this credit limit, we've been over time roughly 50%, 55% has been our utilization of this limit. Going back on the equity side, it's been roughly 70%, 75% is how we've been utilizing that particular limit. So again, we've got the limit in place. We're always staying underneath that limit with a little bit of a buffer just to be able to absorb movements in the market and such. But the 50%, a lot of it is driven by how we manage our risk within our investment portfolio. As Mark showed you yesterday, we have a very conservative investment portfolio in Jackson today. What I want to highlight during this slide is how much it has changed. So look at 2007 and compare that to the middle of 2018. You'll see a material derisking in our credit portfolio between those time periods.

So what I'm going to do is I'm going to focus first on a couple of the asset classes in which we have reduced our exposure to derisk the business. And then I'm going to focus on a couple of the asset classes that we have increased our exposure to compensate.

The 2 areas that you see in the largest reduction between 2007 and 2018 is mortgage-backed securities, asset-backed securities. But also in the high-yield corporates. So starting first on the mortgage-backed securities side, you'll notice that this is the blue, the light blue on this particular chart. It was over 25% of our investment portfolio in 2007. And it's just over 7% now in 2018. The main reduction is due to pretty much removal of all of our residential mortgage-backed securities, both agency and non-agency. The reason for this is they have negative convexity, which doesn't really work well from an asset liability management perspective. At the same time, if you look at the non-agency issuance since the crisis, it's been relatively flat. So we just don't feel that this is an asset category that is very attractive to us at this particular point in time. So what comprises the 7% that we have today is going to be commercial mortgage-backed securities and asset-backed securities. Both of these we feel provides a good risk-weighted return. But at the same time, there are limitations of how much we can have on our portfolio because of some of our internal risk limits but also availability in the market, especially in the asset-backed securities side.

On the commercial mortgage side, our preference today, as you can see by looking at the purple where we have 14.2%, is commercial mortgage loans is our preference over commercial mortgage-backed securities. Now again, there's a few reason for that. The first one is PPM America has a very strong team with a great track record in managing commercial mortgage loans. They've got a very strict underwriting guidelines, for example, office space is something that we do not participate in. And at the same time, you have the property as collateral. The business that we have, the portfolio today within the commercial mortgage loans, is very, very healthy. We have a loan-to-value ratio of right around 50%. And we had a debt service coverage ratio of right around 2.5%. And so I think that's good documentation that we run a very conservative approach to it. And it's a very healthy block of business.

Moving on to the second asset class that we've reduced materially from a risk perspective from 2007 to 2018. And that's the high-yield corporates. It's probably easy for you to understand why we've made a reduction in that space. We just don't see there is a lot of value in there and it's not worth taking the risk. And so we expect that to be a small proportion of our asset mix moving forward. It's just not a place that we want to play right now.

So as we made reductions in the residential mortgage space, as we've made reductions in the high-yield corporate space, where is that -- where had those assets gone? There's 2 places. The first place I'd like to talk about is U.S. treasuries. So U.S. treasuries is the red in the slide today. And if you see in 2018, it's roughly 10%, almost 10% of our in-force portfolio. Back in 2007, you can't even see the red on the slide. So it was not an asset class that we were really participating in at that particular point in time. Now the reason that we like the U.S. treasuries is because it's an up-quality asset. At the same time, it provides good duration management capabilities. And the third reason is that it's a -- it can be utilized for collateral for derivatives activity. So it's a very good asset for Jackson. We expect to be able to participate in this moving forward. And so you will continue to see treasuries within our investment portfolio moving forward.

And the last piece I wanted to talk about was the investment grade. The investment grade is the bread-and-butter of what we do. That's why we have 60% of it. We've increased it by about 8% from 2007 to 2018. This is comprised of both publics and privates. There is advantages of the investment grade: there is the size of the market, the liquidity of the market. You're also looking at the spreads that it generates. Then if you look at the privates compared to the publics, then you've got extra spread lift. And there's also bond covenants that you can get on the privates that you cannot have in the public space, about 20% of this 60% is private compared to public. So again, it's a very good space for us. And it's an area where you will continue to see a large percentage of our investment portfolio sitting in those asset class.

So what I want to do is since we have 60% of our assets sitting in investment grade, one of the questions is credit quality. So I'm going to spend a little bit of time on credit quality. This graph has 2 lines. What it's looking at is the BBB exposure as a percentage of the investment grade portfolio for the market. And that's gray, that's the top line that you see sloping up. Then within Jackson, that's the red line. And you'll notice that even though the market has increased its BBBs. And there's 2 main reasons for this: One is you're seeing a higher percentage of issuance of BBBs within the investment grade space lately; and at the same time, you have the downgrades that are in the BBB space today. Now we have remained consistent and diligent and conservative. And we have kept our BBB exposure flat as the market has been increasing its BBB exposure. At the same time, even within our BBB exposure, we are more conservative than the market because we do not really participate in the low end of the BBB. So not only have we kept our BBBs flat, we're conservative within the BBBs. I think this is another differentiating feature of Jackson. All of these changes that you're seeing on the slide, the rigor that we have on the discipline on the BBBs, all the changes that you saw on the slide before where we're talking about derisking our portfolio, those are driven by changes in our investment policy. So not only have we made these changes, we've embedded these particular changes and this appetite into our investment policy. So that policy will talk about our desired mix of asset classes. It's going to talk about credit quality. It's going to talk about individual issuance and the caps that we have on those. So it has all these pieces built into it. And that's part of the North American risk framework. And so if we wanted to make changes to that investment policy, we would have to take it through our Investment Committee and get it endorsed. It would need to go to the Board. The Board owns the policy. And the Board would need to approve any changes that we make to that policy. So again, we have a very rigorous process around the governance of changing anything on our investment policy or any policy that we have.

The next place I'd like to go is assumptions. So how we monitor our experience, how do we benchmark our assumptions, how do we set our assumptions and what governance process do we have? So this process is used for all of our assumptions. It doesn't matter whether it's mortality or policyholder behavior. Where I want to focus today is lapses. So I'm going to start in the top right, experience studies. This is where we really start. This is what drives our long-term best estimate assumptions. And the reason for that is we have one of the largest block of GMWB, for example, blocks in-force in the U.S. We have more experience than anybody else. And we need to utilize that experience to set our long-term assumptions because every company is going to have a different experience given the benefits of the policy, the features of the policy, the distribution, the competitiveness of the policy. All of these pieces are specific to an individual company. And by having a credible block of business the size of ours, it enables us to take the prior experience and be able to determine where we think our future is. And be more accurate than just using industry data. We look at every quarter. We do full experience analysis every quarter. We have a multifunctional team that meets to talk about all of it, to understand it. We do full analysis every year, going out multiple years to understand where we sit now in addition to the trends that we've seen. But even though we have a very large block of business, we are taking past experience to predict what will happen in the future. And that requires expert judgment. And so we will sit down, talk again in a multifunctional team. And understand why we think the experience has been driven in the way it has, where do we think it's going to go into the future, what external drivers happened at the same time, what's happened in the market, what's happened in regulations to understand where do we think the experience will go in the future to set long-term assumptions. Then we benchmark it. So we participate in all the core benchmarking studies around the U.S. Unfortunately, due to the confidentiality requirements of these particular studies, you can only be using it if you're a participant, for example, I'm not able to share that data with you today. However, I can tell you that as we look at our benchmarking around the U.S., our lapse assumptions are conservative relative to our peers, especially when we look at lapse assumptions benchmark of policies in the money. We are on the conservative end.

So after doing our internal experience studies, after we look at expert judgment, doing the internal benchmark, it goes through what we call in Jackson, the Jackson Assumption Working Group. Again, this is a multifunctional group that looks at experience, asks questions, additional analysis. This is where the proposed assumptions for yearend are vetted out and we understand why we're setting those assumptions. Once that process is complete, there is a separate independent risk opinion that is put side-by-side. And so what you have is you have the proposal coming out of the assumptions working group from the first line. Sitting side-by-side, you'll have a paper by the risk function, that is looking at it just from a different lens. They're able to provide different levels of insight. Those 2 pieces go forward to help inform management and be able to endorse the assumptions for year-end.

So the final is the governance process. It's the tiny little stuff at the bottom here that I'm sure nobody's going to be able to read. So I'm going to give you a quick highlight on that. Again, as you've seen with everything I've talked about so far, it's a very rigorous progress from a governance side. And it's very complete and holistic. So once it goes through the Assumptions Working Group, gets an independent risk paper put side-by-side, at that point in time, it's going to go to our Asset Liability Committee within Jackson so that they can endorse those assumption changes. So then going to go to the group Assumptions Approval Committee. It goes to Jackson Risk Committee. It goes to the Audit Committee. It goes to the Group Audit Committee. It has independent external auditors reviewing all the assumptions. Then finally, you've got the appointed actuary and the CFO has to sign off.

So the 2 key takeaways I want you to take from this slide is we run this process every single year. We do not allow our assumptions to get stale. And what that means is that some companies have a process in which they will keep assumptions relatively flat for multiple years. They will track experience and they will look at experience. And then they make a change in assumptions on an irregular basis. And what that means is that they're not keeping their experience in line with experience, their assumptions in line with their experience. And the change that they make is going to be larger when they make it. And it will flow through all of their financials. The way that Jackson manages our assumptions is that we update our assumptions every single year to take into account the most recent experience that we have. In that way, what you've seen every year. And what you will continue to see, is a small update to assumptions every year and no material impact in any of our financial because we always ensure that our assumptions are up-to-date.

The second key piece to take away is, again, going back to the benchmarking. Again, I wish I could share the data with you but everything that we are looking at on the benchmarking side is that we are conservative within our peers. So we are not on the aggressive side. So let me walk you through where we expect these assumption changes to hit us in 2018. Now again, it's not going to be a surprise. There's not a lot of changes happening because, again, we update it every single year. And so where we're seeing on experience, we're seeing slightly lower lapse rates on the variable annuity side. You know some that is driven to the markets have performed very well, our customers have a very good product. There's not a lot of alternative solutions out there. And so they want to keep their policies in-force because it's good value to them. The second piece is that there's been recently around regulatory regimes, especially DOL. Then on our utilization, we've seen a slight increase in the utilization of our guaranteed minimum withdrawal benefits, the customers being able to use it in a slightly more efficient way. But it's been marginal, not a lot of changes there. And so as the numbers flow through our year-end financials, the utilization assumption change will be a slight negative across our financials. But again, nothing material. And the lapse assumption change is going to vary. And so if you think about it, it's going to depend upon the economic growth within the financial metric. So if you have a financial metric that has a higher expected economic growth, then the separate account will grow, policies will stay out of the money, we would be expected to pay less claims. And you will see a positive coming through in that financial metric, EEV. If you have a financial metric in which the growth rate -- the economic growth rates are lower, like IFRS, or it is based upon a tail measure like statutory, U.S.-based statutory, then you're going to see that the -- in those scenarios, the separate account is going to grow at a lower rate, you're going to have more customers that are going to be in the money and there's a higher expectation of claims being paid. So again, in those metrics, you're going to see a slight negative. So where we're expecting our year-end numbers to come in is that it's going to be a modest positive from an EEV perspective, a very slight negative when you're looking at almost immaterial from a statutory perspective. And again a very, very modest negative coming in on IFRS.

So in summary, we've got a very holistic, mature risk framework that helps us not only manage our risk but ensure that moving forward it can adapt over time. We have kept our equity and credit limits steady since 2007, even though we have seen a material growth in our business. So we're very conservative in the amount of capital we're willing to put at risk. And we have a very robust framework around keeping our policies in place, for example, our investment policy. We derisked investment policy. We derisked our credit portfolio as a result of that. Then lastly, we have a very robust process to set assumptions, keep them up to date. So that our assumptions do not get stale. And we'll have a very minor impact at year end '18. So with that, I would like to hand it over to Steve Binioris. And he'll take you through some more of the details about how we manage risk every day.

Steve Binioris {BIO 17195054 <GO>}

Good morning. The topics that I'll be covering today: product and risk overview, product design and pricing, fund selection and what we're getting at there is how we select funds on our variable annuity guarantee platform, an update on the health of our in-force book. And lastly, an update on our hedging strategy and where we stand real-time on hedging. So let's jump into the major products. And an overview of those products and the key risks that come with those products.

So I'm going to layout the slides for you guys because there's a lot of information here. On the far left, we've got the products: Fixed Annuities; Fixed Index Annuities; the 3 variable annuity flavors: the GMDB, the Guaranteed Minimum Death Benefit, Guaranteed Minimum Withdrawal Benefit, GMIB; Life Insurance and our Institutional Product.

Second column from far left is our exposure. And these are as of 9/30. So it just gives you a little bit of perspective on terms of the reserves and the account values for variable annuities, just so you get a feel in terms of the intensity of the balance sheet and where those products fall.

So when we're -- when we're in -- and, of course, the key risks are equity, interest rate risk, credit risk and mortality and longevity. So what we're trying to do here is when we manage our risk, we always try to manage from the most macro level, looking for the natural offsets that exist within our product suite. And what you'll find is a lot of products have natural offsets. And between products, we actually have offsets within products as well. So I'm going to highlight a couple of examples here to bring that message home.

And on the equity side, you can see fixed index annuities. That's a product where, if the market goes up, we credit more to the policyholder. So that he'd participate in the upside equity markets, right? Now variable annuities, as you probably know, are exposed to downside equity markets. So there is -- those are offsetting risks. If I was in a siloed hedging program, I would be buying call options to hedge my FIA exposure and buying put options to hedge my VA exposure. So I'm buying 2 derivatives I probably don't need. What if I net the 2 positions together, I have one net exposure. And I just buy the one derivative instrument to manage that overall exposure? So it's much more efficient. You save on bid-ask spread with respect to buying derivatives.

Another example is mortality and longevity, on the far right, the little green box there. So when you look at GMDBs, the risk there is early death, dying before life expectancy in a bad equity market. So that's an optional GMDB. So we -- if you buy that product, we charge you for that product. And there's a charge associated with that.

There's also longevity risk that comes with a GMWB, the risk there is that you live past your life expectancy. Now you see the account values there. And please don't add them together, we don't have $310 billion of variable annuities on the books. What I was just trying to show is that a lot of our policyholders actually have both products. They've selected both an optional GMDB and an optional GMWB. So they're buying both products. By definition, they can only really execute on one. They are either going to live a long time or they're going to die early, okay? So there's a nice offset that exists even within the VA products suite.

Then we do have the life insurance block business. As you know, we're always trying to do more bolt-ons because with those life bolt-ons comes mortality-based risk, which offers a nice offset to the longevity-based risk that we have with the variable annuities. Then that comes to when our economic capital models, when you actually look at where we stand on mortality and longevity, you actually see that, that risk is actually quite minimal because we're getting a nice offset between the 2.

Now, credit. I think Brad has covered credit pretty well there. So I'll skip it. And you can see that I put the check marks there for your benefit. Anything that's a general account liability is going to have a credit risk associated with it. Now on interest rate risks, you can see that's a pretty busy section. Most -- pretty much every product that Jackson offers has some level of interest rate risk. And so what we do is, we manage that at the highest level. We take all those gross exposures from the different products, we put them all together in our models. And then we manage our overall interest rate risk. And we buy the appropriate derivatives to manage that particular risk.

I'm going to focus on one specific item with respect to interest rate risk, probably the most important one, which is the variable annuities, which of course, are exposed to low rates. But there's a very important concept that I think I want to get across here is, this is a contingent risk. And what do I mean by that? The claims are -- and you will see this in the future slides, the claims that we're going to make on a variable annuity is when the account value has been depleted. Then Jackson is on the hook for the claim payments. And that's going to be about 20 years from now, right? And if markets do well, those claimants, those claims, those absolute claims 20 years are going to be pretty small, because you usually won't get to the point where the account value has been depleted. So whether interest rates are 1% or 10%, 20 -- when -- if there's no claims to discount, it really doesn't matter. It's contingent risk. Now if equity markets do poorly, those absolute claim levels 20 years from now do get big. And it does vary -- at that point, the interest rates do matter now. So in the discounting of those claims, those bigger claims are very important. So it's a very much conditional risk. And you've seen that we've addressed in the past, we've done trades like the hybrid trades, for example, which were trade side. They're equity trades. But are contingent on interest rates. So we address that contingent risk. And we look at our profile. So it depends, if we need to do those trades, we'll do that. But it's all shaped by our profile and our sensitivity at a given point in time. If you look at that. So that's the conditional interest-rate risk that comes with the products that we offer. GMIBs -- first of all, you can see the number, it's $2 billion of account value. So it's pretty much a rounding here, with respect to Jackson National. And it's in a run-off mode. We stopped issuing the policies many, many years ago. It's fully -- it's reinsured. So that you can see that the equity interest-rate risk is reinsured there. This is the product that you probably hear a lot of press about. This is the product that has caused issues in the industry. It's the product that people are trying to get off the books. It's the product that they're basically giving you deals try to take the -- the customer is getting a proposition to move away, They've taken away investment freedom on these products, basically forcing the policy holders to lapse, because they don't really have a good investment proposition. I mean there's a long story there in terms of things that our competitors have done in the GMI -- GMIB space to try to get that stuff off the books. But the important thing here is you obviously know a little bit about the policyholder behavior risk of GMIBs. We've talked about in the past, it's a much more binary risk than the GMWB. So there's a lot of sensitivity on the policy or behavior side. But the other key thing here is, it has a lot of interest-rate sensitivity. Unlike our product, which is GMWBs, which is a contingent interest-rate risk, for GMIBs, interest-rate risk is very much a primary driver of that product, okay? And I think that's part of the reason that our products had so many issues.

So let's stop talking about GMIBs and we'll start talking about GMWBs, because that's a product that we like and sell a lot of so -- in terms of walking through this slide, this is more of a VA 101 for GMWBs. So I apologize. Probably a lot of you guys had known this stuff, pretty cool but there's probably some new people in the room. So I'm going to, at a very high level, give a quick illustration how GMWB works. So hang in there with me. So key features on the left. Who is the typical customer? The average issue age is 62 years old. So this is individuals that are getting close to retirement. And they're looking to protect their nests that they've built up with retirement income as they stop working.

So the benefit of the product is that you can remain invested in the markets. You maintain that equity participation in the markets. And if something were to go bad and the account value is exhausted, you still have that retirement income that we've guaranteed you. Okay. What's Jackson's advantage, the one that differentiates us from our competitors? It's investment freedom. We allow you to stay invested through the market cycle. We have not forced volatility control on you, we've not done forced asset allocation. And so the customers. And we'll look at this later, have really benefited from our experience versus the competitors' experience.

I've got a simplified illustration here on the right. And then a couple of simplifying assumptions here as well, too. First of all, this is a 0% market return assumption. So I think we can all agree that's pretty conservative over a 20-year type period. And it is assumes that the policyholder is going to start taking withdrawals immediately. So they buy the product. And then in the first year they're going to take their contractual withdrawal amount that they -- that they're allowed to for the policy. So the first red bar is their deposits. So they deposited $100, right? And you see the little blue bars at the very bottom? Those are the withdrawals that are coming out of the account. So call it 5%, they're taking $5 out of that $100. And that's coming over time. And what you see is because there is really no market return here, 0% return assumption, their account value, which the gray shaded area, is starting to drop. As they're taking withdrawals, that's depleting their account value. The important point here is that they're actually -- they're taking -- they're funding the withdrawals out of their own account value. At this point in time Jackson is not -- has no obligation with respect to the withdrawals. Now you get to the point eventually, when the account value has been depleted, you can see the bars has shifted from a light blue to a dark blue, that's when the insurance carrier, in this case Jackson, would be responsible for those guaranteed income payments until the policyholder passes away, okay?

Now this is a 0% return assumption. We're going to do better than that. You know, history has proven that we do, do better than that. So what happens if markets do better? Those blue bars become very small. Or if market does as it has done historically, are just going to go away completely. Contrast that with our competitors, because they're not going to get good equity -- when the markets are up 20%, they're not going to participate at the level that we're going to participate. So they're not going to get those good equity years. So this actually is pretty close to the actual profile that you'll see with our competitor set. That's just not going to generate enough good returns given the structure of their funds, the volatility control and the forced asset allocation. So it's going to look very, very different, okay? So let's jump in and talk about the pricing and (posting) methodology that we follow at Jackson. So the first thing is that we're going to identify the concept, right? And so that way, they'll come through distribution. They'll come up with an idea. We'll let our competitor products -- we do reverse engineer those products, if they make sense. Often times they don't, or in some cases we'll actually just create the product. Elite

Access, for example, is a product we created in the industry. We'll do their necessary risk on those products. Does it fit our risk appetite or risk framework? Does it -- how does it fit with everything else we do? And lastly, can we hedge it? And Elite Access, again, is a perfect example. We did the risk over -- diligence on Elite Access. What you do is Elite Access has a lot of really interesting funds. You've got a lot of funds that just can't hedge. So by definition, we made the right decision. It was the right decision not to put a guarantee on Elite Access, okay? But -- so that worked out really well. And of course, there's a regulatory review. The lawyers get involved. So I'm going to skip that.

Setting assumptions. Brad -- I think Brad highlighted that pretty well. We have -- where we have credible internal data, we'll use it, where we have -- we'll do -- we do look at industry experience, industry studies. But at the end of the day, I think we price conservatively on assumptions. We want to make sure we're covered, okay? Risk-adjusted stochastic pricing. And I'm going to thank Mike here because he's going to really help me with the slides. He just -- he just doesn't know it yet but he's helping me here with you from yesterday. We took a 2-pronged approach to pricing, okay? So the first approach we look at. And this is unique to the industry. We look at real world scenarios. And we price it at the tails, okay? So what does that look like? We look at a Ct70 measure and that -- it's a little acronym there. So we look at the worst 30% of scenarios, okay. And we set a price on that basis, okay? So it's very much in the tail of our real-world distribution. And you come up with a charge. Then we're going to look at it on an adjusted marking system basis, that's a -- step over to a different machine. And on that basis, we use a long-term historical implied volatility of 25%, which actually is not that different to what implied volatility is today, okay? And on a market assessment basis, you typically are growing at the swap rate and discounting on a swap rate. We make an adjustment for that. And when you think about it, if I have a claim 20 years from now that I know I need to start building a reserve today to fund that claim 20 years, I'm not going to invest in swap rates today to fill that obligation 20 years from now. I'm going to invest in a AA corporate or an A corporate to fill that obligation. So we make that adjustment. So we make 2 adjustments: the volatility and the AA corporate. And we come up with a mean charge on that distribution. And that's a second set of charges. So that's the methodology. Now I got some numbers, because Mike shared the numbers with you yesterday. In 2007, we were charging, I think, it was 95 basis points for our charge -- was our charge. That 95 basis points was Jackson's real world charge, okay? If we ran our models back then, we came up with 95. You saw on the other charge, it was 65. That was the industry charge, if you recall that. That was the mark consistent charge. Why is that? Why is it lower? Think about it. In 2007, implied volatility was low, rates were really high. That works really well from the markets' historical regime. So if you're falling in that regime, you're going to use 65 basis points. We use the greater of the 2. So we charge 95 in the cost of sales. And there's some distributors that were not particularly happy with those. But I think they're happy today. And what -- how did that play out? Well step forward just a year later, implied volatilities, boom, went up, rates down. What does that do to your markets that's surprising? It's not 65 basis points anymore, it's closer to the 95 basis points Jackson charged. So what did that allow us to do? It gave us the hedging budget we needed to take care of the tail, whereas the competitors were stuck with the 65 basis points. And I think that they've never really truly recovered from that, okay? And that pricing regime still is with us today. We're still using it. And you see it. I think it was 135 basis points, I think Mike, you showed yesterday against the industry, the charge of 115. And so we're really -- it maybe is a little more expensive. We offer investment freedom, there's a cost to that.

It's a little more expensive. But I think it's more resilient to the cycle. There is going to be peaks and valleys to the cycle. But you're going to get a charge that we're comfortable with. And I think our customers are comfortable as well. So it's a disciplined pricing process. There's optionality in these benefits, as you probably know. We need to understand that -- those benefits. What does that option look like? Can we hedge it? We do a lot of sensitivity analysis in the key risk parameters of the price to make sure what are the drivers that are affecting the pricing. And one big important takeaway is we do price each benefit on a stand-alone basis. We're not subsidizing. The optional GMDB is not being subsidized by the optional GMWB. We're not pricing our guarantees by saying, you know what? We'll dig in to the base contract fee and subsidize that to make the guarantee cheaper. No. It's very much done on a stand-alone basis. It's holistic. And in a formal approach holistic. All the key stakeholders are involved. You know it's ALM actuarial, distribution, risk. We have everybody that's important at the table looking at these products. We have a formal -- we have a product committee where these are reviewed. We have assumptions and methodologies. And our pricing are reviewed annually, as Brad already highlighted. And to the extent that there is a new product or a new risk that's emerged that will go even to the -- to the group level and potentially even to the Board level, if it's got that much materiality, okay? So very formal approach.

So let's look at the pricing of a GMWB benefit. Okay. So we've already come up with a charge, right? We -- the 2-pronged approach came up with a charge that we're going to use that's pretty resilient. How does that look on the path of history? So these are -- this is a distribution of long-term equity -- a long-term return. So it's going to be an 8% kind of equity return, 18% volatility. And discounting the cash. So it was at that AA curve, the curve that I talked about. And what you see is the present value of the profits of an unhedged GMWB and where it falls in the % power rank of history. Because we are pricing it and deep in the tails, 90% of the time, what we've charged should be good enough. So we didn't do a hedging at all. We're going to be covered for 90% of historical times. But there is a tail here, right? And so we've charged enough on the front end. So what do we do? We use that guarantee fee to truncate that tail, get rid of that tail. Now it takes away a little bit of the profit in the rest of the distribution. But we've taken away the bad stuff. And retained upside for most of the historical returns. So that's -- the point of this, as much as anything is, obviously, the pricing is here for you to see. But a lot of this is -- it goes back to our approach to pricing and hedging, okay? So we're pricing into the tails. Our hedging should focus on the tails, okay? If you haven't priced it appropriate in the front end, there's no amount of hedging that you can really do to fix it, okay? So they work hand-in-hand. It's very much a symbiotic relationship between the 2, okay?

So one thing, a key input in our pricing, of course, is investment freedom. And it's a differentiator versus us in the marketplace. And I'll walk you through the bars here. Not really some bar. But the charts here. The gray area is the allocations are in-force to equity. The blue is bonds. And the red area is the fixed bucket. What you see is a dash line that goes across at 83%. That's our pricing assumption, that's what's embedded in our pricing models with respect to the equity allocation. And what you see going back to 2010 is we have not exceeded that 83%. What you do see is the market is -- that gray area is drifting up from call it 70% to around 78% kind of on a real-time basis. So what's driving that? It's not the policyholder doing that. They're not changing their allocation. They've set the experience. And I'll get to this the next slide, is that they've selected and they've sat down with their financial adviser. They select an allocation that works for them, call it 75-

25. And they stick with it. What changes their actual allocation is the equity markets, because they participated in a strong equity market. So the market has kind of reallocated them up, okay? And of course, if the market ever drops, it will reallocate them down. But the key take away is here that where we stand today, we've still got a fair bit of conservatism against our price assumption of 83%, which actually works quite well from a hedging perspective, as we are actually heading to the actual asset allocation. So this reinforces the transfer dynamic that I talked about. The -- you can see the bars there, are people shifting their allocations. So if they were 75-25, they're now 76-24, you'd see a 1% little bar. You can see how small these bars are going back to 2007. So in general, policyholders select an allocation that works for them. And they don't change it, okay? And actually investment freedom has risk with it. And so we want to make sure that we're covered. And so we -- this is the level of granularity that we look at the data to make sure that these asset allocations, are they shifting? Are we going to see a regime shift? And so we do monitor this quarterly to make sure that it all hangs together. And you can see the bars there are very, very small. So fund manager selection. So we have a lot of funds on our platform, which I'll get to in a second. As you probably know, investment freedom was what everybody offered in the marketplace pre-global financial crisis. After the global financial crisis, you saw a shift away from it. You saw individuals go to volatility control, forced asset allocation. We stuck with it. But there is -- we have to monitor it. This is a very rigorous process that we follow. Not a lot of funds come on our platform in a given year, very few actually. And we'll remove funds from our platform that just don't -- are not performing as we expect them. So even before it gets to my team for our due diligence review, there is a JNAM, which is Jackson National Asset Management. They are actually the ones that submit the funds to ALM for recommendation, okay? They do their due diligence on their end. And they look at it from a much broader perspective than they -- broader perspective than I would. They'll look at the organization. They'll look at the fund manager or they'll look at the technology of that investment manager. So they're looking at all the soft stuff. So to speak. And some of the returns as well. Then it comes to us. And we do our due diligence review of the fund, okay? So we typically need five years of data on a fund is what we're looking for. So we can run the key risk adjusted metrics that we need to look at. And it's probably, the ones that you guys know very well. We'll look at alpha, betas, excess return sharp ratios, M-squared ratios, information ratios and probably one of the more important ones is the downside-upside capture ratio. Because what we really want to make sure happens is, when the fund goes down, ideally, we'd like to see that fund outperform its benchmark or hedge-able indices. Because when you think about the risk to a variable annuity, which we'll get to in a little bit, it's the down equity markets. So if that fund -- if the markets -- the general marks or the benchmark is down 10% and that fund is down 8%, that's actually a very good result for us. It fits well with our risk profile. If the fund actually underperforms on the upside, it's not ideal. But that's not a risk that we're worried about. Upside equity markets are not they a risk to our variable annuities. So we watch that downside, upside capture very, very closely, okay? One thing that we -- and of course, we look at a couple of other things: trackability, tracking error, the consistency of the returns that the fund managers are providing, that's something we'll look at. Then, of course, we do a lot of analysis on the returns against the benchmark and against our hedge-able indices to make sure that it's working as we initially thought. Remember, we did the due diligence on the front end. But then we come back and look at it again to make sure it's performing as we expected, okay?

One thing that we require on our platform is individual holdings. So if you're managing a fund. And you've got a 2% allocation to Coca-Cola, you're going to give us that exposure. We'll know exactly how much that exposure of Coca-Cola. The next fund manager is going to have 7% allocation to Coca-Cola. My team will consolidate our overall exposures. And what you want to make sure, you don't get to a situation where you've got 20% of your separate accounts sitting in Coca-Cola. If Coca-Cola has a really bad day, then you've got pretty bad -- that actually has financial implication for the company. And we have limits in place to prevent that from happening. But we do monitor at that level of granularity.

Listen, it's something that we're pretty strict about. If you don't want to give us your data, then you can't get on our platform. And I think the fund managers actually get it. I think they're -- they understand it. And it's worked very well for us to be able to get to that level of granularity.

So looking at this, our separate account funds, these are our top 10 funds. And the first thing that stands out, the biggest fund is a balance -- the biggest fund is 4.4% of the separate account. So we don't have any material concentration. You're going to see a lot more funds here than our competitors. If you looked at their top 10, you're going to see probably about 10 funds. And they're all going to be about volatility control and forced asset allocation. What you see with us is a balanced fund, number one. You see the S&P 500, we're doing a pretty good job at hedging that one. The -- and a lot of managed moderate, managed growth, these are balanced funds. So even though we've allowed people investment freedom, they ultimately select asset-allocation-type funds, which by definition, are going to be 70-30, 60-40, 80-20, depending where you fall on your risk chart. So they're not 100% equity-type funds. So they've given us investment freedom. But people select funds that make sense from our perspective as well. So no material concentration to any one fund. And the ones that are -- have a decent concentration, they're good funds. But we have 65% of our funds are diversified amongst 131 fund managers. So we feel pretty good about that. It's a very diversified mix. And it's performing extremely well.

So with that performance, of course, is over the last 5 to seven years, we've done really well in our separate accounts. And that should flow through in terms of the actual in-force health of the book. And that's what you see here on this particular profile.

So in the top left corner. So this is the unhedged GMWB cash flow profile, okay? So just to set the assumptions. It includes only the guarantee fees. It uses prudent best estimates, which are aligned with the statutory framework. It assumes a 5% gross return. So pretty conservative assumption based on history. Then what we do is we look at the -- and let's level set the bar. The bars on the top left are -- those the fees that we're collecting. Then you got the claims that emerge. And I talked about 20 years out, you start to see these claims start to emerge. And again, this is under a 5% growth return assumption. Take out the fees. And it's -- the account is barely moving up. One thing you'll notice is that the claims are many, many years out in the future. And when I PV those back, what you have is $12.3 billion of PVF guarantee fees against $2.2 billion of claims. So the net PV of $10.1 billion. So very strong positioning, basically. And this is as of 9/30/2018. So came into the October market movement from a very -- position of strength. If you -- and we'll do a round on a couple of sensitive here. So we look at what happens if rates are down 100 basis points. Now if you look at the cash flows, the absolute cash flows, they look exactly the same. Because again, we're using a 5% assumption. What we're doing here is discounting the cash flows at 100 basis points lower. And you can see the numbers are very consistent based in down 100%. It's back to this contingent aspect. It's -- if equity markets do well, the interest rate risk becomes -- it's not as important a factor, right?

Now let's look at a down 40% scenario. Now you start to see the -- of course, the red bars start to get a little bigger, which makes sense, start to see claims emerge. So the pedia benefit is close to $14.3 billion. What you see is the guarantee fees have actually increased to $13.6 billion versus $12.3 billion, which doesn't seem intuitive given the market just dropped 40%. There's 2 things at play here: one is persistency. Because if the market does go down 40%, these people have guarantees. They're more likely to persist. So the lapses will come down a little bit. So we're going to collect more fees. And just as important is the fees on a guarantee are benefit based. So if you had a -- if you're account value is $100 and your benefit base was account value and the market dropped 40%, you're account value is $60, right. But we're going to charge the guaranty fees on that higher benefit base. So even though the account value has gone down, we're still charging off the higher base. So that helps with the PV as well, okay? So we'll see a little -- better PV fees, even in the down shock. So even if you net those 2 positions, it's pretty much a push. And this really has to do with the fact that we're pricing the tails. We've got good history here behind us in terms of returns. We've got -- we wrote the business at very good times as well. A lot of the growth in the book, which we will get to in a second has come post-crisis when the market was quite a bit lower in the S&P. And as we sit here in the 2,900 area, well maybe not today. But they participate in that. And so even before hedging, the book is pretty resilient. Now we do hedge. And in a down 40% market shock like this, we'd expect hedging gains of $15 billion, okay? So that takes care of that negative pretty well. And even if you say, well, you're using a lot of your fees to do hedging, okay, even you zeroed out the $13.6 billion, you know what? I'm not going to take any credit for that. You're still going to get hedging benefits that are going to exceed the PV of the benefits. So from that perspective, it still works, okay?

Again, this is -- just reiterates that we wrote the policies at a good a time. The markets have done well. And you could see, this is the same chart as before, just a bigger version of it. You can see the $10.1 billion, which was at the end of Third Quarter. This just shows the timeline of how this has progressed over time. Starting at $2.5 billion and it's growing to $10.1 billion million over time. So just -- a wonderfully positioned block, especially as we came into October, okay?

So cohort analysis. I mean, we do this as much for your benefit as ours because we don't actually manage the book this way. So let me walk through what we're trying to get accomplished here with this slide. If you look at the business as a cause of a lot of our competitors' problems, it's that legacy book. It's the old stuff that they don't want to talk about. It's the stuff they're trying to get off the books. We have that, too, okay? But the difference is, when the market fell 40% in 2008, we didn't actually force our policyholders to get out of funds that they wanted, force them into volatility controlled funds or do things that basically piss them off. They stayed committed to their original allocations. And they're really happy today because the market has gone from 670 in March of 2009 to whatever it is today, 2,800. You could see -- 2,700 or something like that. They participate in that. And so you have a 103,000 policyholders on the GMDV side that have been through us -- through this fun ride. They're 6% of the money. They're happy. Their account values have been restored. We're happy from a guarantee perspective. And you can see, obviously, we've grown a lot since the crisis. We have much bigger cohort that's come post the crisis. We have 931,000 policies that have been written with a GMDB. And the moneyness on that is actually (19%) of the money, as of 9/30/2018. So the GMDB block is really good. And GMWB, similar story there. The old stuff, a smaller block, 38,000 policyholders, pretty close at the money. And the new stuff, 809,000, 2% in the money. That, by definition, is not going to get too far away from being at the money. There's the step ups in these products. So as the market goes up, they're going to reset. If the market -- if they're $100 and their benefit base is $100, the market goes up 25% in a given year, their account value will go to $125. So it will look like you've got really good moneyness. But as soon as you get to that contract anniversary a year later, the benefit base will go to $125. And you'll back to at the money, okay? So at the money is a really good place to be from a GMWB perspective.

So again, we managed the crisis really well. The market did drop 40%. We hedged that. Our policyholders stayed committed with us. Our solvency was very strong, as you know. And they stayed with us. And I think they're been rewarded for doing so. We had no write outs, write-downs, goodwill impairments or charges taken against VA. And the stuff we had written post the crisis, it's -- as Mike's chart showed, we went from 95 basis points to 135 basis points. So it's better priced. And we wrote it at good market levels.

So hedging philosophy. I think -- hopefully, you're mostly familiar with this. We're always looking for those natural offsets to the books. And we stress it and make sure that we're within risk tolerances. And we do look at pretty onerous shocks here. When we -- when I say within risk tolerance, for equities, we're taking instantaneous down 40% shock. How do we look at it under that basis? For interest rates, we'll look at plus or minus 100 basis points, these are instantaneous. How do we look on that basis? Credit, every single bond that Brad talked about has a base default assumption associated with it. We're going to take that and multiply it by a factor of 10. That's what we think a AA shock is for credit, 10x the long-term historical default assumption for a bond, okay? It's not an immunization-based strategy. We're not -- every single small little 1% move in the market, we're not trying to manage. I was up all night, I didn't sleep at all last night because of the times zone difference. And the market must have had a 1% move 3 times, it seemed like, in the middle of the last night. So interesting time series for us. But we don't worry about those kind of moves. We worry about the big moves, right? We worry about moves, what happened in the month of October. When the market, at one point, was down 10%. I think, it finished off -- finished down 7% for the month. We want to be very effective in our hedging program, greater the 90% effectiveness into this big market moves, okay?

And the next 2 bullets are just part of our core hedging philosophy. We look at the assets that we have on the book and liabilities on the books. We stress test them. But we don't give ourselves any benefit of rebalancing. It's what -- we only take credit for what we have on the books, okay? And that protects us from things like gap risk. If the market does drop 10% in the course of the week, buying derivatives when the market is dropping 10% is about the worst possible time to be doing so. It's expensive. You're going to get picked off from a bid aspect from the dealer. And so you want to make sure you have those hedges in place before that gap, if that happens, okay? Requires a significant portion of their hedges be option-based. And we'll get to the -- we'll show you the economic profile and what that means. Options give you gamma, okay? You need that gamma in those bad scenarios and that'll hit home, I think, in a couple of minutes.

The Greeks that we manage delta, rolling gamma, delta. Again, we don't -- I talked about it, we're doing -- following an immunization-based strategy. But I want you guys to walk away here and say, there are still folks on the down 40%. But they're not really watching with the down 5%, up 5%. We have -- absolutely look at the entire range of profiles. We do look at smaller shocks as well. And to make sure we're sitting from a good position there as well. We're always interested in risk. Again, we talked about how we manage that from the highest level of the organization given interest rate risk exists across all our products. And gamma is the second order of delta. That's that convexity, which we'll get to in a second. We don't hedge implied volatility. We've talked about this in the past. What we do focus on is realized volatility. And what we do is we kind if sit in that down 40% scenario, once that scenario is played out, I think, we can all agree that volatility just -- is going to pick up. It's going to be more expensive to protect yourself going forward. So we want to set aside effectively a capital buffer. When that event happens, do I have enough -- have I set enough money aside to make sure that I can protect myself for the next move, whichever move that might be because the regimes here, they're kind of -- they're memory-less in a sense that the market dropped 40%. But these stats don't really care about that. It says, what is the next down 20% look from that perspective. So you want to make sure that you've that capital sitting there, that hedge budget. So to speak, to make sure that you're covered off for the next leg down.

There's an economic focus here. That's -- the cash flows that we've talked about, those 5% of cash flows, those are the economic cash flows. And that's what we focus on with respect to our hedging program under normal conditions. But there are times when the statutory considerations become biting and we have to reflect that. And we're actually in a situation like that right now in a real-time basis. So just hold on for a second on that one.

And the hedge program, we -- of course, we adapt it to the market conditions. And one thing we've done recently. And I'll just jump right into it, is the strategy is unchanged. But the methods that we're using, have changed a little bit. So we're back to 2008. And I say, if the market dropped 40% in 2008, we had $1 billion of hedged payoffs is what we had assumed from our counter parties. And we have, roughly speaking, about 15 counter parties that we work with. And on a real-time basis, it might be about 10 that we're actively trading with. So if you take $1 billion and, say, that's what I have in a down 40% event. You are going to divide it by 10, I've got about $100 million of unclouded rise exposure to a given counter party. So I have protection with counter party A on Friday, that I thought was there. They go under on the weekend. The markets are probably not going to open up very long on Monday morning. And I thought I had protection. I no longer have that protection. So I want to make sure that I'm pretty diversified in terms of my exposure in the tail scenarios, right?

So our strategy, as you probably know, back in 2008, was predominantly put options. There are a lot of put options. So we had this counter party risk in down markets. And we had a little bit of short (features) as well.

Stepping forward to 2018, now when the market drops 40%, we've got $15 billion of payoffs in the down 40% scenario, okay? So if I stuck with my original strategy and I use those same 10 counter parties, I have $1.5 billion of unclouded rise exposure to any given name, which is a material number, if one of them gets into financial stress in a down 40% scenario, which is a possibility. So what we've done here is kind of reshaped the proper -- we used different instruments. So we've gone to more of a short (features,) long call option position, okay? And that's roughly speaking about 80% of what we do. We're still doing some put options. So about 20%. But if you -- I know you guys like to look at the schedules and the blue books, what they're called. You're going to see a lot of call options in the schedules and you're probably going to be wondering, why are there bank call options when there is downside -- risk downside equity exposure. So I think this should hopefully help with that, okay? So what we've done now is we've bought a lot more call options. Now our counterparty risk is actually to upmarkets. We need those derivative counterparties to pay us when the market goes up. And I think that's a pretty good assumption. If the markets are up 20%, 30%, if they screwed that up, then I don't know. But they should be there for us to make those payments to us in an up scenario. Okay? So if none of this makes sense, hopefully the pictures will help.

So in 2008, you we have a vanilla put. So if the market goes down, you get payoffs. And you can see, it's labeled there, counterparty risk occurs when the markets are down, okay? What we've done, as I indicated, we've done short features, which is like shorting a stock. So the market goes down. And you get gains, it's a delta one instrument, of course. The market goes up, you lose. And you can lose unlimited. While we can't -- clearly can't have unlimited losses to the upside. So what we've done is put out about a lot of call options to protect the upside exposure. By doing that, as you can see the counterparty risk now is to up equity markets, as I indicated before. You put those 2 pictures together and you've got a synthetic put. It's called parity. You basically have the same exact picture as you had before. All you've really done now is change the counter party dynamic, which is a really good thing. So we do have -- we still have payments, don't get me wrong, when the market goes down. But who is our counterparty now? It's the largest exchange in the world. It's a CME. So we feel pretty confident that that's the right place to have our protection in place, okay?

So this is a -- this should be new. This is the unhedged economic profile. So what do you hedge, Steve? This is probably as close as -- is what you're going to see. This is the cash flow on an economic basis and let's talk about the profile because, I think, to me, it's fascinating. So if you're going up markets, for example, you see that as markets go up, the economic liability gets better. It actually reduces, right? But that gets to a point where you see it starts to flatten out. And this is due to the step-ups that I talked about before. If the markets go up, deposit holders are going to ratchet up, effectively become at the money. So you effectively cap up your upside, right, on an economic basis. Again, this is just a guarantee. Obviously, if the market is up 30%, while this may be capped up from this perspective, we're going to be really happy with the base product with markets up 30%. So that's the upside. On the downside, you can see how this is not a linear profile. The first 10% down is bad, the next 10% is worse and it just keeps on getting progressively worse. That's convexity in action, okay? That's when I talk about gamma, that's what we're talking about. If you're actually using futures to hedge that, futures are a straight line. They're not going to actually cover the risk that you want. And by definition, you're going to be chasing the market as it's rolling down. What you want to have in place is gamma. And that comes from options, which is the way we approach it, okay? So this is our economic profile. This is what we hedge in normal times. We've also given you the statutory profile here as well. And it doesn't always match the economics.

So let's talk about the upside. And I think Mark highlighted this in his presentation yesterday, in terms of where things are with respect to reserves. If the market goes up, there are no reserves to release at this point in time. Then Chad will get to this as well, in his session a little later. And so you're floored out. So you're not reflecting that good news of equity markets going up. It's not coming through in the statutory methodology, as it stands right now. In the extreme that the market were to double, you can see this come through. I think, we can all agree, if the market doubled, that would be a really good result for a variable annuity business.

Probably more interesting than that now is, look at the downside profile. It's convex as well. So you got that convex profile that we talked about before. But if you look at 0 to 10%, what you see -- you see an interesting dynamic. The book is in such good shape, you don't actually start seeing reserves being put up in the book until you see a 5% to 10% drop in the market, okay? There's this buffer. Effectively, a good news. It's sitting -- that's not being reflected. So to speak. So when the market drops, you're not going to put any reserves up and that's -- and this was tested very well in October, when the market dropped 7% and the hedging performed exactly as we as expected, okay? And again, this profile was at -- as of 9/30/2018. So this was our profile on the statutory coming into a very -- a reasonably down equity market in October. So putting those 2 together, the economics and again, we focus on the economics. But there's going to be times when the stat is going to become -- it's going to be the binding constraint. And we're actually seeing that on the upside on a real-time basis. So we are doing additional hedging on the upside in the form of additional call options -- on economic call options on the upside to protect our statutory reserves, okay? Statutory capital position. Then you start to see the profile on the downside. And Chad will walk us through in terms of the numbers that we've actually been spending in the last couple of years, as we have -- and we've had to live through this dynamic, okay?

On the downside, you can see, they both have a convex profile but the economic, which we're hedging to, is actually a worse profile than the stat. So you're actually going to get better results from 20% drops from a statutory perspective than you would have from an economics perspective because you got this little, kind of this deductible, right? This first 5% move down, you're not going to be putting up reserves. Economically, you're going to be seeing that liability hit. And what's really nice is you get it to down 40% and you can see the 2 profiles converge. And as I said, down 40% is our risk limit. And so as it stands, at 9/30, the hedging that we're doing economically aligns very well with the hedging that we need from a statutory perspective, okay? So stat causes -- there's quirky things happen with stat in extremes. We've had strong equity markets. So we have to live with the dynamic on the upside. Now if we go past down 40%, you're going to get to the point where the statutory requirement will be more (seen in the) economic. But we'll deal that. We'll deal with that when that happens, okay, as these are point in time shocks.

So wrapping up, we have a long history of risk management at Jackson. We've been around for a long time. I've been working with Chad for many, many years, 17 years in about a week. We've seen all kinds of equity stuff, even global financial crisis. We've had flash crashes. We've had Brexit. We've had the Trump election, the Trump Tweets. We managed to -- we managed through all that. We've had a credit cycle that we managed through. We saw a 137 tenure in July of 2016 that we managed that. And we've obviously benefited from rising interest rates since then. So the team has -- we've been there. And I think we'll continue to be there in the future.

So we've talked about our product design. We chose the right product. We stayed away from GMIB, focused on GMWB. Our fund selection, we stuck with investment freedom and managed that. There's risk associated with it. But the rewards are there for us and the policyholder. And the pricing, we have that two-pronged approach to pricing, that's more resilient through the cycle, which has benefited us as well. The in-force book is as strong as it ever was coming into October. And the hedging, it's adapted. The strategy is unchanged. But we'll adapt it and as we walked through the counterparty risk example. And lastly, we are defensively positioned. So if the market does drop 40%, we're going to be well protected for an event like that. Thank you.

Chantal Waight {BIO 4315288 <GO>}

Okay. So we now have time for a quick coffee break. If you can be back here for 9:30, please, when we'll hear from Chad.

Paul Chadwick Myers {BIO 2234559 <GO>}

Good morning. We'll get rolling here. So I think hopefully you saw some good insights on risk managements and limit frameworks, all that type of stuff. We obviously take this very seriously, I think, as you would've seen from Brad and Steve's presentation. And I think a long-held view that we hedge economically. I'm going to spend a few minutes here trying to bridge the accounting and economics because, I mean, we got a lot of questions these days, I think, in part because we're a little bit unique in the industry and partly just because this is extremely complex. We get a lot of questions around interactions between the economics, the various accounting, why stat is going one way, IFRS is going another. Why we're not seeing more stat -- more cash coming out of the stat side given the buildup in the markets and the balance sheet. So I'm going to seek to address some of those today, dig a little bit into the vagaries of statutory and IFRS accounting. And hopefully, that will not -- hopefully, that will add some clarity supposing we use it. But actually I thought what I'd do, just kind of level set for a minute as well on the economics of what we do in the different products that we offer, before we get into the accounting. I think it's just helpful as a reset.

So fee base, basically the VA spread effectively fixed annuity and index annuity and life is life. If you look at the various pieces of this, obviously, fee or VA is the vast majority of what we do. It's the vast majority of the growth that we've seen over the years. And if I think about the revenue pieces of that, relatively straightforward. There's the base contract fee and really asset management fees, which are there to effectively cover off some of the expenses there such as commissions, general and administrated type of expenses, those types of things. And also, on the revenue side, we've got guarantee fees, which is there to handle the hedging and the various benefits that would come off on the expense side.

VA historically has got very low capital requirements. It's a very capital-efficient product. And as such, with a strong returns we have on it, it's the highest ROE product we have.

If you look at the underlying economic drivers of that, in terms of what could impact the profits going forward, equity markets are fairly obvious ones in terms of the level of the -- the absolute level of the account. What kind of fees we can charge, what kind of benefits we have to pay. So that's the bigger one. Steve mentioned on the interest rate side, on VA. Really what we're seeing there is the discounting of future benefits is really the main dynamic that goes along with interest rates there. So to the extent that we have benefits, this contingent risk of interest rates there.

Longevity, since most of what we offer is GMBW, that's the most popular product we have. It's a lifetime income plan. And to the extent that people are living very, very long lives, then there's a potential exposure to the extent the market is not doing well, to have longer payments going through time. Hedging effectiveness is, obviously, a key one, to the extent that we have this equity market exposure. And policyholder behavior, which, as Brad mentioned, is conservatively set and updated frequently. Those are the dynamics that we have within that. If you look at the spread business, a little bit more forward. Investment income is our main revenue source against that. We've got commissions that we pay out for the products, general and administrative expenses and interest credited. So we're really looking at the core revenue dynamic there or profit dynamic is the investment income, less interest credited, the balance that we have left over there is there to pay commissions, general and administrative and to generate a profit.

Spread businesses tend to be the higher capital requirements in the U.S. and as such, they tend to be more on the low end of the ROE spectrum. From our perspective, what we sell, we're still happy with the ROEs but they're just on the lower end of our product set. Main risk there, interest rates, as rates move around because there are various guarantees there, credit spreads in terms of when we put the products on the books. Wider credit spreads tend lead to better profitability. And of course, defaults, to the extent we have defaults come through, then that's going to impair profitability.

On life side again, relatively straightforward. Premiums collected, some of investment income that comes off of the building up of the fund. That's offsetting commissions, interest credited, death benefits, G&A, those types of parts. Then, again, this falls from a capital intensity perspective, it's really in between the fee and the spread. So this really lands more in the middle of our ROE and required capital dynamic. Mortality interest rates, credit spreads are -- they are the pieces that are determinant of the overall profit picture.

So digging into a little bit now to accounting. We're going to stick mercifully to just 2 of our accounting regimes this morning. Let's start with stat versus IFRS. On the stat basis, statuary really is the regulatory solvency-based regime that we deal with in the United States. It is designed with the protection of long-term policyholder protection in mind. And is -- solvency is the priority. So as such, it tends to be fairly conservative on a number of measures. Certainly more conservative than any other basis that we manage to.

A couple of examples of that, for instance, would be on the acquisition expenses, what we refer to as CARVM which just shorthand on CARVM I think it's in the glossary but really, all we're looking at there is effectively the value of the surrender charge that we have. So if somebody puts $100,000 into a policy, there's a 7% surrender charge in place effectively. There's a $7,000 kind of expense allowance there, if you will. And that really is what is extensively the CARVM allowance. So just really the value that's for (inter) charge. So just a little bit of shorthand there in case this gets jargon-y. But stat has as a relatively quick amortization period on those acquisition costs. And I'll get into that in a little more detail. Similarly, a conservative view of deferred tax assets. The only thing that's not specifically tangible, specifically not cash, stat has a fairly conservative view on. The reason stat is important to us, besides just, obviously, we like being solvent, is that it also determines how much cash we can push back out to group at any given point in time. Contrast that with IFRS, which really more of a longer-term view of earnings, more of a matching of revenue and expenses is the concept there. Similar if you look at some of the same things that I talked about like for instance, the acquisition costs, theirs as opposed to the CARVM allowance, which is what's on stat. You've got the DAC, deferred acquisition costs, which ostensibly is really the commissions that are paid. That's capitalized up front and amortized over time. And that amortization period aligns with the profitability of the overall term of the products. If you have the product you expect to be around for 30 years, you'll see DAC being amortized over a longer period of time and in proportion to the earnings that are coming off of the block.

Similarly, on something like deferred tax assets, deferred tax assets are allowable under IFRS to the extent that they are reasonably recoverable and not specifically limited formulaically like they are under stat. One nuance, which I'm going to get into on IFRS is that, there are some limitations to what we can look in terms of the GMWB fee recognition. So that does cause some differences between the 2.

So with that stated, let me just dig a little bit more into stat for a minute. Again, some of this may be a little remedial for some folks. But I just want to make sure everybody is tracking before we get into some of the more detailed slides. So ostensibly, for us, for GMWB, the most relevant statutory metric here is AG 43. There are other pieces to statutory, I'm just trying to keep it simple here with AG 43. If you have GMIBs, that's under a whole different regime. And I'm not intending to get into that today.

So within AG 43, Steve mentioned this before, I think it was Steve who mentioned this before. So it's the -- it's this of a stochastic set of scenarios. We project a whole bunch of various equity and straight and similar type returns and we're going to look at the CT70 or the average of the 30 worst percentile of the outcomes. That's what AG 43 looks at. And it's more inclusive than IFRS. And what it includes is really all the contract fees, the -- if you think about the revenue source I put up on the first slide, it's really -- all those revenue resources are in there as well as forward-looking hedging. But they are subject to prudent margins and other various limitations. Some of those limitations include in the fourth bullet there you can see things like cash surrendered value floor, which I'm going to get into in minute. Standard scenario floor. So within AG 43 or within that framework, within statutory, you have this principle-based reserve, which is AG 43. And then you have the standard scenario, which is the deterministic view of things. And you're going to take -- you're going to hold the greater of the 2. So it's one conservative deterministic scenario in the standard scenario floor. That's not currently biting but it has some from time to time. There's various prudent margins that are put in. So policyholder behavior is not best estimate, it's prudent best estimate. So there's some level of prudence against put in the stat there. And there are things like asset-based fees, which we collect on the asset management. And Steve mentioned, J&M is our adviser to the very separate accounts. We collect a fee for being the adviser and a portion of that fee is really kind of built into the overall profitability of the contract. Stat does not allow us to fully recognize that because there's again, just some level of conservatism of the view that we might not be able to collect those fees in the future even though that's remote. Then there's just other things in there but let me just stick with cash surrendered value for the moment. And we'll dig into that just real quickly. But cash surrender value, just again, to clarify, all we're we talking about there is whatever the customer can cash out at that point in time. So I mentioned before, if you had a $100,000 policy, 7% surrender charge happens to be in place. The cash surrender value or what they can actually cash the product out at that point in time will be $93,000, in that example. So that's the cash surrender value. And that's within statutory. There's is a floor there that says irrespective of what all the principles based reserves look like, irrespective of everything else, these multiple tests, as I mentioned, with stand scenarios and some other things, the cash surrendered value floor is one of those floors. The reason I'm talking about that is it's currently the one that's biting for us. And it's relatively unique to the industry and actually somewhat unique for us, given the health of the book recently.

So I'm going to walk through a couple of examples here, just to try to clarify this as much as possible. So on the top chart, top left of the chart there, you've got a couple bars. So the gray bar is really just this principles based reserve. This is basically, you're taking your fees, you're taking your benefits, you're running through all these scenarios, you're taking the 30% worst on average. And you come up with this kind of principles based reserve that comes through that. The green bar is represented with the cash surrender value floor. So in this case, the example I was using before for that individual policy, the cash surrender value floor might be $93,000. The principles base reserve might look like $95,000. So now, you're going to hold the greater of the 2. So you got the gray bar, in this case, exceeding the green bar, which gives way to a little AG 43 reserve sitting out there, on the right hand side. This would be fairly similar to what you would see across somewhat normal condition in the VA world. This has been our history for -- a large part of our history. We've had AG 43 reserves up, as a most of our competitors still do.

Another scenario is, if you look at the bottom. And what you see there is, in fact, the block is healthy enough and that could be due to very good markets, that could be due to fees well in excess of claims. So if you have a more robust fee charging structure than the top one, that would help you, less aggressive benefits, that would also help you on the gray side. But nonetheless, you go into a situation here where the principles base reserve is less than the cash surrender value floor. Cash surrender value floor will be held as a minimum. So now, what you have is really no AG 43 reserve. But you also have this kind of latent capital sitting out there that's not fungible. It's not recognized on statutory balance sheet. But nonetheless, it does sit out there and does cause this gap. This is the situation that we find ourselves in recently, which is that we have floored out the reserves, which --

it's been in -- it's a policy-by-policy type of view of things. So what we've seen is over kind of 2016, 2017, we've had more and more policies flooring out. And now, we're to the point where we just -- the vast majority of our policies are floored out. There's just really not a whole lot of reserves up in our principles based reserve now. So it's below the cash surrender value floor on the whole.

So that's where we'd sit -- that's where we sit today, it's where very sat for a -- or at least as of 9/30, that's where we sat and that's where we've been for a while. But let's just take a look at some of the scenarios that would play out underneath this or what would happen to the reserves in a couple of different scenarios. So first one is, if you look at a meaningful gain in the equity markets, this should be relatively intuitive. If you have a better equity market, the principles based reserves should drop, right? Less benefits, more fees. That's a good dynamic. Principles based reserve will come down. In this case, it's still sitting above the cash surrender value floor. So you would have an AG 43 reserve still up. But the good news here is as the market went up and assuming you were hedging, you had hedging losses. Well you now have a reserve, at least, to offset those hedging losses and your stat capital is reasonably well protected and is moving in a constructive direction. So relatively well insulated from that. And obviously, a good economic outcome for the block. Scenario number 2, again, which is where we find ourselves these days, is now what you've done is, the gray bar or the principles based reserve is going to drop. So you're going to have less principles based reserves. But the cash surrender value floor is still a biting constraint. So what happens is, you now get a larger gap in between those 2 and more latent capital sitting on the balance sheet and no AG 43 reserve. So again, this, as we move through '17 and parts of '18, this is really the condition we've been in as we've seen larger gaps come up there. And the problem with this particular one, from an alignment perspective is to the extent that you're hedging. And we do, you're going to take losses on the hedge portfolio. You're going to get no reserve offset. And you're going to end up with pressure on statutory capital. As you flipped that around now and say, what if the market drops? Well in this case, again, the upper chart shows an increase in the overall principles based reserve. So now, you have a larger gap between that and cash surrender value floor. You're going to put up more AG 43 reserves. But the good news is, you've been hedging. So the hedge gains that you got offset the reserve increase against stat capital is relatively insulated. Not much movement happens there and you got a larger reserve coming through. The interesting part gets to be the bottom section. So now, in this case, again, where we find ourselves, as the principles based reserve moves up, as I've illustrated here in this assumption, you get just to the point where you get a slight positive reserve, right? So you've got to -- you do have your reserve increase, it's just slightly over the cash surrender value floor. But in the meantime, what you've had. And this -- I'll get on to this in a minute. And Steve mentioned it as well, is you've got this buffer, kind of a deductible, if you will, sitting out there as a cushion on the balance sheet in this latent capital. And as the market moves down, to the extent that hedges continue to gain value in a down scenario, you'll get the gain in the hedges. And what you'll see is you will not take the full reserve hit in this case because you're sitting on this cushion. And that will be beneficial to statutory capital. So while the condition that we've been sitting in for a while has built up latent capital position relative to the stated balance sheet, what it has done is built us a cushion for down markets. So if I just think about summing this up, there's a couple of dynamics you see here. First of all, I'd say within these 2 scenarios, we are not always in scenario 2, where we have been more recently. Generally speaking, we've been in a scenario where we have had AG 43 reserves. So the left-hand side is more indicative of past. The right hand-side inside is a little more indicative of current, or up until recently anyways. And there's nothing, I'd say, there's nothing structural there one way or the other in terms of one being good versus one being bad. And one thing I did want to address here though is I think there's been an assumption or an impression on the market that because we're not holding reserves, we don't have any excess reserves above cash surrender value floor that somehow that our book is more aggressively positioned than some of our competitors to have large AG 43 reserves up. And it's really quite the opposite. So if you have a large set of AG 43 reserves up, that tells me that your book is fairly underwater. And you've got a lot of payments you expect to make overtime. The question gets to be, did you have hedged gains -- as that reserve built, did you have hedge gains against that to build immunized stat? Historically, we have. What you see is a lot of our competitors have large AG 43 reserves, as they didn't have the hedging to offset that or they had assumption lows or whatever it was. And so they have large AG 43 reserves. They didn't have the hedging offset. That is not a position that should be viewed as a conservative or better place to be to have a large AG 43 reserve relative to where we sit today because, in fact, if you took out the cash surrender value floor, you'd say both of them are principle based. Neither one of them should be better than the other. It's just it is what it is, it's the cash flows that underlie. Because we have this floor, we actually have -- we're effectively holding extra capital, if you will, relative to those in the industry that are holding larger AG 43 reserves. So it's not a sign of conservatism to have a big red bar there, it's really more a sign of conservatism to be floored out at cash surrender value because the book is so healthy. But that's where we've gotten to.

So this should look familiar. As long as the break wasn't too long, this is the slide that Steve had up. And just for refresh, the orange-ish line there is the economic, the blue is statutory. So as we discussed previously here, we're in a position where a couple of things -- I'll just reiterate that Steve mentioned, one is we're reasonably well aligned in the down 40%. So we have not had to do additional accounting-based hedging recently in the more extreme scenarios because the health of the book. That are scenarios. And I've talked about this, I think, in prior meetings, like back in 2016 when the market was down and interest rates were at their all-time lows, that the down 40% would've been more binding on the statutory side than the accounting side and that we've had to do additional hedging in certain periods to address that. And this is where having the kind of buffer in the pricing comes in handy because you can actually absorb those within the budget. Also, Steve mentioned, we're in a situation right now where this is this latent capital place that we're at. You have to drop somewhere between 5% and 10% to see reserves starting to come back up. So you get into a situation like October when the market dropped 7%, well, that's actually a pretty scenario for us. Because what we see is some of that latent capital will come back through and emerge into actual capital. Obviously, the path of the markets going forward will determine exactly where we sit. If you get a big rebound in the market, you'll see some of that go back away and move back to this position. If you move far enough down the market, once you get past that buffer, there's a pretty good line between stat and economic at that point. And so, you cease to get additional benefits from it but it's there and it's extremely helpful in the environment we're in right now because we are in a very volatile environment and this is a very nice cushion to have in place at the moment. And we'll move on to the right-hand side of this. So this is really -- the right-hand side is really a bit more what has been an issue over the last couple of years. So this is the -- as the market moves up, we have no -- really literally no cash surrender value -- because of the cash surrender value floor, we have no reserves to release. And this causes a disconnect between the hedging program and statutory capital. So we've had to do additional hedging to meet that. So if you look here, what you see is a quantification of that. So this is an estimate of what the additional spend that we've had to do to deal with really this kind cash surrender value floor dynamic, you can see it was reasonably significant in 2017 of $500 million. I would -- before you adjust and tack that on to capital as a pro forma adjustment, I would mention that this is the spend. So obviously, 2017 was a very robust year in the equity markets. We had upside. And so a lot of -- these are the call options. These call options would've paid off at some level. So the $500 million is not necessarily indicative of just the incremental spend that's effectively lost money. However, it is an incremental spend and were the markets really not moved, were we not to get payoffs on those, this really becomes a drag on the overall capital formation and the accounting dynamics as well. So this is one of those things that because stat is what it is, because we have to protect stat, we are spending the money to do this, or have been spending the money to do this. One of the benefits of seeing the market come off from our perspective is not only get back to a better alignment between reserves and hedging, that's a good thing. The other thing it does is, as we slide -- if I go back real quick. As we slide down the left-hand side in that disconnect between economic and stat on the right-hand side of the page, it goes away. And then this spend starts to reduce. So we get to the point where we really don't have to be buying any incremental call options going forward. So that' a -- that'd be a good dynamic from our perspective. It's a little counterintuitive because the accounting actually gets better when the market drops, even though the economics get much better when the market goes up. So it is one of those things that we appreciate the -- that there's a opacity issue in overall accounting. We don't like it any more than you do. But we don't get to write the accounting standards. And the best we can do is, I think, try to explain it and work around it. I mentioned also under statutory that it's relatively conservative on deferred tax assets. And this is actually another one of those things that is market directional. So what we've seen is on stat, there's a myriad of tests that you have a look at to see what the maximum deferred tax asset that you can put on your books under statutory. And the biting constraint, as it stands right now, is there is a limit at 15% of capital in surplus. So any deferred tax asset that you have in excess of 15% of capital in surplus is not admitted. So what you see here on the chart is the amount of nonadmitted deferred tax asset that sits on the books at any given point in time in the last couple of years. What you will have seen also within this and that reason the deferred tax asset is moving in the directions it has. And the magnitude it has, is you've got a change that happened, I think, it was about three years ago with the IRS, where their view was hedging needed to have better alignment with the liabilities. It used to be effectively as recognized in terms of -- or sorry, realized. So realized gains and loss came through whatever time they came through. And so you can have the potential mismatch between a realization on the asset and liability. They didn't like that. So what they did is they put in just a formulaic three years of spreading of gains and losses on this derivatives portfolios backing the VA. So in this case, what you'll see is, for instance, in a year like 2017, market around 20%. We obviously took hedging losses. Those hedging losses got spread over three years. So we got to deduct 1/3 of it in the current year. And then 2/3 of it went into the DTA. The DTA -- the hedging losses now we're sitting in DTA, we're now subject to a 15% cap relative to capital and surplus. And so we end up with a large nonadmitted asset. The important point here is that because it's a 3-year ratable amortization, those do come through as deductions in the next two years. So we do see those come through. So to the extent -- there's a path dependency to what those nonadmitted deferred tax assets look like. It's somewhat dependent on the amount of capital we hold because if we hold more capital, we get to admit more deferred tax assets. And to the extent that we have fewer hedging losses, then we'll build up less deferred tax assets. The old ones will come off, the new ones won't come out at the same rate and you'll see this drift down through time. And that will drift into the capital. This also tends to be something that is a little bit of a cushion to the down side because as the market drops, we'll generate hedging gains, those deferred -- those will turn into potentially differed tax liabilities. The defied tax liabilities will offset the deferred effect the tax assets. They come into capital at that point in time. And you'd would be able see this get recognized. So it gives us a little bit extra cushion as well on the downside. I did mention at the beginning, statuary is conservative. And this is all part of what we see within that level of conservatism.

So moving on now from just stat versus economic into stat and IFRS. As has been noted, we have seen an increasing difference between IFRS operating and stat operating over the last several years. And it really kind of boils down to -- I mean, there's obviously a lot of methodological differences between IFRS and stat. But there's 2 that explain the vast majority of this difference here. And that's the guarantee fee recognition under the 2 regimes as well as how the 2 counter regimes handle acquisition cost treatment.

So I'll start off here with guarantee fee recognition. When we look at the reserves. So I'm going to start with the reserve, before I go into the guarantee piece of it. I mentioned before, the reserve under stat looks at really the combination of all the fees. It's not to say that, for instance, the base contract fees gets reported through the reserve, they don't. They get reported, as incurred. But if I look at the -- as I'm setting the reserve for the guarantee, the guarantee fee, it's a more holistic view. And those guarantee fees go entirely into the reserve calculation. So on a stat basis, all of the guarantee fees sit inside the reserve. The reserve, net of hedging, sits in the nonoperating portion because that's -- it's very volatile. It doesn't give you as much of an indicator of what's going on. On IFRS, it's a different view. It's a stand-alone, just the guarantee value or just the guarantee reserve view, which means you're going to take the fees you collect on the guarantees and you're going to look at the benefits you would be due to be paid on just on the stand-alone GMWB over time. And that's what the reserve is getting at. Because we price conservatively. And because IFRS is looking not at a tail measure but looking at a mean type of measure, what you end up with is at least we historically have ended up with because of our conservative pricing is a situation where there are more fees being collected than IFRS would say will be benefits to be paid in the future. So that's generally a good situation, except IFRS doesn't like the concept of the gain on sale or negative reserves. So at inception, we're capped in terms of how much of the fee we can recognize in the reserve. And so not only are we capped at inception, we -- when the policy is written, that same proportion of fees is really locked in through the length of the policy. So you don't get to bring in most fees down the line of hedging those up or release fees if it goes down, you just have a situation where the fee component of it is basically fixed. It's just the way the accounting metrics work. It is what it is. So what that means is 2 things: one is the reserve tends to be a little bit less volatile than the hedging, because we're edging the economics, we're hedging the whole fee. And we talked about this in prior events as well, where we basically have to ignore the PV of the fees that don't go into the reserve because they're not in the reserve. The hedges are actually hedging that. So to the extent that we see up markets where fees go up and hedges lose, we're not really getting -- capture that in the IFRS below the line. But the tradeoff to that is where you don't see a portion of the fees sitting in the reserve, it just comes through as earned basically. And that just flows through operating because it's not part of the reserve. And so what you see there is a difference between the ways stat and IFRS work with respect to this recognition. And the orange bars there will show you the growth over time, what we're seeing as the recognition of this kind of extra guarantee fee under IFRS world flowing through operating and not through stat. So that gives you a difference between the 2. I think the important point to make here would be that if you think through what IFRS is looking at, the long-term assumptions that IFRS looks at, if you were to see those long-term assumptions play out and you basically end up with the benefits that IFRS would project at the beginning of the policy, you basically would be back to a point where you get a different reporting outcome between the 2. You have basically no net reserve impact below the line, you would have recognized the fees that you should've recognized in operating. And that would be there. Stat would just show a gain and the reserves net of hedging below the line in that case because it will be counting all the fees in the reserve and you would've needed all the fees in reserve, again, back to the long term set of assumptions. So that's the dynamic that comes through with respect to that one.

And I guess, closing point on that, too, would be to the extent that we continue to price conservatively, continue to grow the VA book, this is something that will persist over time. And it'll just be a subject -- it will be -- the end result of how the cash flows come out over time will just be a function of how the markets play out and how hedging plays out over time. Secondly, the acquisition cost treatment varies quite a bit between stat and IFRS. I mentioned before, stat is pretty conservative. If I -- this is basically the gray and red bars are post time 0. But if you think about time 0 for a second, which not illustrated there just because it gets kind of messy. At time 0, you have the acquisition cost, which is basically the way IFRS is going to look at it is the commissions.

So the commissions will come through as -- get deferred under DAC before the amortization cost under IFRS. Stat doesn't specifically take the commission. What it does is it looks at the surrender charge I mentioned before. This is the CARVM reserve we talked about earlier. So stat looks at that, it gives you this expense allowance against the surrender charge. They're close. But stat tends to be a little bit more favorable or little bit more lenient, if you will, at times 0, inception. However, it reverses quite quickly because what you see is the gray bars on stat, it really just follows the surrender charges. The surrender charge runs off. And they tend be -- they tend to run off over 5 to seven years, depending on the product. If you get a 7, 6, 5, 4, 3, 2, 1 type of surrender charge and it runs off 1% a year, what you'll see is effectively a 1% drag per year for the first seven years, come through on statutory, that's shown on the gray bars. So that's the drag that you have for amortizing that off.

On the IFRS side, DAC is more aligned with really the profit emergence. So the red bars would demonstrate more what DAC amortization might look like over that period of time, as you have profits really spread over the entire length of the contract. So you wouldn't be as aggressively amortizing DAC at inception. But long after the IFRS -- sorry, the stats -- the stat CARVM allowance has run off, you're still amortizing DAC. So there's a big timing difference between those 2.

The other thing that is important note and, in more recent history is, while stat is relatively insensitive to market, the only -- you're not going to get any relief from the reserve or for that CARVM reserve amortization. If you had a huge drop in the market, you actually could see it amortize faster. But that would be a very, very big tail type of event.

The red bars actually do move up and down. And they move up and down with the market. So we've had a very good run over the last couple of years in terms of equity markets. And what that's done is given us more profitability on the book and more profitability farther out. So that has a tendency to slow down current year DAC amortization and really push some of that DAC amortization farther out into the future, which gives us a bigger disconnect between stat and IFRS in the current environment.

The other thing to take note of is the sales patterns because if you think about those red and gray bars running through time, that's one cohort. But if you think what all these cohorts that are running through, you going to have some that are old enough to -- all of CARVM reserve's gone. So there's -- so stat profitability should be must much higher than it would be under IFRS. And obviously, to the extent that you've got a younger block, it's going to be the other way.

And we wrote a lot of business, we had our big kind of lift off coming out of the crisis. And you saw pretty good growth in sales up until '11, '12 and into '13. And then a flattening out and a drop of sales. So we're still working through kind of the pig in the python kind of analogy of the -- of all the amortization costs from the ramp up in sales. And we're not getting as much of the benefit from first year sales on stat capital due to the CARVM allowance over the last couple of years because sales have dropped somewhat. And that's illustrated here.

As I mentioned, the stat's a little bit more favorable. But that's been relatively flat. That's the blue bar. So that's a little bit of benefit that we get from stat because the surrender charge typically exceeds the commission. That's just really the dynamic being captured there. So that's been relatively steady, '13 through '17. What's not been steady is the difference in the amortization between stat and IFRS.

So if you look back to 2013, what you'll see is the amortization of the in-force was reasonably well, consistent between the 2, I guess, a bit of luck there because they wouldn't expect them to be quite that close. But what we've seen is again, as sales have slowed -- sales increased in prior years and slowed in the more recent years, what you've seen is an increase in the drag from stat relative to IFRS. And that's demonstrated with the green bars. So what we've seen there is about $400 million a year swing from 2013 to 2017, that's really mostly a timing difference between how stat and IFRS are handling the acquisition costs. This is something that will reverse through time. And we'll see a better in line between both stat and IFRS.

So I think if looking back over the last several slides, we've got clear headwinds coming through in terms of the -- just the conservatism that's sitting in stat. We've had, obviously a, I'd say a fairly significant drag, given the positioning of our books and given the conservatism of stat. But I think just to put that more in context, while if you look at the overall performance of Jackson in terms of cash flow, capital and resilience of the book, what you will see is, going from 2007 through 2018, the 2 blue lines, the solid blue line will be the gross amount of capital. And overall, the capital really hasn't grown over those 10 years. Part of that's due to the fact that we have obviously, we remit quite a bit back to the group. We have a lot of -- with the group -- anyways.

And we've had a number of drags coming through in terms of the -- in terms of that. We also have a very capital-efficient business model. If you think about the transition we've had from pre-crisis, where we were much more fixed annuity, indexed annuity, higher capital requirements; to a position where we've got more variable annuities, less capital requirements, the capital hasn't really needed to grow materially. And you see that through the RBC ratio, which is the dotted blue line, which again, has kind of vacillated between 400% and 500%.

So if you just stop with the blue lines and said, well, that doesn't seem all that great. You're kind of flat over last 10 years. That would be ignoring the fact that we've remitted $5 billion in dividends back to group over that period of time. We've absorbed what's effectively the equivalent of over $1 billion of equivalent capital hits in the tax changes that we saw over the last year. And we've grown balance sheet over 200%.

So if you think back, you look over this period of time, you think about the out turn that we've had on capital has been extremely strong. Steve brushed on this a little bit earlier, too. But this -- if you think about the context of the last 10 years, that's a 50% drop in the market, lowest interest rates in 1000 years along the lines there. We've had the commodity collapse, a little bit of everything. So despite all the changes we've had coming through there, despite the fact that we're remitting a lot of capital, despite the fact that we've got lot of regulatory headwinds, we've seen a very resilient capital position. And we built a very strong business here. It is very resilient to all kinds of market shocks and continues to be able to be cash-generative, which gives us a large level of comfort because we're not done yet with the regulatory fund.

If I -- as a quick recap, if I go back to 2017. So we started the year in high 400s in terms of RBC. We saw a 75% RBC -- or 75-point RBC hit from the tax reform that we saw go in last December. We additionally paid a $600 million dividend. Net-net of all that was we ended the year at a 409% RBC, after what's effectively ($1,003,000,000) or ($1,004,000,000) capital draw between those 2 impacts.

If you look forward to first-half or look back into first-half of '18, again, we started the year at 409%. We ended up with the second leg of the tax impacts. The first tax impact had to do with, really, deferred tax assets and carrybacks and things like that. That was more of a capital, or a numerator-type of event. There was a follow-on piece, which is the NAIC updated their -- the tax factors for the various risks. And that's a denominator-type of effect. That came through. And we adopted that in first half of '18 once the numbers were available. So it took a 35-RBC-point impact from that, paid out a $450 million dividend. And we're still above the RBC level we started at the beginning of the year. So again, strong performance there.

If you look at that 1.5 years, 110-RBC-point impact, which again, is north of $1 billion equivalent, paid over $1 billion of dividends and still in a very strong RBC position.

I'll note here, just as a little blurb, not a fan of this particular measure in terms of the CTE positioning. But I know a number of our competitors are out there talking about it and I know it's made a lot of you curious about where we stand. So if you look at mid-year, we'll be holding capital north of a CTE98 position. I don't like it because it's not comparable across companies. It's not what we manage to. But hopefully, your curiosity is now sated, the fact that we're north of 98 and on par with some of the other disclosure that are out there. I think that will go away. Even some of the people who have been excited about the CTE measure have already said that under the new VA regime, they won't really be bothering with it anymore.

Looking forward. So we still have 2 more legs in this race. And the first one is the C-1 factor update. This is the -- I think it's been 20 years, roughly, since the NAIC updated their default factors, also referred to as the C-1 factors. They are just about at the end of doing that. They pretty much have the factors together. What's in question at the moment is when they're going to be able to implement. This a very large rebuild of their systems to be able to handle all the inputs from the insurance companies that are coming through. So there's some question as to whether that's going to happen in '19 or '20. It looks probably more likely like it's '20 at the moment, unless they're able to pull a rabbit out of the hat.

But that said, our estimate at this point, it's about 30 to 40 RBC points. The reason there's a little bit of a range around there is this is a denominator impact, right? This is not hitting capital, it's hitting required capital. Because there's so much leverage in the formula, it really would matter a lot whether we were at 400 or 450 or 500 RBC when the change actually went through in terms of how many RBC points it would be. So that's why there's a range around that. But I think it's relatively well-baked at this point.

Then the other big impact that's sitting out there is the NAIC VA framework change that's been headed up by Oliver Wyman. That, again, is something that is expected to come in, in 2020. There is the option to spread that over three years. I think we'll see whether it makes sense to spread or not, spread when we get there. It's not that big of an impact. As you can see, we're looking at something in the neighborhood of 40 to 50 RBC points on that. And again, this is more of a leverage type of thing. So what we're seeing is, we see a roughly equivalent increase in both our adjusted capital. So an increase in capital and an increase in required capital. So when you start with 4 to 5x the required capital, then you get a leveraging impact on that, that's not helpful in terms of the RBC ratio itself.

This is one of those things, as I've mentioned before, that the industry may reset down to a different view of capital. The rating agencies may as well because this is one of those things where, when you take both of them up, you just depress the ratio. So striving for a higher ratio doesn't necessarily make an immense amount of sense because the risk hasn't changed.

But anyways, within that, we're looking at a 40 to 50 point impact. And as I've said before, one of the benefits of the new methodology is that it should be a little bit less volatile in the down markets. Just for those of you who are deep into the wonders of statutory accounting and capital, you know that there's a reserve calculation, there's a capital calculation. Each 1 of those has 2 prongs to it. Any one of those 4 pieces could win at any point in time. It makes the calculation very volatile potentially, in down -- steep down markets, depending on what rates and equities and everything do. That really goes away under this new regime. And so we should see a much more stable downside. And presumably, less need to do additional stat hedging to the extent that we see -- we talked about the down 40 in the past. The stat should be more stable in the extreme downs. And so that would be, I think, welcome from our perspective.

And so yes, just to really -- to wrap this up, then. We don't know exactly the timing on C-1, again, likely '20. Certainly, NAIC will be '20. So when we look at this over the next couple of years, we are -- we're seeing less of an impact going forward than we've seen historically from the regulatory stuff. So that's helpful. We do expect that, given the planned capital formation that we see coming through over the next couple of years, that we will be able to absorb these hits, as well as pay our normal robust type of dividend levels and still come out with a relatively strong RBC position. So we really don't see anything that's going to come through this that's going to significantly impact our business model or remittances or anything like that. So we're reasonably calm about that situation.

So in summary, just, I think a couple of things worth talking about. And hopefully, this laid out the continued track record of delivering cash through crazy markets, all kinds of regulatory changes. We've continued to be able to do that. Kind of back to Barry's Ferris wheel -- or not Ferris wheel, merry-go-round.

See, I'm on the Ferris wheel now. I'm on the wrong one. You get high, you get altitude sickness. So see, that's not good.

So the merry-go-round. That's really what we've been on in terms of that. And I think that's a sustainable, continue to be workable, scenario going forward. We continue to drive significant value creation through our market-leading position. We're in the highest-return segment of our market. We are by far the market leader. And we've shown that we can control this, that we can manage the risks and generate strong returns. And that continues to be the case.

We continue see a strong economic profile in the VA book. It continues to improve. Frustratingly, the accounting doesn't fully reflect that. That will change through time, depending on where the markets go. So stay tuned for that. But we continue to be well-positioned to deal with the upcoming regulatory changes over the next few years, still paying dividends, still doing what we're meant to be doing. And again, as Steve, I think, finished off all this, wrapped up in a nice package of a well-hedged, well-risk-controlled block of business that gives a lot of potential upside to the shareholder.

So with that, I will turn it back over to Barry.

Barry Lee Stowe {BIO 15021253 <GO>}

Okay. So 3.5 years ago or a little more, when I returned to the U.S. from my long run in Asia, I inherited from Mike this -- the leadership of this business and -- which as you have seen countless evidence that it's a best-in-class platform that was market leading, gaining market share every year, going from strength to strength, considerably outpacing all of its competitors. Mike touched on distribution capability, the efficiency of distribution yesterday, highest ranked by -- always in the top 5, our wholesaling force is always ranked in the top 5 by financial advisers, year in, year out. And we're the only life insurance company in the top 5. We're up there with American Funds and BlackRock and people like that.

Lowest operating cost -- again, Mike touched on all of this yesterday, off the charts, customer satisfaction. So I inherited this best-in-class platform. But the market was shrinking and had been shrinking consistently every year since 2007. We were under increasing regulatory pressure. The DOL rule was being talked about. And right about the time I settled in, it landed in my lap. So that was fantastic. But challenging -- but really created an inflection point for the industry. And there was also a lot of consumer skepticism. You had talking heads on CNBC, people who were financial planning correspondents and so forth, who did not say nice things about annuity products in general and variable annuity products in particular. And so notwithstanding this extraordinary strength, the fact that we were the leader, the growth in the balance sheet that Chad's highlighted, industry-leading return on equity. The fact that we have never created any drama that we are, as I said earlier, compared to some of our competitors, a little dull in terms of our consistent trajectory with financial performance. We found ourselves in a very difficult situation because we were in a shrinking industry. A virtuous company with a virtuous product in a shrinking industry. And so we quickly realized that while much of what we have historically done, which has been highlighted for you by Brad and Steve and Chad over the last couple of hours, should not change, should never change that we could -- must continue to maintain this extraordinary level of governance and discipline and financial prudence in order to ensure that we deliver promises made to consumers and to shareholders as well that there were other dynamics in the marketplace that required us to do some things differently. When you are -- when you find yourself in a position where you are far and away the commercial leader in the segment then it is incumbent upon you to become the thought leader as well, to become more vocal, to become the advocate for what we do not just as a company. But as an industry, who we are, the social utility of what we do. And so three years ago, we took on that responsibility and decided, determined really, to lead the lead the industry back to growth. And we've been working very hard on this ever since. What we really did was we listened to the forces in the marketplace that were causing the scale of the -- the absolute scale of the market in terms of new sales to drop. And we adapted. We listened and we adapted. So we decided we have to create new products designed specifically for fee-based advisers. We decided we have to change the entire narrative, all of the skepticism, regulatory skepticism, consumer skepticism, investor skepticism around who we are and what we do. We have to change the narrative, tell the story in a more compelling way because it's actually a fantastic story. There were things we had to do around technology. Notwithstanding the fact that we have market leading and very low cost customer service technology, the entire industry suffers from very poor front-end technology. Part of that is because of the regulatory burden that's placed on us, the amount of paper and wet signatures in some states and so forth that's required by regulators. But even still, there were opportunities for us to engage very differently with consumers and with the advisers who advise them. And use technology to make it a lot easier to get these valuable products ultimately to consumers. And whilst we're going through all of this change and thinking differently and telling the story differently and doing a lot of very innovative things, we had to protect the core business, which has historically been driven by the brokerage market by financial advisers who rely upon commissions for their compensation.

So let's start with product. We launched new products. And again, the -- one of the reasons -- the primary reason, I guess you could say, relates to this graph. You see, there was a tipping point about three years ago where the assets flowing into wealth management platforms that -- where the adviser is compensated on a fee-basis exceeded the volume of assets flowing on to commission-based platforms. And it's not just that there was an inflection point, you also have to be mindful of the trajectory. So there is no doubt that fee-based advise is the future. People argue, Well commissions make more sense for this reason or that reason.â€ It is what it is. So we've decided, as an organization, three years ago to stop arguing and to be agnostic. We adopted the approach, which we hadn't before, which is that it is the consumer's choice how they pay for advice. We will adapt our product so that consumers can go to a fee-based platform or a commission-based platform. It's their choice. They can get exactly the same outcome from us. That's what we ought to be focused on. So we launched, again, our lead access product, which you heard about earlier today, our flagship product, which is the Perspective II product. We launched advisory versions. We've just recently launched Market Protector, which is a new FIA product also available on a -- an advisory basis. So all of these products have now been launched. Now in -- by taking out the commissions and by simplifying the lines of the product, what we think -- what we've also done is make the products easier to understand, they're simpler and you can compare them more readily. Without the compensation built into the product -- into the pricing of the product, you can compare it more readily to a mutual fund, which is, in fact, the product against which we are usually compared most commonly.

We also, as I said, are set out to change the narrative. And candidly, I mean, this is a gigantic task. And I have to say, this is one of the things that we've undertaken that I think is actually progressing more quickly than I imagined it would. And again, it's not just changing the narrative in the marketplace and running ads to say annuities are fun, you should -- everybody should have an annuity. It is having substantive conversations with all these constituencies to make them understand who we are and what we do because there was clearly, based upon the criticisms, there was clear lack of understanding of what our product does, starting with regulators. One of the other benefits of adopting this fee-based approach where we strip out the commission and as a result, strip out the surrender charge in these products. So essentially, you could buy one of these products now on a fee basis and you have a liquidity if you want a -- if six months later, you want to change your mind and get all your money back. It's -- there's no drama at all. By introducing these products and then going and visiting regulators and saying, â€œLook, here's our value. Here's what we think a modern variable annuity ought to look like.â€ and engage them in that conversation. What we'd actually done from a regulatory perspective is solve the 2 overwhelming objectives that regulators had historically had around our products, which is commissions, which they believe -- by paying upfront commission that introduces the prospect that the adviser's judgment is impaired when he's advising a client. Again, we can argue about this but that's their view. And it's not a completely unreasonable view. And it removes the surrender charge because those 2, the commission and the surrender charge, are linked. Without the commission, you need no surrender charge. And so what we found immediately is that regulators start reacting very differently to the product. In fact, we had one meeting with a regulator, a very prominent regulator. He's incredibly influential over our industry and -- there were a group of us there and after a long meeting and we explained, â€œHere's what the fee-based product is going to look like.â€ It hasn't actually been launched at that point. On the way out, this guy says to us, â€œI really look forward to seeing this product in its final form. I think my father's going to need one of these.â€ Completely different approach from regulators. And that has continued.

We've -- and so changing the regulatory environment doesn't happen overnight. It involves constant regulation with -- or constant interaction rather with lots of regulators and as you know, it's not a single regulator. There are elements of our business where the DOL has had insight. All elements of it are under SEC purview. We have FINRA , which oversees the compliance of the broker-dealers' distributions and so forth and then there are insurance commissioners in every state where we do business and we do business in every state. So it's a lot of conversations, a lot of road trips going to places like Idaho and Indiana and Tallahassee, Florida and so forth to meet with regulators. But we're making enormous progress and we are, generally speaking, getting a very positive hearing much -- a much different sort of conversation around these products going forward than there has been in the past.

We've also engaged with legislators because a lot of the oversight of our industry can be impacted not just by administrative change but by legislation. So there's -- there's a bill called RESA that is moving through Congress. And we would expect -- well, elements of RESA had been attached to a tax bill that we expect to clear the House and the Senate and be signed by the President we hope before the end of the year. I mean, there's been an election but Congress is back in session now in what -- in the United States is called a lame duck session. There'll be, obviously, a change in control of the House of Representatives where the Republicans are still in charge for another 6 weeks. And it is highly likely they're going to pass another tax bill that will include provisions that are very useful to us, specifically around embedding the kind of products we manufacture into 401(k) plans, defined contribution savings plans, which the long and short of that is it allows us to reach out to people and educate them on the importance of a protected lifetime income long before they reach age 62, which, as you heard earlier, is the typical age where someone comes to us and say, â€œHere's what I've got. I'd like to sort this out.â€ So that's very useful. We've also -- we continue to engage, however, very closely with the SEC because another big thing that will be happening in the next 12 months is a new best-interest rule that will be promulgated by the SEC, which will speak to the level of care that advisers must exercise in providing advice to their -- to consumers. And this is -- in some respects, is sort of an alternative to the DOL rule, which has now been vacated by the court system and which is gone. The most impactful thing we've been able to do with the SEC is have a conversation with them about a very specific topic and that is the sorts of risks that the advisers must contemplate as they give advice to customers. And 2 risks that we are optimistic will be in the final rule that have not ever been in the rule in the past are the requirement that advisers take into consideration, the risks that consumers face around market volatility and longevity. And those 2 particular things, those are risks that in many respects are only mitigated by the products we sell. So as you can see, the environment is changing.

Let's talk about the consumer segment. You see the logo up here, the Alliance for Lifetime Income. We decided over two years ago that we were going to have to go out into the marketplace and make a statement about the importance of protected income. And rather than having Jackson go out and spend an enormous amount of money and say, buy a blimp or something and run TV ads and the sorts of things we've never historically done, we said -- we don't want a company that's the leading writer of annuities going out and telling people that annuities are fun because it's not as credible as if you have a coalition of interested parties. And it includes insurance companies but it also includes asset managers, including the firms that many of you work for and it includes consumer interest groups and consultants and they've all come together and they've all donated money and time and effort and thought leadership. And we've created the Alliance for Lifetime Income, which is educating consumers in a variety of ways: a lot of print advertising, there's a fantastic digital footprint that -- but most importantly, starting in the third week of September, we started running television advertisements that are very clever. Most of you in the United States may have seen some. There's a woman featured in one of them that drives these like jet cars so she's like a drag racer. There's a guy that swims with sharks, which -- I mean, you see this guy -- I mean, it's -- he's insane. But they're very clever ads. And the point of them is to highlight the need for entering retirement without risk. People live with risk all their lives. These people that we've highlighted in the ads live with unique levels of risk all their lives. And as they enter retirement, they want to retire their risks as well. And those ads have been impactful. Just in a matter of about 6 or 7 weeks, the focus groups indicate that the idea of annuity and what an annuity does is viewed with -- much more positively than it was six months ago. The number of articles and publications like The Wall Street Journal or the like that are positive on annuities is up 9%. The number of articles that is -- are negative about annuity products is down 10%. So there is a shift happening in the marketplace in terms of the way people think about these products. We have reached out to people who historically weren't friendly to us. I earlier referred to people who were on CNBC or the Today Show or one individual, a guy called Dave Ramsey in the United States who has a fantastic following does a daily radio show and provides millions of people every day with just common sense financial advice. And he's just -- he's a fantastic guy. But he never said anything nice much about us. And so we went and we've spent hours and hours with Dave Ramsey and with his people and we've talked to him about these new products and who we are and what we do, the virtuous nature of the product, the social utility of the product. Last week, I was -- I called in, Dave had me on his radio show, we were talking about some community work that we're doing together with his -- our foundation and his foundation. But he made a point of calling out the fact that he said, â€ Hi. Barry. Now yesterday, somebody called in and it sounded to me like they needed an annuity. And I recommended one and I hope I got the advice right.â€ I'm pretty sure he did. The point is, that we have turned the tide with these people and there are people who were very public, visible, vocal, skeptics, who are now believers and who believe that what we do is important and valuable. And the conversation at that level is changing as well. So you can imagine an environment in the future where these products are viewed very positively, where the regulatory environment is much more positive towards these products. And the result, I believe -- I'm not allowed to make forward-looking statements but I think I'm allowed to be optimistic and I am. I believe this is going to be a different world five years from now.

Another thing we've done to facilitate all this is the technology element. You may have heard us talk about this before in terms of building pipes. So most financial advisers, the way they interact with a customer is they do it all on their client management platform. And they can do anything by pointing and clicking except buying a product that provides protected lifetime income. And then they have to drag out a ream of paper and fill it out with an ink pen and it's just -- it's not a pleasant experience. What we've been working on over the last three years is to build technology that links our system to the operating system of the Morgan Stanleys and Merrill Lynches and all -- and the Envestnets and all of these platforms that various different advisers use so that they can link into us and transact far more easily than they've historically been able to do. There's still a lot of work to be done because we've done the work on our end. It will be largely completed in the coming months. There is the counterparties, the Envestnets and so forth have to work to connect with us on the other end. They're making good progress as well. We announced this collaboration with Envestnet in 2018 and the products will be available there -- will be both our commission product and our advisory product. But that connects us, makes it far more easy for 90,000 advisers to transact with us. It dramatically simplifies their life when a customer comes to them and says, â€œHi. I'm hearing about protected lifetime income. How does that work?â€ So we're creating a tailwind for the product with all of the narrative change. Then when that tailwind sort of hits the customer in the form of a consumer who walks in and says, â€œI'd like to hear about one of these things.â€ We're making it far easy for him to fulfill the need of that consumer.

We're also embedding the idea of a guarantee into the planning tool. As you are aware, many people go online, they do a bit of some robo-advice, a little do-it-yourself advice. And there'll -- there's countless tools on the Internet where you can go and say, â€œWell what happens if I save this much or that much? Do I get this return, that return? What's inflation?â€ And so on and so forth. None of these tools have ever said, â€œWhat happens -- what's the likelihood that my desired outcome is fulfilled if I have a guarantee?â€ And what we've typically found is if the -- if you work with this tool and you say, â€œWell based on what -- on your inputs, there's a 70% chance that the level of monthly income you want, you're going to get and it's going to last forever.â€ You introduce the idea of a guarantee and yes, you can imagine it goes up 20%, 25%. It becomes much closer to a virtual certainty that people's desired outcomes are met. So that's an incredibly powerful piece of this as well.

Advisory is the future. All this change will facilitate it. But the brokerage market that has built our businesses is the present. And we continue to dominate that. We continue to be the top VA seller in every channel where we're present. Our market share has continued to go up, 627 selling agreements with different broker-dealers firms around the country. And importantly, we have just announced a new relationship with State Farm Insurance. For those of who are unfamiliar with the property casualty market in the United States, State Farm is sort a main streak instantly recognizable brand to any American. There are State Farm offices in everybody's town no matter how big or small. They are the largest writer of consumer lines, property and casualty insurance in the United States. They are twice the size in terms of market share of their nearest competitors. This relationship -- they also sell life insurance. But they are overwhelmingly P&C. And they currently do not sell annuities. There's been huge demand within their sales force, 10,000 of whom are licensed to sell our products because you have to have a securities license as well. They'll start coming online in the middle of next year selling our products. And this again, I can't be forward-looking but I can be optimistic. And you should be about this too. This is a fantastic development for our business.

So what are the takeaways? This is a huge opportunity. The retirement market is vast. We are an innovator. We have market-leading capabilities from distribution, product manufacture, pricing, product management, risk management, customer service. From soup to nuts, we have unparalleled capabilities. We provide thought leadership as you can see. And that will only become more impactful as time goes on. And I hope what we've done today because our objective was to remind you that this business that you own is durable and virtuous and that the scale of it can grow much larger, the returns even more attractive and you should be proud to own it. I think we have to do a better job going forward, be more diligent about explaining the details, how the merry-go-round works, if you will. But it's durable. And I hope that's what you walk away with today. Now my other hope is that the presentations have been concise and in-depth. And so there's probably not many questions, maybe 1 or 2. We will have everybody come up to entertain any questions that might arise. It shouldn't take long, right? So guys, do you want to come back up and we'll have a crack at this?

Questions And Answers

A - Barry Lee Stowe {BIO 15021253 <GO>}

Yes. I could stand.

A - Chantal Waight {BIO 4315288 <GO>}

Okay. I said yesterday. So keep your hand up and wait for a mic to come to you. Okay. We'll start with Blair.

Q - Blair Thomson Stewart {BIO 4191309 <GO>}

It's Blair Stewart from BAML. I'll limit myself to one question. Chad, can you maybe -- or anyone for that matter, can you maybe give us a feeling for how the stat profit outlook might evolve over the next few years? Just given what you know about the shape of the book, in particular the amount of business coming out of the CARVM periods, how will that impact stats in terms of moving stat closer to IFRS perhaps over the next few years?

A - Paul Chadwick Myers {BIO 2234559 <GO>}

Yes. So that's -- it's an interesting question. And unfortunately, it's an it depends question. So if you froze the book in time, I think you'd see from -- just from the dynamics that are on that 1 slide, you'd expect to see a convergence between stat and IFRS. And obviously, stat would improve because you'd have the acquisition cost behind you. The dynamic is hard to -- really hard to handicap at this point is, what is the sales levels for if what Barry was talking about comes to fruition and we start seeing sales levels starting to accelerate again, you're going get a different dynamic between new stuff coming on, old stuff amortizing off. So it really depends a lot on the shape of the sales going forward. And it also depends a lot on the mix because one of the things I think that I've probably neglected to mention on the slide is when we look at the advisory products going forward, there are no surrender charges, there are no commissions. So there's no CARVM allowance and there's no DAC. So a lot of that noise just goes away. But what that also would do is -- to the extent that we saw big increase in sales on commission-based business, with surrender charges, we get a tailwind on that from statutory, from the CARVM allowance being set up and we see huge increase in fee-based, which you'll see as the acquisition costs coming through in terms of just the general marketing and wholesaling and things like that, that come through without really any offsets. You'd actually see a strain in the first year, which is not something you've seen historically. That dynamic makes it really hard to say exactly what it would look like going forward. But the corner line block should improve. Does that make sense? You're looking a little puzzled at me.

A - Chantal Waight {BIO 4315288 <GO>}

Okay.

Q - Blair Thomson Stewart {BIO 4191309 <GO>}

(And what would be the total?)

A - Paul Chadwick Myers {BIO 2234559 <GO>}

And that, I wouldn't quantify because it really goes back to what's the mix.

Q - Blair Thomson Stewart {BIO 4191309 <GO>}

Just ignoring the impact of new business for a moment. I mean, you gave an indication on the slide. It was a point --$2.3 billion as of 2017, right? Can you tell us where that goes?

A - Paul Chadwick Myers {BIO 2234559 <GO>}

I think -- what you could look at I think is from a normal perspective is that drag that we're getting today should reverse. So the $200-ish million hole that we're in today should reverse over the next couple of years.

A - Chantal Waight {BIO 4315288 <GO>}

Okay. (Heather)?

Q - Unidentified Participant

What's your outlook for remittances from JNL? Then how much of that you think will pass through to shareholders?

A - Barry Lee Stowe {BIO 15021253 <GO>}

Mike?

A - Michael Andrew Wells {BIO 4211236 <GO>}

I think the short answer to that will be (on account of there is nothing in there) from the point of the (U. S. book will automatically go to a normal board to do.) Thank you. There's nothing, as Chad mentioned, in the U.S. plans that would suggest any strain in remittance, including some of the changes coming in methodology, if you will. That said, there's a normal governance process on our Board, regulators and things that define our dividend capabilities that we wouldn't give a forward look to that.

Q - Unidentified Participant

So are you saying that you expect them to be (consistent but they're not?)

A - Michael Andrew Wells {BIO 4211236 <GO>}

Yes. I'm saying I'm not going to give you a forward look on dividend on the U.S. without regulatory approval or Board approval. I can't do that.

A - Chantal Waight {BIO 4315288 <GO>}

Okay. Jon?

Q - Jonathan Michael Hocking

Jon Hocking, Morgan Stanley. To horribly simplify this, would it be fair to say, taking what you said this morning, that the stat capital generations or the cash from the book is likely to be higher in a down market or an up market?

A - Barry Lee Stowe {BIO 15021253 <GO>}

Chad?

A - Paul Chadwick Myers {BIO 2234559 <GO>}

Well certainly, for -- a reasonably -- it wouldn't be if you had the 40% drops. They're reasonably well aligned. But you do have an asymmetry right now because of the kind of deductible concept we're talking about. There is a cushion there in the downside so to the extent that we saw a downturn, I think that would look better than an upturn from a capital formation standpoint in the near term, anyways.

A - Chantal Waight {BIO 4315288 <GO>}

Okay. Greig?

Q - Greig N. Paterson {BIO 6587493 <GO>}

Sorry, just two questions. One is, looking at the Oliver Wyman proposals, I mean, one of the key issues -- which cause you problems was your voluntary reserves and the low interest rate environment. And both of those -- well, the voluntary reserves, you've -- have disappeared and the interest rates have gone up, yet you've got a 40 to 50 basis points hit net. The size of it actually surprises me. I wonder if want to talk about the components. And the second thing is, I don't know if it's applicable. But I believe the NAIC is looking at a

C -- a new C for longevity risk. And sort of a 2-year time frame that will come into play and I know -- I don't know actually if they're just looking at sort of fixed annuities or impairment annuities or it might have an impact on the VA book. And I wonder if you want to talk about that.

A - Paul Chadwick Myers {BIO 2234559 <GO>}

So I didn't -- I'm sorry, I didn't quite catch the full part of the longevity. It was...

Q - Greig N. Paterson {BIO 6587493 <GO>}

So my understanding is the -- obviously, it doesn't include a C for longevity at this point. And that they are proposing to introduce one. Is it just for drawdown annuities, impairment fixed? Or will it impact the VA because it's affecting your longevity product as well.

A - Paul Chadwick Myers {BIO 2234559 <GO>}

Right. So I guess on the -- in terms of the Oliver Wyman piece, the -- I think the dynamic we're seeing there is there's really no need for voluntary reserves anymore. The thing about why we've been doing voluntary reserves in the past it's been because of the instability between -- I'd mentioned before, yes, you've got AG 43, standard and stochastic; you've got C3 Phase II, standard and stochastic. Any one of those 4 could be weighing in any given point in time. And that really gets to be the one that sets the capital because of the leverage in the formula, you get this dynamic of -- depending on which one -- whether it's hitting the numerator, denominator, you can get a very erratic RBC, which isn't really helpful for anybody to look at. So the voluntary reserves, we've used historically to stabilize that. The other thing I'd mention with respect to voluntary reserves is in the current stat regime, you've had a disconnect between what that tax reserve is and what the stat reserve is, creating a bigger stat tax difference. With the Oliver Wyman change, what you'll see is the new regime will be the tax regime so you won't have this noise coming through that would partially require a voluntary reserve. And you won't have this 4-pronged test coming through that causes all this instability in the RBC ratio. So from that perspective, we think it's going to be much more stable and won't -- we don't view it as a negative that we won't have to post voluntary reserves. We actually like the fact they will be in a regime that we don't have to post voluntary reserves. And again, they'll be more stable to the downside. So those are all -- I think those are all wins from that perspective. In terms of the interest rate risk, there's -- they've opened up more abilities or more flexibility to be able to deal with interest rate hedges and how you account for them relative to the reserve. I think that's a plus. That won't really affect us a whole lot because as Steve mentioned that's a -- it's a lot more of a contingent risk for us and in a very healthy equity market, the interest rate risk is not as significant. We've addressed that through hybrids and other things as Steve mentioned before as well. In terms of the longevity fact, I'm not actually familiar with that. I mean, currently within the RBC formula, there is an insurance risk, which is C2. That's already built into there. To the extent that they were to come up with something new or additive to that, I'd -- from what we've seen -- and Brad may have a view on this, too. I mean, longevity risk is not something -- it nets out pretty nicely, as Steve was talking about. It's not something we see as a big risk economically but...

Q - Greig N. Paterson {BIO 6587493 <GO>}

If interest rates are going to work, (if this is going to work) what expense -- sorry. So you removed the 2 issues that were gelling negatively with the Oliver Wyman proposals have gone away. And those were the big levers. I think we've discussed this a while or a few times. And so -- but why there's such a big hit of a 50-odd basis points if the -- sort of -- constraining factors that -- would have caused an issue have gone away? Is it to do with the prudency in the demographic assumptions around lapse in utilization or...

A - Paul Chadwick Myers {BIO 2234559 <GO>}

No. It's actually a little bit simpler than that. It's just the inherent leverage in the formula. So we're talking about an increase in TAC on the range of $100 million to $200 million. So we'll get better -- and we'll get a better view on adjusted capital and we'll have a capital requirement, which will increase by a similar $100 million to $200 million. So you're just shifting both up by a relatively small amount. But because you've got 4 to 5x leverage in the RBC formula, it just -- it effectively delevers the RBC. And I think you should see that across. I think a decent portion of the industry, I think you'll a similar dynamic. I mean, people have been pretty opaque about what the impacts will be, it won't be a big deal -- how much of an impact -- I think you'll -- you should see a general uplift in both TAC and required.

A - Chantal Waight {BIO 4315288 <GO>}

Thank you. We have Johnny.

Q - Johnny Vo {BIO 5509843 <GO>}

It's Johnny Vo from Goldman Sachs. Just a couple of questions. Again, back to Jon's question, in upmarket, it appears the hedge losses plus the growth means the capital formation is almost next to 0. So if we keep on getting an upmarket, will this put pressure on your ability to remit capital back to the group? That's the first question. The second question is in a downmarket scenario, implied volatility will probably exceed your realized vol assumptions. So what's the impact there? And the final question is that the capital base of your U.S. business hasn't moved. And I guess a lot of that has to do -- despite the fact that your balance sheet's moved up, a lot of that has to do with the fact that you're hedging a lot. Now what's the sensitivity of your capital base to hedge breakage if some of your funds don't go as you expect?

A - Paul Chadwick Myers {BIO 2234559 <GO>}

Okay. I'll start off with this -- you guys, any comments? So in terms of the up market scenario, I think you seem to imply that there is no capital formation for up markets. But we actually do -- even though in the environment last year, the market was up 20%, we still formed $800 million or so of capital if you look at the -- and that's the deployment we already floored out. It's the same dynamics you're seeing here. So what I was showing on the screen is not necessarily forward

looking -- I mean, it could be depending where the market ends the year. But it's more backward looking than what we've seen. So we've had -- as I think we've said before, capital formation tends to be even -- and I guess in a fairly normal market, a little better than $1 billion on the current run rate. And we've tended to have somewhere in neighborhood of $200 million to $300 million of kind of drag from some of the up hedging we've been doing that's -- and I guess we've talked about it last year. So that's -- yes, I think that's the dynamic. But we're still definitely capital generative in up-markets. It's just that you've got this latent capital conversation that I was having kind of building up there. So does that answer that question?

Q - Johnny Vo {BIO 5509843 <GO>}

Yes.

A - Paul Chadwick Myers {BIO 2234559 <GO>}

Okay. Good. In terms of realized vol versus implied, the dynamic at least with respect to remittances is that statutory does not -- statutory is not a market-consistent world. So it's got a fix long-term vol. So if I look at the reserve calculation and what's being driven underneath of it, that's going to be off of a more kind of 18-ish long-term vol. So what you actually see is to the extent the market drops and you get a big increase in implied vol, what will happen is our derivatives will mark in a positive way because of the positive vega effect. The reserve won't be specifically impacted by that. Then what we'll effectively do is -- there'll be a little bit of asymmetry that gets into the stat balance sheet. And then it'll inflate capital temporarily until some of the -- some of that vega kind of burns off. And so either vol comes back down or until the time value is realized or not realized on the options. Then -- I'm sorry, the third question?

A - Unidentified Speaker

I guess your sensitivity to down markets. With the basis for us, we actually calculate an indicator quarterly or we take the worst basis risk model we've ever had. What are the implications to our capital position? That's around $100 million. So we are monitoring that very closely. And obviously we're, basis risk is important to us. And recently basis risk is versus something like -- some of our international exposure. So we do things like, we've allocated a portion of our hedges to (re-fund EM,) for example. So we're actually tracking it at that level, to make sure we have a -- for that 10% of the block that has that exposure, we've got derivatives in place to cover the things like that off. So.

A - Chantal Waight {BIO 4315288 <GO>}

Andrew?

Q - Andrew John Crean {BIO 16513202 <GO>}

Andrew Crean with Autonomous. Given the almost mind-bending complexities of the accounting and the statutory basis, do you think there is any chance that public markets and portfolio managers will really be able to genuinely understand this and value it properly? How would you recommend we value the Jackson business? And if you think public markets are not capable of valuing it fairly, how would you propose not to have too much value leakage from the Jackson business?

A - Paul Chadwick Myers {BIO 2234559 <GO>}

Even after today?

Q - Andrew John Crean {BIO 16513202 <GO>}

Even after today.

A - Barry Lee Stowe {BIO 15021253 <GO>}

I think it takes probably more than one day, more than one day, every 5 or six years. As I said earlier, I think we probably have to do this more frequently, maybe in a forum like this and with a combination of this and reverse roadshows. I recall 12 years ago, there was a lot -- there was a lot of head scratching around Asia as well. And we didn't do it overnight. But I think we went through a process of investor days and reverse roadshows, where we familiarized you with the business in a more intimate way, gave you in-depth exposure that I think few competitors did and the result is a different valuation on the business. And I think there's the scope to that here as well. But Mike is going to be the guy that's the expert on this. So I will turn it over to him.

A - Michael Andrew Wells {BIO 4211236 <GO>}

Thank you. Yes, I think it's a fair question. I think there is a -- we talked about a lot of the challenges, a lot of the -- I wouldn't think necessarily headwinds. But a lot of the noise in the marketplace in the U.S. and I think you have to add to that, you've had competitors that were unsuccessful in this space doing sort of a good bank, bad bank play to exit their -- liabilities they shouldn't have written and write-downs they -- that were material. So Jackson's -- the group is about $600 million, was the original purchase price for Jackson. Let's put this in perspective, compared to some of the peers. So dividend levels are akin to our acquisition cost. $5 billion-plus of cash out in the last decade, return on equity calculations at 60-plus % higher than peers. No slips, no stumbles, no losses. The quality of the business I think is clear and given the long term look that Prudential takes at markets, you've got structural demand, you've got a leadership position, you've got best-in-class capabilities. If you are looking at doing anything, which I'm not suggesting for a second we are, you certainly wouldn't do it after competitors stumbled in a lot of the market to price those errors. So I think there's a lot of different things we can do to expand the business, to diversify the business, to derisk the business, all of which were, we're alive to. But what I wouldn't do is take somebody else's mark on risk when they've stumbled.

A - Chantal Waight {BIO 4315288 <GO>}

Barrie.

Q - Barrie James Cornes {BIO 2389115 <GO>}

Hello. It's Barrie Cornes, Premier Gordon. You talked previously about M&A and bolt-on acquisitions, I just wonder if that's still on the agenda? And if so, what type of company and how much firepower would you bring to bear, you think?

A - Barry Lee Stowe {BIO 15021253 <GO>}

Well we just did one, I'm pleased to say. They don't come as frequently sometimes as we'd like. But that's a result of the dynamics in the marketplace. It's, over the last several years, has been a result of what some people have been willing to pay for properties in the United States, which drive returns that were not particularly interesting to us. And I don't think would be particularly interesting to you. And so we've passed on those. But we are known in the marketplace to be interested in acquisitions of the sort that we just did. And under the right circumstances, some of you know that they will even be a little larger than that. And so it's still very much a part of our strategy and we'll continue to execute against it with the same level of diligence and hopefully the frequency will be more in the future than it has been in the last few years.

A - Chantal Waight {BIO 4315288 <GO>}

Oliver?

Q - Oliver George Nigel Steel {BIO 6068696 <GO>}

Oliver Steel, Deutsche Bank. Just to sort of help us with the CARVM and DAC calculations, what percentage of your business is fee-based at the moment? And...

A - Paul Chadwick Myers {BIO 2234559 <GO>}

Very small. Is it measurable?

A - Barry Lee Stowe {BIO 15021253 <GO>}

(inaudible)

A - Paul Chadwick Myers {BIO 2234559 <GO>}

We utterly dominate the space, let me say that. But the space is tiny. This is a very new thing.

A - Barry Lee Stowe {BIO 15021253 <GO>}

Let say a low single digits would be a fair...

A - Paul Chadwick Myers {BIO 2234559 <GO>}

Yes.

A - Chantal Waight {BIO 4315288 <GO>}

John?

Q - Johnny Vo {BIO 5509843 <GO>}

Just coming back to the risk appetite slides at the beginning. I'm slightly puzzled about how the dollar equity risk has stayed so flat, given that the book is so much bigger. Is that because you've hedged more? Or is it a function of the pricing of the book? Or market levels? How does that actual dollar equity risk stay flat, given the book is just so much bigger than it was back in 2007?

A - Brad Harris {BIO 20364978 <GO>}

I'll start. And Chad, if you want to kick in after this. So if you think about it, a lot of it is depending upon the health of the block of the business. And the risk that, that underlying block is representing. And so again, going back to the slides that Steve saw, you're seeing that as the block is grown. And you have the present value of the fees sitting on a 1 5 side and present value of the benefits, the present value where the fees had been grossly outpacing the present value of the benefits that we expect to see. So the health of the block has been growing tremendously. At the same time, it does mean that as you've also seen, that was roughly $1 billion in -- down, 40% shock a few years ago compared to where we have $15 billion sitting now. Then so, we do hedge more today. But at the same time, we're receiving more fees from those underlying consumers to pay for the hedging in which we are spending. So in a perfect world, we would be using these fees to hedge and I guess -- I know that we've talked about hedge losses in the past, to me, it's insurance. So we are spending money for insurance through the hedge program. And in a good market, we do not need that insurance. And so that's -- I guess I would define the hedge loss slightly different. It means we are spending the money we don't need. And that's a good thing for us long term. And so from a risk perspective, the -- it's mainly the block of business is remaining stable and if you also remember, it's because our capital levels have remained stable. And so we want to give out a certain percentage of our capital, we're not willing to put at risk any more than that. I think there was a question earlier regarding to the amount of capital that we're holding in, remaining flat in the market, in which we have also had an increase in our underlying block of business. We test that capital. So it's not just the fact that we're holding that capital level on a statutory basis, we have two different economic measures in which we value, are we holding the right amount of capital? Because the capital we are holding is based upon the underlying risk (revolver,) what we have in-force. And we validate that not only what we're holding from a statutory perspective is appropriate, by looking at we have group economic capital model that is one year VAR, 1 to 100 model. And that consistently demonstrates that we have surplus above on that particular metrics or statutory, that validates the statutory, we also have an internal capital metric that looks at paying claims and claims would come due. And also ensuring that we are holding the reserves that require each point in time. And it's a how many times you're going to fail on a AA. And that also validates the amount of capital that we're holding, relative to the risk of our business today, is appropriate.

A - Paul Chadwick Myers {BIO 2234559 <GO>}

And just a, it's just to dab a little bit on that too -- I mean it's -- clearly the amount of hedging has increased massively. I mean Steve showed you the slide, where 15x the hedging, we did 10 years ago. So there's a -- because capital is flat, because we set some of our critical limits based on a percentage of capital, which obviously is rational. We agree. We do have a very, very big kind of hedging burden, if you will, to do, year-in, year-out without a lot of flexibility, it's not like we can play around within the limit frameworks. We're generally having to hedge. I think it's an interesting question or conversation because we do have one or 2 folks in the industry that are thinking about -- thinking of it in terms of, kind of a first loss piece, where they're holding back extra capital to say, we don't want to spend as much for smaller movements and I think that would be -- it's again, interesting conversation. I'm not sure anybody wants to park a lot of capital to Jackson. But you could reduce hedging expense there and benefit in that markets more, were that to be the case.

A - Brad Harris {BIO 20364978 <GO>}

Yes. It's the difference between holding capital from a risk perspective, making sure you have the right capital to manage your risk appropriately and holding capital from the hedging optimization perspective.

A - Chantal Waight {BIO 4315288 <GO>}

Abid?

Q - Abid Hussain {BIO 20229932 <GO>}

Just one question for me, please. How should we think about the ideal level of capital for Jackson, in particular? What's the range of comfort around the RBC ratio? Would you, for example, still want to operate above 400% post the NAIC reforms?

A - Paul Chadwick Myers {BIO 2234559 <GO>}

I'm sorry, I couldn't quite...

A - Barry Lee Stowe {BIO 15021253 <GO>}

Could you repeat the question?

Q - Abid Hussain {BIO 20229932 <GO>}

Yes. So just in terms of capital, what's the ideal level of capital, how should we think about that?

A - Paul Chadwick Myers {BIO 2234559 <GO>}

Ideal capital levels?

Q - Abid Hussain {BIO 20229932 <GO>}

Yes. Then, sort of comfort levels around the RBC ratio? Is 400% the ideal level?

A - Paul Chadwick Myers {BIO 2234559 <GO>}

Yes. So I guess on the overall levels, we've seen the industry over the last couple of decades, really quite a range. I mean, if you go back to the 1990s, you'd have been, 250 was a perfectly adequate RBC ratio. They brought some intangibles in and some things changed along the way. And that kind of inched things up. We had the financial crisis, that pushed things a little higher. So I think the market's gotten comfortable somewhere in the, call it, 400% to 500% range, where I think we generally have viewed 400% to 450% as a pretty reasonable place for us to be. I think the -- I think you will -- I'm pretty sure you're going to see the industry migrate a little bit lower. They -- whereas some folks might have been high 400s, I think, the rest of the industry might feel like 400% to 450% is a reasonable place to be. I think. And I don't think anybody's going to be upset. Rating agencies, regulators, whoever, if you're closer to 400% than not. Again, depending on how everything comes through with the NAIC working group. And there's has been a lot of hits that have comes through over the last 20 -- last year and more coming through. So it wouldn't be irrational for the industry to reset back at that 350% to 400% range, I'm not saying that's our target and we're comfortable, 400% above at moment, we're comfortable. And we're not moving off of that for now. And I think we can sustain that. But I think given the amount of redundancy that's now getting built into the required capital on multiple levels, there's -- there would be a reason to hold a little bit less RBC going forward.

A - Chantal Waight {BIO 4315288 <GO>}

Lance?

Q - Lance Montague Burbidge {BIO 3978332 <GO>}

Thanks. Just going back to Andrew's question about how to value Jackson and given the stats, maybe the lowest common denominator for a lot of people and the need for the U.S. to be a good counterparty to a fast-growing Asian business in terms of cash flow. Is it a temptation to manage the business a little bit more towards that or maybe more of a balanced scorecard approach, whereby you can pull some levers to improve the stat numbers. And if so, what leavers could those be? Apart from the issue we talked about earlier with CARVM? And what else can be done to improve the stat numbers?

A - Paul Chadwick Myers {BIO 2234559 <GO>}

Well I think in terms of trying to improve stat, improving the actual balance sheet itself today, there's very limited things that you could do. I mean, it's a little bit of a -- evidently -- I mentioned for instance deferred tax assets, right? If you put $1 of capital into Jackson, you get $1.15 back out, because you would allow the deferred tax asset. The catch to that is, if we take the $1.15 back out, you lose 115% or $1.15. So it doesn't quite work that way. But if you're looking for higher stated capital, there are some of those latent capital dynamics that are out there, which could be improved through some mechanics like that. But not a lot of change.

Q - Lance Montague Burbidge {BIO 3978332 <GO>}

(In terms of flow?)

A - Paul Chadwick Myers {BIO 2234559 <GO>}

I'm sorry? In terms of flow? Right. So I think there, you're back with specific questions about where is the market? What's the path? As I mentioned, if one were to have the view that equity markets generally trend up through time, then it doesn't help the flow of capital in the short term. But if you held more capital, you're going to generate more capital going forward, to the extent the market moves up. Because there's more effectively risk capital in the business. There's -- I don't think there's any magic elixir to make a lot more cash come out. In fact, I think partly we've talked about managing to the economics and management to the long term view of things. Barry has talked about the advisery world. The advisery world's actually going to be -- the new advisery products will be somewhat capital consumptive in the early years, because of the lack of a CARVM allowance. So in some respects, the -- I mean, I think we still continue to generate strong amounts of capital. We continue to optimize the hedge program to try to be as resilient as we can for the up scenarios and deal with the cash surrender value. But I think the trend of the business that we're looking at is not going to -- it's not going to unlock some huge amount of cash all of a sudden. That's going to be much more market-dependent and where -- how much extra hedging are we having to deal with statutory dynamics.

A - Chantal Waight {BIO 4315288 <GO>}

Okay. Last question. And Andrew?

Q - Andrew Baker {BIO 20402705 <GO>}

Can I do 2 questions? Firstly, what is the total expense ratio or reduction in yield on variable annuities, taking into account advice fees, management fees and fund management fees?

And secondly, I mean yesterday, there were a couple of presentations looking at the value of the Asian business related to its embedded value. And the generation of cash in embedded value. Embedded value hasn't been mentioned once here in your presentations on the U.S. Is that an issue if you're going to put these two partners in the same bed?

A - Barry Lee Stowe {BIO 15021253 <GO>}

In terms of -- so what you're looking for in the first question, Andrew, is sort of the customer outcome?

Q - Andrew Baker {BIO 20402705 <GO>}

What is the customer's overall reduction in yield if he holds the product for 10 years?

A - Barry Lee Stowe {BIO 15021253 <GO>}

It depends on what he bought and it. And certainly in a fee-based model, it depends upon what he pays his adviser. If you're comparing it to a mutual fund, even if -- with our product, with a commission in it, it depends on what he's paying the adviser for the advice on the mutual fund. So it's a difficult question to answer. But I can tell you this, we regularly compare ourselves using a basket of our funds versus a basket of competitors' funds, to gauge what a theoretical customer gets and we also look at actual customer outcomes as well and what we typically find is, primarily because of investment freedom because we have, for the last several years, been the only company in the market that continues to offer full investment freedom, that our customers have consistently gotten market level returns where other customers have been muted, competitors' customers have been muted. But to say how much drag is it? I mean, it's difficult to answer it because it depends on the fee that the consumer is paying.

But the other thing I would point out to you is, it's a little bit like asking someone how much appreciation -- what total value creation did you get over the last 10 years of home ownership, contemplating all your expenses associated with that home. And you compare -- if I bought insurance on the home and if I didn't. Because fire insurance is not on your home is not something that you can generally equate a value to. It's an expense until your house burns down and that is effectively what we are doing. We're -- we use all these terms to talk about providing financial advice. And these financial instruments and solutions and so forth.

In the end, one of the best ways to look at our product from a consumer's perspective is it's fire insurance. And yes, you might pay us, on a typical size -- a typical customer might pay us $1,000 a year in guarantee fees and that's the fire insurance on his retirement income that will last him the rest of his life and it will provide a legacy to his heirs once he's gone. And as is the case with fire insurance, most people are not unhappy that they didn't file a claim. I mean. So it's a more complicated question than you make it. What was the second part of the question?

Embedded value.

A - Paul Chadwick Myers {BIO 2234559 <GO>}

Embedded value. Well Mike or Mark added up, it's -- are you saying would you expect us to focus more on EEV metrics going forward, or?

Q - Andrew Hughes {BIO 1540569 <GO>}

Yes. So it's really more of an observation that it makes it much more difficult for public markets to value a company where the proposition is you're going to value one side through one accounting method, embedded value. And another side through a totally different accounting method, which I'm still not quite sure how to value Jackson, whether I'm looking at your IFRS, looking at your stat, looking at your EV, operating net income. It's a vast array of choices, which is unlikely to maximize value.

A - Paul Chadwick Myers {BIO 2234559 <GO>}

One thought on that would, I'd say -- I specifically did not go into EV because we're not -- there's actually not a lot of distortions going on in embedded value. And just not wanting to prolong the conversation any longer than everybody would want to have. I don't think embedded value is a bad way to look at Jackson, actually, in terms of -- it's got a more long-term view in the market and better, reasonable prices. I don't think there's necessarily a disconnect between Asia and the U.S., vis-Ã -vis embedded value.

A - Barry Lee Stowe {BIO 15021253 <GO>}

Did I answer your first question to your satisfaction? At least evade it, elegantly? Oh, we don't.

A - Chantal Waight {BIO 4315288 <GO>}

Thanks, Barry.

A - Paul Chadwick Myers {BIO 2234559 <GO>}

Thanks, guys.

(Break)

+++presentation

A - John William Foley {BIO 4239156 <GO>}

Good morning. Everybody got dim sum. And I can see everybody is ready for the big finish. So what I want to use this time to talk about today is what M&G Prudential is, okay? What makes us different from our competitors. And why I think we have a compelling proposition for customers and shareholders alike. Along the way, I want to demonstrate why having asset management and life insurance under one roof makes perfect sense. I'll also set out the three competitive advantages which will arise from this business mix. But what I won't to today is give a detailed account of our future strategy and the financial ambitions of this business. We'll do that close to the point of demerger.

I know M&G pretty well, or M&G Prudential, I should say, pretty well. I've been with the Prudential group for 18 years. 11 years of that within M&G, I'm an Executive Director on the PLC Board. And as well as running the U.K. and Europe business, I've been be the group Chief Risk Officer and the group Treasurer. Now when Mike asked me to run this business, I said yes. But on 2 conditions. My first condition was that I get to choose my own management team. The team is now largely in place and I think we have some of the most able people in the industry. Mike Evans was appointed as our chair in September and Mike, if you'd just stand up and take a bow, in case anybody wants to speak to him at the lunch break. Together, he and I will appoint a number of non-executive directors over the coming months.

The second condition was that I needed a pot of money to upgrade parts of our business. This is necessary to enhance the customer experience and to improve customer outcomes. It is mostly about modernizing the infrastructure of the traditional insurance operation in the U.K. As everyone knows, there's been an undue investment in Prudential's U.K. and European business for the best part of the decade. Quite reasonably, group has taken the cash flows from U.K. Life and put them to very profitable use in Asia. Now the time has come to make a fresh investment in what is after all, the original Prudential business. As previously announced, we have allocated GBP 250 million of shareholder investment to set us up for future success, plus a contribution from the with-profits fund. This investment will help to lower our operating costs and to make us even more competitive. That's to the benefit of both shareholder and customer.

Now as well as reinvigorating our business, this investment will result in cost savings. We remain on track to achieve annual cost savings of GBP 145 million by full year 2022.

Now with both my conditions satisfied, I am confident that my team and I can grow this business, improve outcomes for customers and unlock the full value of M&G Prudential for shareholders. The truth is, this business has always generated tremendous shareholder value but it hasn't been fashionable to talk about it.

Our decision to merge and subsequently to demerge from group means that everyone now wants to understand our story. And I think it's a great story.

So let's start with the merger, which we announced in August 2017. As I'll show, despite the formal separation of the businesses over the years, our fund managers and strategic asset allocation teams have collaborated closely ever since Prudential acquired M&G. I like to call this a symbiotic relationship and I believe it offers huge potential to create value for shareholders now that we're operating under a single management structure. The formal merger of the two businesses last year has enabled us to extend this collaboration much more broadly. That means to other areas such as sales and support services, it also allows us to maximize the efficiency of our investment in new technology. But let's go back 20 years to when Prudential acquired M&G in 1999. The group paid approximate 10% of assets under management. There was some who said we were paying over the odds for this business. Now let's take a look at the return on that investment.

This slide shows how our asset management business has more than doubled in size. The number I really want to highlight though is the growth in assets we manage on behalf of external clients. This business is 7.5x bigger. It is also worth pointing out that the life fund assets was stable for much of this period. Now they are growing again, thanks to the success of PruFund. And you will hear more about PruFund shortly.

At the time of the M&G acquisition, the critics warned that life insurance and asset management would make for odd bedfellows. They said fund managers don't like working for insurers and that insurers don't understand or appreciate fund managers. Well it doesn't have to be that way and it's certainly not that way at M&G Prudential. In fact, it's a relationship of mutual benefit, with each business supporting the other to achieve the best possible outcome for customers. The result, I believe, is that M&G Prudential far exceeds the sum of the parts. And these numbers prove it.

What's at the root of this success? Much of it's down to the symbiotic relationship that I mentioned earlier between the fund managers and the strategic asset allocators of the life fund. Each team supports the other in multiple ways. First up, there is -- the life fund has acted as an incubator for the investment ideas of the fund managers. It has encouraged them to develop new strategies, including direct investments in real estate, private debt and infrastructure. Then back them with seed capital. Everyone wins from this collaboration. The 6 million customers of Prudential's U.K. Life business have one of the most diversified portfolios in the market. This underpins the reliability of their returns. The scale of the with-profits fund, now over GBP 130 billion, enables it to achieve a level of diversification not open to smaller funds.

At the same time, external clients have been able to share in this innovation under the M&G brand. Today, we offer pension funds and down to other institutions, a rich variety of alternative strategies originally seeded by the life fund. Shareholders also gain because this approach has turbocharged the growth in our institutional and wholesale businesses.

Along the way, we have quietly built one of Europe's biggest alternatives operations, with assets under management of over GBP 56 billion. As well as becoming the U.K.'s largest active fixed income manager, we are one of the largest private credit investors in the world.

As you can see from this slide, today we have a vast array of investment capabilities in both public and private markets. We are a leading investor in infrastructure, channeling our customers' savings into everything from hospitals to solar energy. Claire will provide more detail on our alternatives business in her presentation.

Importantly, these capabilities, like many others at M&G Prudential can't be easily commoditized by the passive houses. You can't reduce these capabilities to an algorithm. This is because they involve real assets or private assets. As a result, investment management fees for this type of active management are relatively resilient when compared to the pressures on, say equity, (eq free) portfolios and these assets are also stickier. The sourcing of assets and execution are critical in this space. Again, this is something that the team behind the life fund have done for many decades, especially in real estate.

Few know this. But M&G Prudential is one of the UK's largest commercial landlords. This is our first competitive advantage. The breadth of our investment capabilities.

Now, in case you think the relationship between asset managers and the life business is a one-way street, let's look at the Prudential with-profits fund. This is the engine behind our market-leading solutions proposition in the U.K., PruFund. With a size of more than GBP 130 billion, it's the UK's largest with-profit fund by quite some distance. The nearest is just GBP 60 billion. It's also one of Europe's largest multi-asset funds for retail investors. About 80% of the assets are managed by M&G fund managers. And more than 90% of the assets are managed across the Prudential group. The with-profits fund has delivered consistently reliable outcomes for customers, generating positive returns for the past 9 consecutive calendar years. There has been just one 5-year cycle since 1946, when the fund has failed to deliver a positive return. So to repeat, that's just one 5-year cycle since 1946 for a product, which savers hold, on average, for 15 years. Just take a moment to think about that. Now unlike our competitors, we maintained our with-profits fund when the concept dropped out of fashion or was mismanaged by others. That means today, we have the perfect engine to power our savings solutions for customers. Over the past decade, U.K. savers have been able to tap into the with-profits fund through PruFund. It has become the fastest-growing asset management product across the entire Prudential group.

As you can see on this slide, PruFund has attracted almost GBP 43 billion of assets. This is our second competitive advantage. We are a leader in savings solutions. I think of the investment management and strategic asset allocation is the engine behind M&G Prudential. The motor which drives customer outcomes. But we also have strong capabilities in distribution and 2 of the strongest brands in the industry.

Over the past 12 months, we have begun to explore how a more collaborative approach to distribution can improve customer outcomes and capture more assets. In the U.K., we are looking at how we can make the notion of the man from the Pru relevant in the digital age. Now, Claire will talk more about our digital platform for advised customers in the U.K. and it is one of the fastest growing platforms in the market. Internationally, we continue to build out our footprint, opening offices this year in New York, Miami, Melbourne and Sydney. We are also deepening our presence in Europe, building on our success under the M&G brand over the past 15 years. From a standing start, we have built a GBP 55 billion business in Europe. Italy is now our biggest market outside of the U.K. with total assets under management of GBP 18 billion and distribution relationships with the likes of Intesa Sanpaulo, Verizon and Fineco. We're now exploring how we can bring the benefits of PruFund to European customers through M&G's established distribution network on the continent. Conversations I've had with our leading clients in Italy and France suggest an enormous appetite for the proposition. We just need to get the technical and operational aspects right. And what makes these conversations possible is the quality of our relationships with distributors in Europe and the standing of the M&G brand in these countries. And this is our third competitive advantage, international distribution and 2 outstanding brands. So you've heard what I think makes us different from the rest of the market and what our competitive advantages are. What then will be the financial characteristics of M&G Prudential? As I said, we'll provide detailed metrics closer to the time of our listing. But I know some of you have broad questions. And I do want to give you a preview of what sort of financial profile will have. One of your questions is about the dividend. Future dividend policy will need to be signed off by the M&G Prudential Board, which is yet to be created. So I cannot give you an answer today. But you can trust that we will be disciplined custodians of capital. Investing where we see clear opportunities to deliver attractive returns, reallocating capital away where we do not. And always informed by what's right for the customer, because the investment we're making in M&G Prudential is all about becoming a truly customer-centric business.

Now, here are the financial facts about this business today. Solutions and alternatives are at the core of our business, both are currently resilient to fee compression and the assets are sticky. We have a balanced, diversified earnings profile. As the slide shows, this reflects the mix of our business lines with individual contributions from asset management, with-profits and our traditional insurance and annuity business. New businesses is capital-light or capital-efficient. Aside from some seed money, our wholesale and institutional businesses need little in the way of capital. PruFund requires small amounts of capital in the early years of the contract. Financial strength and independent M&G Prudential will be financially strong. We expect to have a solvency II ratio of 170%, with an appropriate capital mix. Now a few words on demerger. As you have heard from Mike and Mark, we remain on track for our market listing. We expect the legal process behind the GBP 12 billion annuity sale through Rothesay to complete by the end of 2019.

At present, we have no plans to sell any further tranches of the annuity book. Once independent, we can truly become masters of our own destiny, as a leader in savings and investments. We'll have control over our own capital and a leadership team focused solely on our business and on our customers.

As you have heard, I think we have a unique mix of businesses, capabilities and people. We've begun to think of M&G Prudential as a virtuous circle, each part of the business feeding another, with a multiplier effect for customers and shareholders alike. Demerger will give us the opportunity and the capital to scale this business. Intelligent use of technology will be critical. It's the only way we can become an efficient, simple and customer-centric business of scale. And the opportunity for M&G Prudential is huge. Our ambition is to be truly global. Clients already choose us because of our global investment capabilities, I see no reason why we can't have a correspondingly global reach in sales and service. In Europe alone, the growth opportunity is much the same as for our colleagues in Asia and the U.S., a growing savings gap. You could see the opportunity on this slide. Improvements in longevity mean we all must save more and start earlier if we want to enjoy our retirement, rather than merely get by. Support from the state is evaporating across Europe and employers are gradually retreating from guaranteed retirement provision. The result is a vast savings gap. In the U.K., this could be seen in the 62% fall in annuity sales over the past five years. At the same time, there are millions of people with sizable assets who want to grow or protect their value, either for themselves or for their children. Many savers seem to be keeping their money in cash despite the negative real return. Some EUR 10 trillion of household money sits largely idle in cash across the European Union. The truth is, that they are reluctant to take on the risk of capital markets without some form of professional help. Who will they turn to for that help? Well we'd like them to come to us. And why not? As a leading provider of solutions, with two of the most trusted brands in the industry, we are well placed to be their first choice for savings and investments. So to conclude my section, asset management and life insurance can be a winning mix if done the M&G Prudential way. So that the whole is greater than sum of the parts. Our competitive advantages are the breadth of our investment capabilities, our leadership in saving solutions and international distribution footprint and 2 strong brands. I look forward to your questions later, now I'll hand over to Clare, who will look at some of these areas in a little more detail. Thank you.

A - Clare Jane Bousfield {BIO 16746072 <GO>}

Thank you, John. I'm going to cover 3 specific areas, deep dive into our business. These represent some of the breadths of the customer offering that we are able to deliver to our customers. All three of them, I believe, are underappreciated by the market. They don't represent the entirety of our business. But you'll see that each represents some of the distinctive propositions that we're able to offer.

The first area that I'm going to cover is the with-profits fund. As John said, it's one of the largest multi-asset funds in Europe. The second area I'm going to talk about is our advice platform. It's the fastest growing platform in the U.K. market, both by relative and in absolute terms. And the third area I'll talk about is the 20 years that we have developed the capability around private assets. You will see how we're able to deliver superior customer outcomes as a result of these three capabilities. I'll also demonstrate how we manage and drive value from the inter-linkages between the shareholder, the policyholder and also our life insurance and our asset management capabilities.

So the with-profit fund. So the with-profits fund is a 170 years old. It has an estate of GBP 9 billion, which has been built up over about a 170-year period. The total assets are GBP 134 billion, it's a unique fund in the U.K. market, both in terms of size and strength. And the Pru fund proposition is unique -- is a unique proposition in the market. You can see from the red charts, or the red boxes on the chart, on the left-hand side, the growth in the Pru fund over the last five years, from $9 billion up to just over $40 billion at June this year. On the right-hand side, you can see the asset allocation. The different asset classes and the different geographies demonstrates the strength and the size of the fund. As a retail customer investing in the fund, they get access to both public and private assets that they would not be able to access elsewhere, driven by the size and strength of the fund. Over 90% of the assets are invested by internal asset managers, 80% by M&G. The close collaboration between the life insurance and asset management business means that we can actually very closely link the customer need with the investment outcome.

I'm now going to deep dive into the PruFund and talk a little bit about why the PruFund is so successful in addressing our customer needs. It's a simple product, easy to understand and it allows our customers to plan for the future. The customer has the choice of multiple tax wrappers and different investment profiles, depending on their financial position and their underlying risk appetite. On a daily basis, the expected growth rate is added to that investment pot. And you can see on the right-hand side, the dark blue or green line, shows the EGR. The EGR is adjusted on a daily basis, if the underlying values move by more than some pre-set tolerance limits. The fund is delivered or the PruFund growth fund has delivered an 84% return over and above the capital invested over a 10-year period. And you can see against the benchmarks, that has outperformed the benchmark significantly over the period. That is driven by the diversification, the investment expertise and the unconstrained asset allocation, which is fundamentally driven by the strength and the size of the fund. In 2006, we launched the PruFund. We took a static, traditional with-profit fund and created it into a successful proposition with the PruFund. The funds under management are just over $40 billion and growing.

I think it's useful to understand a little bit more about the PruFund proposition and particularly, the three key stakeholders. Our customers, the with-profits fund itself and shareholders. So if you just take each one of those in turn. From a customer perspective, our customers invest a pot. They then received the EGR on a daily basis. The EGR is adjusted for significant market movements. Against that pot, we deduct an annual management charge, which represents both the administration and the investment fee. Then the customer can withdraw either in part or in full as and when he needs his funds. The with-profit funds receives the actual investment return and then accrues to the customer the EGR. The fund receives the difference between the annual management charge and the cost of administering and managing the investment proposition. Then the fund itself will pay the shareholder transfer at the point of the customer withdrawal. So from a shareholder perspective, the shareholder receives the with-profit -- the with-profit fund and the transfer at the point of a customer withdrawal, that amount is equal to 1/9th of the difference between the amount withdrawn and the amount invested. Just taking the shareholder perspective and just exploring that in a bit more detail, the fund is a 90:10 fund, as you would typically see in the U.K. market. The principal propositions relate to the PruFund and the traditional with-profits business. The PruFund's a 90:10 fund. The shareholder receives 1/9th of the smoothed investment return realized by the customer. That's effectively the EGR, which is typically around 5% to 6%. For the traditional with-profits business, again, a 90:10 product, the shareholder is still entitled to 1/9th but that is distributed by the typical annual and final bonuses. The chart in the middle shows the emergence of value. And you can see in that chart just the amount of accrued value that is sitting on our balance sheet today. You can see a substantial proportion of that comes from the traditional book. But also the PruFund's in terms of the in-force book. We've included an illustrative view of new business that assumes that new business stays static annually through this period. From a shareholder perspective, there is a small strain that the shareholder is subject to. The PruFund's a very capital efficient product. There is a strain of around about 1% of the assets under management, depending on market conditions on a Solvency II basis. That strain is relatively low for a typical life product in the U.K. and the payback period is significantly faster. This strain is driven by a 1-in-200 year event that we have to stress the balance sheet on a one year basis under Solvency II. And because the shareholder is subject to the investment risk both up and down. And Solvency II does not allow us to account for investment returns on anything more than risk-free that creates a strain on day 1. That strain is typically paid back in roundabout a 3 to 4 year period.

I'm now going to move on to the second area, our advice platform. A lot of people ask this, what is our platform strategy? And that's not surprising, given the platform market has doubled in the last four years. We launched a platform in September 2016 and the assets under administration at the end of June were just over $10 billion. And we have 66,000 customers. We launched a self-invested personal pension with drawdown capability as the first tax wrapper. And that was driven by the recently introduced pensions freedoms at the time. 90% of the assets are PruFund assets. We have just included 50 of the M&G funds onto the platform. We're also in the process of launching to a small number of our own advisers, digital customer adviser and operational journeys. This slide shows the growth of the advice platform over the last two years. As I said, it's the fastest growing platform in the U.K. market, both in absolute and relative terms.

On the right-hand side, you can see how the growth has been driven compared to our competitors. We also write an ISA, an onshore and an offshore bond. But currently, those are not on the platform. The plan is for the platform to offer the full range of tax wrappers, including the ISA bonds and a general investment account. The pricing of the product is strong, driven by the strength and the value that our customers get from the PruFund proposition.

As we implement the digital journeys, we will drive efficiencies through the business and look to reduce the administration fee to make it competitive, particularly for solutions outside of the PruFund. I wanted to just cover the value chain. So the value chain as I see it, is the advice distribution and guidance, manufacturing capability including guarantees and smoothing. And then the investment proposition. You will see that M&G Prudential is strong in all elements of this value chain. From an advice and distribution perspective, we interact with over 7,500 intermediaries and have a tenured advice business with around 350 advisers. The launch of digital customer adviser and operational journeys will also form the platform for a direct proposition.

From a manufacturing perspective, we will have a full range of tax wrappers on the advice platform and the strength of the smoothing and the guarantees by the PruFund gives us real strength in manufacturing. From an investment proposition, the breadth and capability of our investment proposition, including the launch of the 50 M&G funds onto the platform, provides good value for money investment solutions to our customers. The

PruFund will provide an entry point to provide access into the intermediary market, given we're relatively late to market in the advice platform, with a broad investment proposition, with -- and being able to offer our customers interaction through guidance and advice however they choose to receive it, will allow us to provide a closed architecture fund at a competitive price.

The final area that I want to talk about is our private asset capability that we've built up over 20 years. Our private asset capability is just under GBP 60 billion of assets under management and that ranges from real estate to private debt into infrastructure. Both the with-profit fund and our annuity portfolio benefit from our private asset capability and that has been a key driver in terms of the underlying performance with the with-profit funds and from an annuity book, the illiquid nature of the liabilities is a good match for the private assets. Private assets are a high margin, high revenue product. They provide resilience and stickiness, around 25% of the assets under management is in closed end funds. And typically our clients are investing for around 10 years. So a long duration, long tenure investment solution.

As John talked about, the capability both in terms of sourcing, the relationships we have and the expertise that we've developed over 20 years is pretty difficult to replicate. The life fund -- the relationship with the life fund has been critical in delivering this track record in success.

One of the examples is on leveraged loans. In 1999, we were one of the first non-bank investors to invest in leveraged loans. And we did that on behalf of the with-profit fund. That provided value as a first mover. Then in 2003, we took it externally into our external clients. And you can see, from this chart, that we've developed that with over $8 billion of assets under management, predominantly with our external clients. Our external clients now provide the cornerstone in some of these new strategies.

Private assets are in high demand. The investment profile, the return and the search for yield are the primary drivers. Analysts are expecting this area to grow, to double in the next six years. On the left-hand side, you can see the average market fees for this institutional asset. And you can see that we play at the premium end of this market. On the right-hand side, you can see in terms of our portfolio, the tenure, you can see that from a closed-end fund perspective, our assets under management, around 25% and from the revenue perspective, 40%.

By the nature of the closed-end fund, our clients are typically investing for 10-plus years. This is driven by the relationships that we have, the performance and the track record. And not only the relationship with our clients. But also the relationship that allows us to be -- to source assets.

As John said, we're one of the largest private credit investors in the world. So in conclusion, I have talked about 3 key areas where I believe we have strong proven track record. They all represent distinctive propositions that are difficult to replicate. I'm extremely proud of what we've delivered and what we continue to deliver. As John said, we will provide, closer to demerger, more details of our business, segmentation and financial profile. And on that, I will hand to Chantal for questions.

+++qanda

A - Chantal Waight {BIO 4315288 <GO>}

Okay. So can we have Greig, please? (Gray,) keep your hand up, please. Thanks.

Q - Greig N. Paterson {BIO 6587493 <GO>}

I'll keep it to 3 questions. Just on the PruFund, 3 questions. The first one -- 2 questions on PruFund and 1 on solvency. The -- just talk about your ability to apply market value adjusters on the PruFund? And what sort of rules and conditions do you do that in? And secondly, is my understanding correct that the crediting rate is gross of the platform and the asset management fee? And if it is, could you just give us an idea of what those would be? Then, thirdly, on your Solvency II target coverage ratio of 1.7x, I understand there to be a shareholder view, given the size of the inherited estate, et cetera. What is your target on a regulatory review for that metric, please?

A - Clare Jane Bousfield {BIO 16746072 <GO>}

So I'm going to take your second question first, Greig. So yes, the returns are gross of the underlying fees charge from a customer perspective. For the investment proposition and the administration, our fees are around about 100 to 120 basis points. So that's excluding the advice. From -- in terms of the first question around market value adjusters, if you -- when you look at the slide I showed, the dark line, that basically shows the adjustments that we basically made, which you could akin to an MDR. The fund -- the way that it operates is we basically have a set of preset tolerance limits. And if the underlying value moves by more than that, it effectively gets adjusted by half of that -- half of the difference between the unsmoothed and smoothed. And remind me your third question?

A - Chantal Waight {BIO 4315288 <GO>}

Solvency ratio.

Q - Greig N. Paterson {BIO 6587493 <GO>}

So the solvency ratio target. I think you announced a few weeks back as 1.7x. Now that's a shareholder view, which is probably a poor representation of your financial situation because you have such a large -- with-profit fund with the benefit of an inherited estate. So what would your target on the regulatory view that goes into the (SFCSS?)

A - Clare Jane Bousfield {BIO 16746072 <GO>}

So the shareholders solvency view is actually a good representation of our business because the shareholder solvency view includes any burn-through costs from the with-profit fund. And so from our perspective, that (170) is a fair representation of the overall solvency position of the company. If you take the regulatory solvency ratio, then that includes the with-profits, SCR, both in terms of in the denominator and the numerator, that is not a good representation because it's not giving you any credit for effectively -- the strength of the underlying with-profit fund.

A - Chantal Waight {BIO 4315288 <GO>}

Okay. Jon?

Q - Jonathan Michael Hocking

Jon Hocking from Morgan Stanley. On the strain number you mentioned, the 100 bps of AUM, the shareholder strain, can you -- is the growth strain, is it just the normal 90:10 rule that applies? Then, in terms of the sensitivity of that strain to interest rates, what has to happen from a macro point of view for that strain to disappear or reduce materially?

A - Clare Jane Bousfield {BIO 16746072 <GO>}

So that is purely the strain from a shareholder perspective. Obviously, the with-profit fund in the estate is built -- is supporting the strain from a broader perspective. In terms, you're right, the actual strain itself is sensitive to interest rates. I don't have the full details here of that exact sensitivity.

A - Chantal Waight {BIO 4315288 <GO>}

Johnny?

Q - Johnny Vo {BIO 5509843 <GO>}

Johnny Vo from Goldman Sachs. Just a question on your platform, is your platform fully open architecture? And what is the underlying company that supports that platform? Secondly, can clients access the PruFund without going on the platform? And the third question is, in terms of illiquid assets, are you planning to use the illiquid assets to bolster the annuity liabilities in terms of generating capital going forward?

A - Clare Jane Bousfield {BIO 16746072 <GO>}

So the advice platform is a closed architecture platform. And that is driven by just the strengths of the investment proposition that we have, both from M&G and the other internal asset management -- managers across PLC. And we have no intention of making it open architecture, partly because from a customer perspective, I don't think it's particularly useful having 5,000 funds that they have to select from. And actually being able to narrow the range and provide customers with something that's broad. But not overly difficult for them to actually identify what fits their needs. And I forgot the other 2 questions that you were asking.

A - Chantal Waight {BIO 4315288 <GO>}

PruFund access, non-priced?

A - Clare Jane Bousfield {BIO 16746072 <GO>}

Right now, we don't offer -- we offer the other tax wrappers from a PruFund perspective. So ISA, the onshore and offshore bonds, they're all off-platform solutions. We don't offer the solutions on a direct basis. We're working through that. As I talked about, I talked about the digital journeys that we're just launching right now, that will provide a platform in terms of being able to then broaden this into a direct proposition. And the other question you had was around illiquids on the annuity portfolio. So we already utilize the private asset capability to support the annuity portfolio. That effectively matches the illiquid nature of the liabilities with the assets. But that is obviously within defined limits in terms of the overall risk appetite of that fund.

A - Chantal Waight {BIO 4315288 <GO>}

Okay. Andrew?

Q - Andrew John Crean {BIO 16513202 <GO>}

It's Andrew Crean with Autonomous. Two questions. I think the group's essential costs is something like GBP 340 million a year, how much of those will be part in your business once you separate? And secondly, I can't quite see the logic, I mean, you stopped writing annuity new business, you sold off GBP 12 billion in annuities. And yet you want to keep the other GBP 21 billion, which as I understand it, would have a bigger capital release in the sale of the first GBP 12 billion. So what's the logic, which lies behind that one?

A - John William Foley {BIO 4239156 <GO>}

Shall I take the second one while you think about the first one? So on the annuity book, I think -- so we've got it down to a level that we think is acceptable from a risk balance sheet perspective. It's an efficient business for us. It's a well-run business. We're happy with the risk. It's a business that we -- it has a number of attractions. The first is cash flow. The second is that it provides the M&G business with assets that we then -- as I was saying in my presentation, assets and capabilities that we then sell to third-parties. Once we start reducing those capabilities from an internal perspective, then it's an issue -- I think it becomes an issue for third-party customers, particularly institutions. So when I go and talk to our clients, one of the things they're interested in is the fact that we manage large chunks of money on behalf of the internal client. And annuities forms part of that portfolio. Now that's not to say that, in the future, we wouldn't do something on annuities. And what I said was we have no plans to do it today. I think the other thing to mention around annuities is that, one of the issues for us in terms of demerger date is when we actually finish the Part 7 with from Rothesay. And until we've done that, we can't demerge. If we were to do another transaction now, we'll be delaying the demerger again. So these questions will come up when we are a separate PLC rather than in any time between now and when that happens.

A - Clare Jane Bousfield {BIO 16746072 <GO>}

Then, on your first question around head office costs. So Mark talked about in his presentation the building of the internal model capabilities that the group has and effectively moving those to U.K., that's an example of where what we're actually doing is leveraging the group, what the group has today. And what will move to the U.K. in terms of support. There are other group head office costs that we have to build ourselves. So

Investor Relations is a good example in terms -- so we're basically working through that in terms of actually what capabilities do we need and starting to attract that and get those people on board in terms of actually working out what that group head office will look like.

Q - Andrew John Crean {BIO 16513202 <GO>}

(When?)

A - Clare Jane Bousfield {BIO 16746072 <GO>}

Too early to say.

A - Chantal Waight {BIO 4315288 <GO>}

Blair?

Q - Blair Thomson Stewart {BIO 4191309 <GO>}

It's Blair Stewart from BAML. Two questions. I think, the annuity asset portfolio is extremely conservative versus some other companies that we saw the split yesterday. Is there a desire to re-risk that book at some point? And if not, I'm assuming that a potential buyer of the book would also be prepared to re-risk it, therefore, there could be a value transfer if you decided to sell on. But are you -- the main question is, are you intending on re-risking that book? And the second question is related to with-profits fund. The estate is significant. But the fund is growing a lot. At what point does the fund start to outgrow the estate, which means the shareholder strain would potentially go up? If that makes any sense.

A - John William Foley {BIO 4239156 <GO>}

So yes. Thanks, Blair. So on the annuity portfolio, we're reviewing it all the time. You're right in the sense of the conservatism around it from the asset perspective. And is that something that we have, if you like, up our sleeves in any -- whatever we might decide with that book in the future? Yes. It is. Will we be doing it? We do this stuff on the annuity book all the time. But not in a dramatic way. And we won't be -- we look into -- our job, as we see it, particularly with closed books, is to squeeze those -- squeeze the performance out of it. And that's what we'll continue to do. Others, as we've seen from some of the things we've done. And particularly the deal that we did with Rothesay and the process we went through with a number of bidders on that book, we understand how the other institutions look at the asset side of that business. It's interesting. And we learned a lot as we went through the process. We might apply some of it.

A - Clare Jane Bousfield {BIO 16746072 <GO>}

Then, on the size of the estate. So the fund itself is very strong. And actually, what we are seeing is with the traditional with-profits business running off. And that's typically business that has got higher guarantees in the PruFund that actually, if anything, it's the strength of the fund in terms of actually how strong can it get is the bigger challenge than, I would say, in terms of actually depletion of that estate. We would also look to leverage the estate in terms of actually the kind of capital intensity of our business. So assuming -- if interest rates increased, guarantees will become more attractive. And therefore, actually leveraging that estate in terms of providing those customer solutions, particularly if we start to hit some volatile markets.

A - Chantal Waight {BIO 4315288 <GO>}

Thank you. Oliver?

Q - Oliver George Nigel Steel {BIO 6068696 <GO>}

Oliver Steel, Deutsche. Two questions. First is, you seem to have come up with yet another way of splitting your profits from previous versions. Are you still saying that the management actions, performance fees -- well, that's not so much the performance fees. But the management actions, again, to drop away sharply. It seems to -- I think that's what you said at the interim. But it seems to be a little bit different from your answer to the last question just now that re-risking. I've got a second question. Second question is, are you happy that the GBP 250 million restructuring charge that you've laid out so far is going to be enough?

A - John William Foley {BIO 4239156 <GO>}

So I'll take the first one. So I didn't mean to confuse the issue with Blair's question. But I mean, the point of running a back book is that we're learning from whatever the market's doing at any particular point in time. So if we see an opportunity, we might take it. But on management actions, there are what you might consider the standard ones, like reinsurance. And once you've sold 1/3 of your book, you are somewhat limited in what you can do going forward. So I think our view remains the same that management actions are somewhat less than -- the abilities of carrying out management action is somewhat less than they were in the past. Are we looking for new opportunities? Do we try and manage the booking through that lens? Yes. We do. And I think shareholders would expect us to. So that would be my response to that.

A - Clare Jane Bousfield {BIO 16746072 <GO>}

And on the costs, the investment cost of GBP 250 million that shareholders are investing, yes, today we believe that's sufficient in terms of to be able to provide the GBP 145 million in savings and also driving stronger customer outcomes in terms of some of the digital capability.

A - Chantal Waight {BIO 4315288 <GO>}

Thank you. Patrick?

Q - Unidentified Participant

(Patrick Levin) Well to go on, on that GBP 145 million, I mean, been here, looking at digital capabilities, running a fintech fund. And clearly, a lot of money is needed, you need to invest. You've just completed a 10-year period of underinvestment. And now, you're going to save some more costs. So maybe you should be spending that GBP 145 million per annum to actually invest more and become a digital leader rather than sort of, well, doing what is just necessary.

A - Clare Jane Bousfield {BIO 16746072 <GO>}

So that investment is going in to effectively drive a number of different outcomes. But the use of digital and technology, we've been relatively late to the market. I've talked about the advice platform in terms of what we've been able to do is effectively buy this technology and capability relatively cheaply, learning from some of the mistakes our competitors have made. So I actually though I wouldn't see the GBP 250 million as purely driving cost savings. It's actually about investing in our business in terms of creating the technology, driving better customer outcomes, managing conduct risks. And as a byproduct, we get cost efficiency as a result of it.

A - Chantal Waight {BIO 4315288 <GO>}

Thank you. Any further questions? Okay. Greig, last question.

Q - Greig N. Paterson {BIO 6587493 <GO>}

Two questions. One is the -- how much is the policyholder fund investing in the restructuring? I didn't think you gave a number. And the second fund question, just slightly confused. And maybe it's my misunderstanding of the structure of the PruFund. But if it's got lower guarantees and you've got an estate, why is there a burn-through to shareholders in terms of new business strain? I thought it would be adequately covered by the estate?

A - Clare Jane Bousfield {BIO 16746072 <GO>}

So if I take the second one. So the reason you get a strain on the shareholder side is because the shareholder is exposed to, on its transfer, both on up and a down in the investment markets. That's why you're getting the shareholder strain, it's not because there's any burn-through in terms of the with-profit fund. It's purely the fact that the shareholder has that up and downside risk.

A - John William Foley {BIO 4239156 <GO>}

And I'm trying to think of a longer way of answering your question, Greig, than saying that we're not going to disclose what the policyholder's contribution to that. But it's substantial. And you can be certain that there are equivalent benefits for the policyholders in making that contribution.

A - Chantal Waight {BIO 4315288 <GO>}

Okay. Thank you very much. So we'll now be moving to group Q&A. Yes. So ready for group Q&A. Okay. Colm?

Q - Colm Kelly {BIO 19140684 <GO>}

Colm Kelly, UBS. A question on the balance sheet and derisking. So obviously, this is a very strong growth focus of the group, which is very clear. What's clear also through the slide pack is that there has been also, certainly, an internal focus on derisking parts of the balance sheet, particularly credit risk across U.S., Asia, M&G Prudential and a lot of the corporate activity to an extent. I feel that has been a focus of doing that as well. So when you see the balance sheet as it is today, are you happy with its positioning? What are the areas from here you'd like to maybe tackle in the next couple of years? What areas of that balance sheet or risk profile should we see as in scope for change from here?

A - Michael Andrew Wells {BIO 4211236 <GO>}

Okay. So in a broader view of risks, I appreciate the comment. So we've aimed at derisking credit. Clearly, the U.S. has demonstrated, aimed at derisking the equity risk by level of hedges we're maintaining now. We've exited -- we showed you on the -- when we talked about active management, we've exited about 300 million of recurring earnings, businesses, markets, channels, et cetera, that we think, cross-cycle, had more downside than upside, or weren't at scale for management retention, reinvestment, et cetera. And again, this suggests that other people didn't find those businesses valuable. But that's a view towards -- I think the current view of the management team is, at this size and scale, resilience is something we could afford to build for and let the growth fill back for some of those decisions. So I appreciate there is a loss of earnings but you also see, I think, a much more resilient earnings base. The other that's obviously risk-related is the shift in Asia, in particular, to a more recurring premium. And this is, again, to get us more neutral to interest or equity rate cycles. So looking at it now, I think we're actually where we need to be. I mean, the last risk that gets addressed is FX. Clearly being pound-denominated, there's been some noise in the pound due to recent political events. And the -- I think the alignment of the -- on the demerger of the 2 businesses, one primarily a pound earner and one primarily a dollar earner or effectively dollar-linked earner takes a lot of the FX noise, hopefully, out of the shares. And that's as much a market element as it is an earnings element. But there is a real cost to that. As we've told you, we hedge our dividends once declared. So that does have a cost to us that, when currencies are more volatile, is higher. So that comes out of the business plan effectively when we get that split done. So that's the last piece. But no, there's no other part of the business that we look at. I should look at our CRO. But I don't think there's any part of the business that we're looking at now that we think has a material risk, do you think?

A - Stuart James Turner {BIO 17214499 <GO>}

No. I mean, we're in a situation with the half year is 74 billion of the 94 billion of invested assets was in debt. And as we've set out, the risk profile of that debt is extremely conservative. So I'm very comfortable in terms of where it is.

A - Chantal Waight {BIO 4315288 <GO>}

Jon?

Q - Jonathan Michael Hocking

I got 2 questions, please. I understand you can't comment on the M&G PRU dividend policy until the board is in place. What should we think about the pre-PLC dividend policy going forward, given the different shape in the business and the growth focus? First question. Then, the second question, given what you just said about FX, does it makes sense to group to report in dollars going forward rather than sterling at the present moment?

A - Michael Andrew Wells {BIO 4211236 <GO>}

So I'm going to give you a little bit of the same answer. It is a Board decision, not a management decision, on dividend policy. So I think, to the question earlier on dividend capability of the businesses, I think, what you see is there's nothing occurring in the businesses that diminishes any business' ability to continue paying dividends. The question for both boards as they split with their new own risk appetites and own dynamics is what's the reinvestment rate? What are the opportunities in front of us? What's the dividend for competitors with similar securities and similar positions in the marketplace? And that's the natural tension, I think, for both boards. But I don't -- I can't give you a forward-looking view. But in the interim, obviously, our current dividend policy is well-strained, well-tested. We're very confident with it and stand by it. Mark, do you want to talk about reporting currencies?

A - Mark Thomas FitzPatrick {BIO 20178326 <GO>}

Yes. Sure. Jon, thanks for the question. In terms of reporting currencies, we've looked at it and we recently agreed that we would, at the right time, look to switch over to be a U.S. dollar-reporting entity for PLC, just given the underlying currencies that come up and we think, as Mike said, this will also strip out some of the currency noise in the accounts.

A - Chantal Waight {BIO 4315288 <GO>}

Okay. Johnny?

Q - Johnny Vo {BIO 5509843 <GO>}

It's Johnny Vo from Goldman Sachs. I guess, coming back to Jon's question again, I mean, when you look at all the 3 regions, there seems to be growth opportunities and significant -- potential significant investment opportunity. I mean, does the demerger change the capital allocation decisions that you need to make? And second thing is, how much capacity do you have to meet the needs of each of the businesses?

A - Michael Andrew Wells {BIO 4211236 <GO>}

It's a great question, Johnny. I think -- so we are not -- there is no constraint on any of the businesses for organic growth. Let me start there. So the -- Asia is not selling -- doesn't have a sales cap on a given product in any given market, et cetera. It's inorganic. The capabilities, some of the partnerships, those sorts -- monetizing those sorts of activities, that would create additional strain. And I think they vary in size and scale. So I think the combined business will have plenty of bandwidth to do the kinds of things we've been doing, renewals of bank relationships, the Babylon-size elevations in our capability, the banker relationships you've seen done in the last year in Asia, the bolt-on you saw done in the U.S. You see all that's in our normal course. And I think that's part of the scale issue that I've been arguing we need. If you -- I think I mentioned this yesterday, if you went to the market for a GBP 200 million or GBP 300 million, GBP 400 million transaction you'd be a diminished buyer at the table. There's just no way around that. Firms ask if there's a counterparty in the first round. And if you ask John, when we looked at the transaction with Rothesay, anybody that needed to come back to you or to reinsurers or to the debt markets to be able to fulfill their bid will look -- John, is it fair to say we'll look at it differently?

A - John William Foley {BIO 4239156 <GO>}

Yes, completely differently.

A - Michael Andrew Wells {BIO 4211236 <GO>}

So we don't want to be that firm. Given the size and scale of the group, we want to maximize the value of that. I think, on the larger strategic, it's not -- I think it's clear, when both of these firms split, they have options and choices they've never had before and just for a lot of reasons. I mentioned yesterday that the number of potential relationships, partnerships, things we can do is material. And if they're larger, we would come back to markets for that. If we thought they were accretive and they added value or dimensions the firm that we're unique, then we're -- I don't think as a management team or as a board, let's be clear, these are growing businesses. So if there's something we think is important to the shareholder base and the long-term success of the company, we've got debt as options. We have equity as options and both of those for the further growth and scale of the business are, I think, at a certain size, are on the table. But we shouldn't be coming to you for things that -- a firm our size, again, should be capable of funding off the success of the previous back book.

A - Chantal Waight {BIO 4315288 <GO>}

Greig?

Q - Greig N. Paterson {BIO 6587493 <GO>}

Greig Paterson, KBW. I've just explored the dividend theme. I'm very happy that you acknowledged that the bank insurance deals is essential for funding function, as we've discussed before. And also mentioned Babylon. So I've got 2 questions as a source of, say, additional capital requirement financed from the U.S. One is, what is the -- could Nic give us some idea of what the sort of next five years additional, or CapEx on, call it, new age, IT, IP, whatever is going to be, what the step-up is that. So we sort of got a feel for the magnitude? And I wonder if you could give us an idea of what the sort of current or the next 3-year pipeline for bank insurance deals are in Asia and which ones are coming up? Which ones will be of magnitude? And some of the thinking about pricing of those?

A - Michael Andrew Wells {BIO 4211236 <GO>}

So the second one, no. That would be competitive information. We wouldn't want -- I mean, we're not looking to have competitors in Asia or competitors who aren't in Asia that wish they were in Asia saying that we didn't realize that bank was coming up. So I don't think that's appropriate that we -- we're not going to share with you what bank relationships are on the horizon, no scenario we're going that space. On CapEx, the Asia team, the U.S. team, the U.K. team, have more ideas and more things on the horizon. And there is a fantastic sort of energy right now on what's possible. And that said, that's been true for a long time in the group. And there's always been a discipline in how we allocate capital. And there's a reasonableness in management bandwidth and our ability to integrate different activities. So we've got to stay focused. I think the priorities for Asia have been very clear on what we want to do, okay? So the choices in how to accelerate that do come at different sort of capital tiers, right? So I think, the Asia team is live to that. Is that fair?

A - Nicolaos Andreas Nicandrou {BIO 15589153 <GO>}

Yes -- no, absolutely. I mean, the opportunities that we showcased yesterday in the technology space when it comes to service, increasing touch points is organic in nature. In Babylon, yes, there was an upfront payment. But that kind of buys us a number of years of working with them. And because they're inorganic in nature, we get to decide the scale and pace at which we can undertake those. And of course, any extra OpEx expense ultimately will be funded by scale benefits and other efficiencies that these investments generate. In Asia, our total cost base is GBP 2 billion. So there are abilities to repurpose spend and to -- and as I said, these things will generate savings. If there is CapEx that is needed, then we'll fund that out of retained earnings.

Q - Greig N. Paterson {BIO 6587493 <GO>}

(Did you say that before?)

A - Nicolaos Andreas Nicandrou {BIO 15589153 <GO>}

I did.

Q - Greig N. Paterson {BIO 6587493 <GO>}

(Last year?)

A - Nicolaos Andreas Nicandrou {BIO 15589153 <GO>}

Okay. No, last year, I said that when it comes to operating the operational and the CapEx costs of in 2017, for example, they were of the order of about GBP 250 million in my business. And I indicated that we would increase that to GBP 300 million, which is what we're spending this year. As we look forward, that number will be bigger. But I didn't indicate that it will drive an overall increase in our expenditure, I said it will make up a bigger proportion of our total costs. As I said, they will drive efficiencies, there is ability to repurpose spend and that we will do that. And if we need to make some CapEx investment, then we will fund that from the capital that we have on our balance sheet.

A - Chantal Waight {BIO 4315288 <GO>}

Okay. Thank you. I think we owe Blair an answer from yesterday, don't we? Having referenced some Solvency II statistics. What are -- what we can say in terms of capitalization for PLC going forward?

A - Michael Andrew Wells {BIO 4211236 <GO>}

Mark, do you want to answer that?

A - Mark Thomas FitzPatrick {BIO 20178326 <GO>}

Yes. So in terms of PLC going forward. Well today. And until the point of demerger, we will continue to be subject to Solvency II, M&G Prudential will continue to be a key part of the group. We're in the early stages of discussion with the Hong Kong Insurance Authority in terms of what the new capital regime will be like. And therefore, what the requirements of that will be. The one thing that we have agreed with the Hong Kong Insurance Authority is that the Jackson National deduction and aggregation methodology will be maintained going forward in terms of the way we operate and the way it's set out currently in the accounts from a Solvency II perspective. And as soon as we can share with you what the new position will be once we've agreed with the Hong Kong Insurance Authority, we'll look to share that with you.

A - Chantal Waight {BIO 4315288 <GO>}

Okay. Blair?

Q - Blair Thomson Stewart {BIO 4191309 <GO>}

I just want to come back on that, if possible. So when the businesses are separated next year, how does the PLC business look from a capitalization perspective based on today's rules? Presumably, you can answer that.

A - Mark Thomas FitzPatrick {BIO 20178326 <GO>}

So in terms of today's numbers, we haven't disclosed what the element of that particular position would be like because, technically, the element of stripping out the U.K. Solvency II would not apply in that new world. So (if we said today, it's) a hypothetical constructed position rather than the reality of what the position would be. If you bear in mind that from an Asian perspective. And something we've been saying for a while, is when you look at the -- our capital within Asia, the element that bites is the local statutory position, rather than the Solvency II position from that particular piece.

Q - Blair Thomson Stewart {BIO 4191309 <GO>}

Yes, because, I think, on a Solvency II basis, it will be something like 250%, if you look at the group and take out the U.K. at 170...

A - Mark Thomas FitzPatrick {BIO 20178326 <GO>}

It would be significantly higher than it is...

Q - Blair Thomson Stewart {BIO 4191309 <GO>}

It would be a higher number. So would you describe the PLC business as adequately over or undercapitalized? I guess it's one of the first two.

A - Mark Thomas FitzPatrick {BIO 20178326 <GO>}

In reality, Blair, I think we need to look and wait and see what the Hong Kong regulator comes out with. So that we can make that determination against a methodology, rather than just a stand-alone and abstract. In terms of where we stand today, very comfortable with the level of capitalization that we have in terms of the capital, in terms of the risk that we run.

Q - Blair Thomson Stewart {BIO 4191309 <GO>}

So that's the stock of capital. Could I just ask someone on the floor of capital? Because you talked about bandwidth, I think, Mike, was the word that you used. And just looking at the capital generation of the 2 businesses for the PLC business at the moment, I appreciate the organic growth opportunities, what it's all about. And I think you've done a great job in explaining that. But the inorganic stuff, inorganic cost is not clear where the bandwidth is. When you look at the cash flows coming from Asia and the U.S.. And set that against central costs and any reasonable dividend policy, it's not clear to me that's there's a great deal of bandwidth.

A - Michael Andrew Wells {BIO 4211236 <GO>}

Again, we haven't defined central cost or dividend policy. So I can't fill back in the gaps for you at this point. But as we get further, when we get to the point with the roadshow with the U.K., we'll have similar information to you on the PLC. It shows you what the final will look like. Obviously, we're looking at reducing cost. We have a very different model going forward. So some of those central costs that you referenced, we expect to be at a lower number. And again, we'll get to dividend policy and those elements. We'll give you a little better look then. Hopefully, we'll have at least a transitional -- we will have. And hopefully, we'll have the transitional regulatory regime to give you the answer to your first question as well.

Q - Blair Thomson Stewart {BIO 4191309 <GO>}

Any idea when those roadshows will happen?

A - Michael Andrew Wells {BIO 4211236 <GO>}

I'm sorry?

Q - Blair Thomson Stewart {BIO 4191309 <GO>}

Any idea when those roadshows might happen?

A - Michael Andrew Wells {BIO 4211236 <GO>}

We've got to get through the Part 7 and the final steps to -- again, before we can -- the parts that are in our control, we've mentioned are on schedule. That piece, we cant's define. That's U.K. courts and regulatory piece in the U.K. So there's nothing to suggest that's not proceeding at pace. But it's not something that we can influence. And just to be clear why for the room, we don't want to split them with a relationship that's not finalized on severing that piece. The language around a reinsurance agreement like that has protections if the transaction fell apart. So those would go to the original entities. So you need a clean break on that book before we can separate the 2 companies. It's an important step in this.

A - Chantal Waight {BIO 4315288 <GO>}

Okay. Scott?

Q - Scott Russell {BIO 17965886 <GO>}

Scott Russell from Macquarie. What is the strategic asset allocation for Asia? I don't think we touched on that yesterday. But it was interesting hearing this morning, particularly about the U.K. with-profits fund, which is almost three quarters now in listed equities and private assets. Now I recognize the universe in Asia is very different. And there are obviously ALM differences as well. But is that the direction of travel for your Asian Par funds? I'd just be interested to hear thoughts on the philosophy behind how you're investing in investment assets in Asia, which are backing the Par funds?

A - Nicolaos Andreas Nicandrou {BIO 15589153 <GO>}

No. I don't have the kind of the precise split front of mind. I don't know if Raghu is in the room and he has information at hand. You do? Yes. Can we give him the mic, please? We had a slide. But in the end, there were too many. We didn't include it.

A - Raghunath Hariharan {BIO 20450777 <GO>}

Yes. So in the Par fund, the equity backing ratio is around 40% in Asia. So 60% is in mostly fixed income, half of that is in gov Es. And half of that is in corporate bonds. And below investment grade is 7%. So it's a pretty strong fund. To the other part of the question, Scott, around strategic asset allocation, clearly, this is something that we review every year. And it moves in tandem with the illustration rates and achieved rates on the funds themselves. So as of now, we're feeling very good with the asset allocation as is.

A - Nicolaos Andreas Nicandrou {BIO 15589153 <GO>}

So yes, with-profit fund is in line effectively with the expectations, because we've run those funds akin to a -- on a PRE basis, because the business -- both the Singapore with-profit fund and the Hong Kong with-profit fund were branches of the U.K. business. Clearly, Hong Kong, recently domesticated. In relation to the non-with-profit business, most of the balance sheet is effectively backing the protection insurance that we provide. And as Raghu showed you yesterday, a lot of that is bond -- fixed income-backed, mostly from government bonds. And we're happy with that profile. We don't need to stretch for yield in that part of the book because the profitability -- the underlying profitability of the insurance prepositions is strong.

A - Chantal Waight {BIO 4315288 <GO>}

Abid?

Q - Abid Hussain {BIO 20229932 <GO>}

Just coming back to the earlier question on distribution agreements. Can you just share to what extent can PCA fund distribution agreements without the support of other parts of the group?

A - Michael Andrew Wells {BIO 4211236 <GO>}

I think the question is order of magnitude of the agreement. So it's not a -- I mean, do you want to take a shot at that? Like with the largest ones, no. Midsize and all the ones you saw done this year, absolutely. So it's just a function of the particular agreement, the duration of the agreement, the structure of the agreement. The nature of the current agreements is far less upfront, as Nic has mentioned. So an agreement signed 3 or 4 or five years ago had a very different cost structure when you deployed the capital than the current ones we're doing now. But they're one by one. And the team looks at them individually. Nic, do you want to comment further?

A - Nicolaos Andreas Nicandrou {BIO 15589153 <GO>}

I mean, they come in different shapes and sizes, absolutely. A lot of the ones that we're doing and we've done in the last year and a bit were nonexclusive in nature. Where we go after a particular segment. And I think, Lilian highlighted that, with a proposition that we know is stronger than our competitors and one that we can execute to quite quickly. So it depends, whether exclusive, nonexclusive, the duration, the nature of agreement that you have, how much of that effectively will be paid as a variable fee with -- as the production is delivered versus just a fixed upfront. They come in different sizes -- shapes and sizes.

Q - Abid Hussain {BIO 20229932 <GO>}

So I appreciate they come in different sizes and vary by upfront payment versus trail commission. If I just use the UOB distribution agreement as an example, I think you paid something like $475 million upfront for that. Could you fund something half the size of that, for example, with similar structure upfront versus trail commission?

A - Nicolaos Andreas Nicandrou {BIO 15589153 <GO>}

At the time when we did the UOB deal, I said different shapes and sizes and nuances, if I can add that third dimension. We're also buying their existing in-force life operations, both in Malaysia and in Singapore. So that's another dimension. Clearly, not all distribution deals that we look at have that component. Some do, some don't. So yes, shapes, sizes and nuances.

A - Chantal Waight {BIO 4315288 <GO>}

Are there any more questions? Hello?

A - Michael Andrew Wells {BIO 4211236 <GO>}

Okay. Let me wrap up with a couple of things and then I'm going to show you -- a number of you asked about the fintech events. There's a lot going on in Singapore this week, as you are well aware. Our conference being probably one of the most important things. But there's also Asia conference and the fintech event with 42,000 people at it. So I did have our team in Singapore were kind enough to put together about a minute clip of that. So you can see, we'll show you at the very end for those of you that can't make it over to the office. And I think it just gives you a -- I started the conference by talking about just the energy in this part of the world and the -- some of the creativity and the dynamics. And I think they did a good job of capturing a little bit of that and our interaction with it.

I guess, where I'd like to leave you. So if you -- what I hope you heard in the last couple of days is from a macro point of view, we don't have a business that isn't in a market with material structural demand. Okay? That's, again, a great place to get up in the morning when you do what we do for a living. We have leadership positions in almost every single market we're in. We have unique product track records or product designs in almost every single market we're in. We have trusted brands in every single market we're in. And the similarity in the businesses, if you think about what you heard over the last couple of days, is that if we do our job well for the consumers, we're stacking vintage after vintage of profitable cohorts on years and years of profitable relationships with consumers. Okay? We're not talking about blocks that didn't work or products that failed, or -- what we're talking about is the successes over time. And that funds the choices that we have for where we go. A lot of this is people, okay? A disproportionate amount of it is people. We have an incredibly talented staff. I've been here more than 23 years, we've never had this depth and breadth of talent in the group. And one of the things, when I first took the role, I told a number of you was when we were -- when I first joined, people thought we were bigger than we were. And now, people sort of underestimate the size and breadth of the group and its capabilities. I hope you got a feeling for how many things this team can do at once. The demerger is one critical thing we're working on. But as Mark mentioned, it's about 200 people out of 24,000, plus the rest are working on all those other things you saw in the various businesses. And every one of the businesses is looking at new ways to get to clients, new ways to support their advice channels, new ways to put a face on advice, new ways to improve technology and efficiency; all the same time we're doing a corporate restructuring, we're derisking the businesses, we're doing all in parallel. And I always believed. And I hope you see it demonstrated, that this group had unique bandwidth. And I can feel it day-to-day, I hope you see it in the presentations and just the sheer amount of things that are going on in these markets. I appreciate the complexity it brings. But it's also, a firm this size, should be dynamic. It should be growing. It should be adapting to its markets. It should be adapting its technology. We're doing all of those.

So the last piece I'd I leave you with. And it came up in the slide session, I appreciate it, is the demerging is not an endgame by any means. This is repositioning to grow the businesses further. This is a starting position. So it is not seen by this management team or the Board, or Mike in his new role as a let's run smaller firms and the status quo and some sort of isolated scale. This is getting these businesses ready to compete and grow faster and to adapt and be more agile and more focused and create more value for shareholders.

So I want to thank you very much for a couple days of your time. One more thing I want to bring out. So Barry has been with us about half of my career here. And I know a lot of you know him well. And I think, for the whole management team, we want to say thank you.

A - Barry Lee Stowe {BIO 15021253 <GO>}

Thank you.

A - Michael Andrew Wells {BIO 4211236 <GO>}

You want to say a word?

A - Barry Lee Stowe {BIO 15021253 <GO>}

Thanks, Mike. Yes. It's -- I'm reminded of December 1, 2006, which was the first Investor Day in which I participated. It was actually an Asia day. And it was memorable because we were doing a lot of things. We were trying to reset strategy for Asia and talk about -- introduce the idea of protection and other like scary thoughts. And I mainly remember that the day -- just the logistical organization of it was absolutely shambolic. Chantal has done a much nicer job this week. It was -- I think we ran about 2.5 hours late. We had to cut off Q&A. I mean, it was -- we had way too many people speak and they had way too little to say. And -- but we got through it. And it was the start of a fantastic 12-year run from my perspective. Since then, we've had the opportunity to interact on countless occasions, on days like this, at results days and half-year results days and the many, many, many reverse roadshow visits in Asia and a handful in the U.S. as well. And I think back on all of those interactions and all the familiar faces in the room. And you've always been challenging. But more importantly, you've always been supportive. And the fact of the matter is, obviously, your involvement is critical. And your challenge and your support has improved the businesses year-after-year. And these fantastic businesses that we had the opportunity to showcase for you this week would not be what they are, were it not for you. And so, I just feel like I would be remiss if I took my leave without just taking a brief moment to express my gratitude. Thanks.

A - Michael Andrew Wells {BIO 4211236 <GO>}

Thank you, Barry. Thank you very much. And thank you for everything you've done for us. If we could, can we have -- let's run the video quickly and then, Chantal will come up and tell you how the logistics work to get over to the Singapore office for those of you who are joining us. So the film, please.

(presentation)

All right. The energy in that room was amazing, 42,000 people, all trying to get us to invest in their start-up. It was a fascinating day. Again, thank you very much for your time. On behalf of the whole management team, we appreciate the travel and the attention and the questions and, to Barry's point, the challenge. Chantal, do you want to tell us how to get over to the Singapore office?

A - Chantal Waight {BIO 4315288 <GO>}

Yes. Absolutely. Last bits of housekeeping. So lunch will be served now in the Prudential Club Lounge level 2. If you're doing the Marina One office visit, 2:15 in the lobby. The office tour will end at 5:30. And you'll have transfers back here to the Grand Hyatt at 5:30. So that's it. Thank you for attention and your attendance and safe travels.

A - Michael Andrew Wells {BIO 4211236 <GO>}

Thank you, again, both Chairmans -- I guess 3 Chairmans, we also have Guy here, for again, joining us. And appreciate all the time, the travel. If you're going to the office, I think you'll find it fantastic. And if you're not, have a safe journey home. Good afternoon.