Hannover Rueck SE Investor Day

Company Participants

- Andreas Markert, Chief Risk Officer & MD of Group Risk Management
- Claude Jacques ChÃ¨vre, Member of the Executive Board
- Jean-Jacques Henchoz, CEO & Chairman of the Executive Board
- Karl Steinle, Head of Corporate Communications
- Klaus Wilhelm Miller, Member of the Executive Board
- Roland Helmut Vogel, CFO & Member of the Executive Board
- Silke Sehm, Member of Executive Board
- Unidentified Speaker, Unknown

Other Participants

- Andreas SchÃ¤fer, Analyst
- Andrew James Ritchie, Partner, Insurance
- Dieter Hein, Partner
- Edward Morris, Equity Analyst
- Ivan Bokhmat, CEEMEA Banks Analyst
- James Austin Shuck, Director
- Kamran Hossain, Analyst
- Michael Hermann Haid, Team Head of Financials
- Roland PfÃ¤nder, Equity Analyst
- Thomas Fossard, Co
- Unidentified Participant, Analyst
- Vikram Gandhi, Equity Analyst
- Vinit Malhotra, Banca di credito finanziario S.p.A., Research Division

Presentation

Karl Steinle {BIO 1986424 <GO>}

Well. Good morning to all of you. Welcome to Hannover Re's Investors' Day 2019. And I'm really delighted that so many of you were able to take up our invitation. My name is Karl Steinle. And I'm, among other things, responsible for Investor Relations and corporate comms.

If we go by the Gregorian calendar, that 2019's edition of this event is the 22nd. And some of you may refer to it as the first Investors Day in the post-Valen era or the first one in the (onshore) era.

For me, personally, it's the 10th edition. And I must say I'm rather relieved that some of you joining here today have experienced quite a few more than I have of these Hannover Re Investor Days.

As you know, we are always very keen to find an attractive and inspiring location for the Investors Day dinner, especially, partly as a means of encouraging the dialogue with management. It is also a way to express our appreciation for the work that you do for Hannover Re. And casting back our minds, we have been to the zoo, we have been in the theater, various museums, even a vintage car collection or a crypt.

Given the importance of that, that we attach to that event, we have almost thrown our cost target unceremoniously overboard in doing so. To make that even easier, this time, the boat trip yesterday was a logical consequence.

As we head out on the -- on this voyage of discovery, it is, of course, only fitting that our new captain and CEO, Jean-Jacques Henchoz will be taking the wheel. I would like to express my gratitude to Catherine and Kathleen, who tracked down that marvelous location yesterday and created this unforgettable atmosphere. Well thanks.

I hope -- I do hope that you found the captain's dinner yesterday, enjoyable and inspiring. And not only because of the maritime theme. Our crews today will feature a number of highlights. First off, Jean-Jacques will map out the future course to be chartered by our Hannover Re power boat. And he will discuss the strategic initiatives that has been launched since he took the helm.

Roland Vogel, our CFO, will explain how he navigates the stormy seas of the capital markets and how he intends to sail around the low tide of current interest rates. Andreas, our CRO, will assure us that from the reserving point of view, we have sufficient water under the keel. And we -- he will discuss the capital generation and the Solvency II model update.

Claude ChÃ¨vre will describe how we are conquering new markets in Asia, along with the approaches and initiatives that we pursue to deliver added value to our customers. Klaus Miller and Silke Sehm will additionally offer up a glimpse into the engine room of bespoke solutions. Unfortunately, I have to excuse Sven Althoff because he cannot be here today due to illness. But I'm sure he's the one of the many who have dialed in for the webcast. And we send him our best wishes for recovery.

As you can see, we have a rich agenda for today. And before we start, I'd like to draw your attention to the feedback question there, which is on your desk. And as you know, we really appreciate and highly value your feedback because we use it extensively for, a, conveying your comments and messages to the management; and B, preparing for the upcoming activities.

You may either leave the feedback form at your desk or hand it over to Julia and her team. As a gesture of gratitude and appreciation for your positive and unfailingly fair cooperation, you will find a very modest gift on your table. I hope you will like it.

Well I don't want to keep your suspense any longer. So I'm now handing over to our CEO, Jean-Jacques. The floor is yours.

Jean-Jacques Henchoz {BIO 17457677 <GO>}

Thank you very much. Good morning, everyone. Great pleasure to meet you for the first time. Thank you, also for yesterday evening. This was a good opportunity to interact more informally. It's a pleasure for me to be here for the first time after roughly six months in the role. So still early days and still ideas and new inputs coming every week. So there will be more to come.

Today, for me, it's an opportunity to take stock of where we stand as a company strategically, competitively, give a very brief view of the track record of achievement. Then introduce some of the ideas which are worked on by the team today.

These are several initiatives, which we're working on diligently, which will lead to some strategy days in January with the Executive Board. Then in the New Year, we'll be able to put together a strategy review for our next cycle, for '23.

So bear with me. Today is more about giving a sense of direction. There are many items which need some fine-tuning, which need discussions within the team. So no quantum nor any leap for today. But be aware that next year, we'll make sure we give you some more granular input on these ideas and initiatives, particularly on where we see them in terms of supporting our targets and put some numbers around them.

So as a brief review of the track record of outperformance. So that's the title of the presentation, pursuing the outperformance journey. Ten years of superb track record in terms of ROE, in particular. But growth as well and an opportunity for us to take stock and think about the key success factors, which are needed to continue that journey of outperformance.

So 3 topics I'd like to cover. Maybe the one before, just on the agenda slide, the current position in the market. You know the numbers very well. I won't go into many, many details. Secondly, the business model. Also, the business model, as I see it, the comparison from the outside-in view and what I've seen in the past few months. And lastly, a bit more of an outlook in some of these topics, which are on our mind.

So position in the market. I see the number 95. This has nothing to do with our combined ratio. So don't jump to conclusion on this one. But a few slides just to wrap up on the property and casualty side. These are slides you know already with an update. We have a market, which has been growing 2.9% in the phase shown here 2014 to last year. The growth of Hannover Re has been, on average, 9.4%.

You see a clear gain in terms of market share during that period. We moved from 6% at the time in '14 to 8% last year. And I hate to say that the benchmarks on the economic hurdles have been met. So it's not that we compromised on bottom line during that period. It's very much profitable growth.

And I see the journey continuing on that one. Short term, I think we have some good momentum. I've met a number of clients, who are very keen to continue to expand the relationship with us. So I'm rather optimistic about continued profitable growth in P&C.

So just to give a bit the same view. But with the earnings, the EBIT contribution across these years. The reinsurance market earnings since 2014 were rather volatile. If you take the top players. But you see there our contribution has been steady. We have an EBIT contribution in percentage terms, which vary considerably. But very steady in terms of numbers.

And this, of course, particularly for '17 and '18 has to do with the heavy NatCat load and the fact that we had very, very good retrocession protection and helped us to outperform the market during these past two years in P&C. So that's certainly one of the insights that I'm very convinced about the retro program and feel we need to continue based on that approach.

So P&C continues to be stable and steady and growing. It's a very, very important earnings contributor for us. And will continue to be so in the next few years.

Moving now on to life and health. You see a bit of a different picture in terms of market share. We used to have 11%. There has been 3.9% market growth. We were a little bit down and practically no growth, even a bit negative in the past few years. This has to do with the volatility of earnings, our U.S. portfolio. But also I'd say, a rather cautious stance on some of the more commoditized segments. We've been -- we have been rather diligent, not to go into some of these RFPs with very competitively priced approaches. And that has led -- this has led to a market share, which is a bit under here.

As we proceed and address the U.S. legacy challenges, I feel that the earnings generation will go up again. And there are some opportunities in the pipeline. But the picture is a bit different in life and health.

If you turn to the next slide with the same view with EBIT contribution. You see steady earnings coming. But a bit more volatile. It is very much related to the U.S. mortality market. So 1.1% combined aggregate growth rate and a growth which we believe will go up in the next few years, in life and health.

To close off this short section on the review, we -- this slide you've seen before. But one which I think captures very well the fact that we see some good opportunities in the market where we see the reinsurance space is attractive. We're optimistic about the outlook. We see some of the demand drivers going in the right direction. Our value concentration, which give opportunities, particularly on the NatCat side.

There are huge protection gaps everywhere, life and nonlife. And I think these are opportunities which we should tap into under insurance, in particular, as a challenge. We have new products, new opportunities. The cyber market is one example of a risk category, which has been growing.

And I think, generally, the capital requirements, challenges, the volatility, management challenges make reinsurance generally part of the conversation with the CFO, with the CRO, with insurance companies, creating really a clear opportunity for us, whether we talk about new risk, new markets, dysfunctions, volatility of earnings or capital requirements, challenges. We feel we're very well positioned as a go-to partner.

We bring the capital base to offer real convincing solutions and take on risk. We have some tailor-made services and solutions. And I think we're a go-to partner, which understands the clients very well and is able to react very quickly and address some of the clients' challenges. So the outlook is rather positive for us. And we see our space as attractive and our positioning as strong. So I come into the company with a positive outlook on the next few years.

So moving on to the business model, which you know very well. But I'd like to give you some comment and more personally on what I've seen in the past few months. We use the tag line "somewhat different." We've been doing so for a number of years. And this should really give a summary of how we feel the business model operates, lean and focused and client-centric and -- and certainly, when you see these numbers. And that was a bit -- the entry point for me to look back at the last 10 years.

You see in terms of growth and ROE and net income, a scattered state of performance. It's always frightening, actually, to come into the company at this stage. But I say that half-jokingly, I think there is a strong team, a strong model, which is a base we tap into to pursue that journey.

But clearly, that "somewhat different" tagline, related to the business model, is a good proxy for what we've been trying to achieve the past few years. And I see business model continuity as a given, not coming into the company with new plans on how we want to operate. I think the philosophy is the right one. And we'll leverage that base in the next few years.

So this is a little bit a summary of what I saw in the first few months when I came in and I was trying to ask myself, what are the key elements in that business model, which make Hannover Re distinct in their approach to business. And I think it's very much business model and corporate culture for me. And the first one, which is not new. But it needs to be reiterated is the underwriting culture that we have. A company with a very strong underwriting DNA, a lot of discipline in how we approach the business, life and nonlife. And a real culture of underwriting, which I was very impressed about. There is a fair level of empowerment on decision-making, which also is part of the model of making sure that we take sound. But swift decision that we have full empowerment of the lead underwriters in their areas of responsibility.

So strong underwriting discipline, strong underwriting culture. That's the DNA we need to continue and maintain and continue to strengthen in the future.

I think related to that, the second point would be the client focus. I see the company very focused on the client needs, very much trying to increase loyalty and that sense of partnership with the client is very much a part of how we work. I know that many companies say so. But I was very impressed in the past few months. Talking to clients in different regions to see that notion of partnerships being mentioned consistently. And this is about being reliable, being consistent, no surprise, being really a true partner across cycles and help out clients when they really need us. And this is something we will nurture and want to continue to build on. I'm quite passionate about that one and feel there's even more potential to continue in that direction.

The third one is the lean model and the cost leadership. Roland will say a bit more on cost leadership. So I won't go into detail there. But clearly, this is, for me, very impressive because you see that it's not only a top-down philosophy. This is very much part of the culture, that's the way we operate. We try to be nimble. We don't want to create complexity in terms of organizational setup and we try to be swift in terms of decision-making and that makes the difference often in front of clients.

And cost leadership doesn't mean that we're cheap. It's more of an attitude of really making sure that we invest when we see a business case and that we stay nimble and don't try to increase our cost base or increase complexity. So that's part of the culture.

That's hard to replicate. It's easily said. It's not that easy to replicate and implement in practice. And I think we have a huge advantage there, which we'll build on. Coming from Swiss Re, of course, there were some question marks on whether the cost leadership will be part of the value proposition. And I can just reiterate once more, that this is very much where we focus on. We want to have that cost advantage, which can make the difference on some of the decisions on the business.

And last but not least, we'll hear more from colleagues from Roland, from Andreas later on this morning. I think the capital management has been effective. We had a good ROE performance. I think the retro strategy has been also very successful. And we'll continue to build on a strong retro protection on the P&C side. We have some retro protection on Life & Health side. But less prominent in terms of numbers.

So this is very much what I felt were areas of strength and competitive advantages for the company, is the semi-outside in perspective. I validated that and six months later, I would say, it's very much part of the corporate culture, part of the business model, the operating model we have and the base we want to build on for the future.

This just to -- and again, this is a slide you have seen, which is showing the standard deviation in the spread and variability of our return on equity over 5 and 10 years. And clearly, you're showing Hannover Re in a specific box if you want and with a few points ahead of major competitors. I think that's our benchmark. And we will try to continue on that journey.

And here, again, the target matrix, just not to comment into the details in a couple of weeks, we'll have our Q3 figures. And we'll be able to come back to the target matrix. But just showing in terms of the current strategy cycle, we are well on track.

If you look at all the metrics, we are meeting or exceeding the target. So a very pleasing starting point. 2018 was really ticking the boxes in spite of a difficult NatCat season. The picture, of course, for the first half does not include some of the NatCat events, which took place later on this year. But we'll update you soon on that. But basically, as we end the strategy cycle next year, I believe we're very, very well positioned and are meeting our targets.

So moving on to the third section of this presentation, I'd like to some extent, to reiterate some of the things we want to continue to build on and then move on to some of the initiatives we we're working on.

I think in property casualty, again, we are having a very strong market franchise across the globe. We have a broker model. We really focus on distribution with the brokers. And it works very well. The feedback I've received was really positive. The responsiveness is seen as second to none. And I think the market -- generally the market feedback is positive.

Most of the clients in Monte Carlo or in Colorado Springs a few weeks ago told me they want to grow with us. So that's a notion, which is new to me. I don't feel that glass ceiling, which I did a few years ago. So I think we build on a very, very strong market franchise with the potential to remain a preferred partner and to strengthen that base.

Europe and North America continue to be, of course, our core markets. We have -- we continue to expand relationships in both markets.

In North America, we have -- we're going to have more momentum because the primary pricing is going up and reinsurance as well. I believe we'll have due to the NatCat experience, some price momentum. But we'll talk about Asia. It's not yet that prominent. It's 15% of the total today, excluding Australia.

But these are the core markets where we'll see further growth in the next few years. I think we are very well positioned in the specialty space. We have very strong teams. We're strong in many of the different lines of business. And we've taken the stance to be an active participant in the cyberspace.

We are continuing to grow with some key clients. But obviously, an area where we need to strengthen our risk management and modeling capabilities and this is a topic we'll come back. I think Silke will talk briefly about cyber. And from a risk management standpoint, Andreas will also talk about cyber reinsurance.

Think structure solutions, again, a topic we want to highlight today. P&C and Life & Health, actually Klaus Miller talk about it as well, is a space where we've been successful. We have a portfolio, which is, I think, in P&C, EUR 3.6 billion of top line has been steady. And we see some growth potential.

And again, bottom line goes first. We're fortunate to grow, have top line growth. But the margin requirements need to be met and the reserving continues to be very conservative. So a very strong position with continuity of the model, as I said, profitable growth for the next few years but underlying that underwriting discipline.

So these are more repetition. But I'd like to reiterate how important it is for us in areas where we will see continuity in our model.

Moving on to Life & Health. We have a setup, as you know, which is a bit different, with a more decentralized approach. We have a strong global network of entities around the world and offer really underwriting and product development solutions.

We're very close to our clients and the notion of partnerships also is key to success. We have very strong teams in the different regions. Financial solutions or structured solutions is also part of the mix. We have a very strong team in North America, in particular. But are also expanding in other regions.

I see financial solutions as really an important part of the mix. Longevity, actually, there is also a good pipeline of projects. It's a line of business where we've been a leading player in. And we'll continue to do so. It's still very much U.K.-centric, of course. But I think over time, we'll see some opportunities in other markets. But I think we want to play in the longevity space.

One of the observations, of course, the U.S. legacy problems in the past, have been an area where Klaus Miller has had to spend a lot of time on. And I think we're moving, we're proceeding very, very well. I think we are on track in managing that legacy portfolio. We'll hear more later today. But generally, I feel we are on track.

But as we want to grow, I also wanted to make sure that the in-force management in Life & Health is being strengthened. So there are some of the resources, which we allocate for this year and next year, which goes into -- which go into the in-force portfolio management. That's an important part. And we want to continue our growth trajectory. We need to be really best-in-class in managing the in-force and getting the insights from in-force management into pricing into the way we operate the risk appetite we have generally.

And last but not least, innovation plays a very clear role. In Life & Health, there's probably more of a push element, you need to come with new ideas. You need to come with a product development opportunities and sometimes we bring digital partners in the relationship, an area where I see expansion opportunities.

Again, topics which we'll hear more about in the course of today. So I think we're expanding. From now on, we have a solid base. But we need to build on a strengthened life in-force management. That's an important part of making sure we can grow successfully and with sustainable performance.

So coming now to some of the topics, which, as a team, we're working on building on all these aspects, which will be part of the continuity of the business model.

There are 4 I wanted to mention. There are other initiatives which are more internal and more related to our culture. And I won't go into all details here. But I think the Asia Pacific strategy has been an area where we felt we can accelerate. And we'll hear more from Claude on that. We have a strong base. The clients are keen to work with us. But I see some potential. But also a need to reframe a bit and make sure in terms of resource allocation, we put some more emphasis on Asia.

I briefly talk about digital innovation. This is, of course, a very broad topic. What I've seen in the past few months is that we have many interesting projects and initiatives in that space, building on relationships with clients, linking them with InsurTech companies. But what I'd like to put forward to the team is, how can we replicate some of the success stories, how can we make it more relevant to our investors so that we really can show numbers behind some of these projects in the next few years. So we're working on that. And we'll offer more feedback on how we want to proceed in that space.

The third is very much customer-centricity. As I said, customer loyalty, partnerships are part of how we work. But I also think that as we grow, we need to think a little bit more strategically about key client relationships, we need to have a bit more insights on how we operate, have a strong customer relationship management base to operate from. So that we are very well coordinated, that we see opportunities early on that we can be even more proactive looking at kind of an end-to-end view on our customer relationships.

So we're not going to build an infrastructure around it. We're not going to create new functions around it. This is very much the idea to support our underwriting teams to be alert, be well informed, to see cross-selling opportunities in the future. So CRM and broadening client relationships are questions to the team, which will be discussed soon.

And last but not least, more of a soft topic. But I think competition for talent, nothing new. It continues to be tough. And whereas, we haven't suffered very much from this problem so far because we have a very high loyalty in our organization.

Clearly, there are some key underwriters, key people in the company in the next five years, who will be retiring. And there is obviously an issue around succession plans. And we need to make sure we're very well-organized so that we make sure that, that succession takes place in an effective way. But also the younger talents, I think we can do a bit more in making sure that they can develop their skill set and can gain that end-to-end view on the business. So talent mobility is a topic we're working on. And I'm quite optimistic that this will be positive for talent development, opportunities for our people. But also succession planning.

I'll very briefly, I've talked about some of these aspects. I have a few slides on these 4 topics. So Asia Pacific, the numbers speak a clear language with 45% of global insurance premiums being part of the 27% mix in the statistics. So clearly, there is a shift happening, nothing new. But we feel we need to be more systematic in order to tap into these opportunities.

As mentioned, we'll strengthen the local footprint. We won't expand in terms of the locations or legal entity set up at this stage. We feel that we have what it takes. But we need to staff up some of the local offices. We've taken already some decisions in that direction. And have identified a number of initiatives, which Claude will comment on. We're really based on business plans, we allocate resources. And if it works, we will staff up; if not, we'll reframe and look at alternative opportunities. But basically, in terms of target frameworks, some adjustment. And in terms of regional footprint, the same.

We want to keep that lean structure. We want to make sure we have empowered management and that speed of execution remains part of how we work. But we feel specifically for Asia Pacific that we need to strengthen the local presence. This has no precedent-setting on other regions. I think the model we have in P&C with a centralized team for North America, in particular, with other regions, works well. So no big plan to change the setup or the footprint in other regions.

This is very much APAC specific. We want to increase our market share. But we know it's a tough market. We know it's competitive. We'll be diligent. The underwriting acumen is key to success. And we won't grow for the sake of it. So we're very much bottom line oriented. We hope we can execute on our plans. But not if we can only reach top line growth. It needs to be profitable.

Briefly coming back to digital innovation. I think there are several aspects, which our team is working on. I think the efficiency play for us, for our own value chain is important. We continue to try to make progress there. The automation of interfaces with our business partners is an important component.

There are some industry initiatives, which are mentioned on this slide and where we're an active participant in. We feel this is certainly the way to go. And there is much -- a lot of scope for simplification, standardization for non-added value part of the process.

The new business opportunities, of course, are always part of the mix. Cyber is the most prominent example of that. But I hope we will see some other themes emerging and giving us an opportunity to expand. And the one where we still need to take a stance where we're probably less prominent than others make less -- comment less publicly on is the whole area of digital InsurTech and Fintech and how we can play a role in that space. We have a number of data analytics specialists. And as I said, some projects which are promising.

But what we want to do is see if there is maybe a case to do things a bit differently instead of trying to become a private equity player and invest into Fintech, which would not be our preference. That's not our core strength. Is there maybe a way to become very skilled at managing partnerships and bringing Fintech, InsurTech, new entrants into the mix and supporting our clients.

But this with the reinsurance positioning. We're not trying to improvise ourselves as a primary player. We know our strength. But I think there is a case to be made to manage these partnerships and also to expand on data analytics capabilities.

This is an area where the Life & Health colleagues have been particularly strong in. But I think also in property casualty, there is some scope for further advancement there. As mentioned, this is not a very material part of our revenue base. But if you add up the many pilots and initiatives we've been pursuing.

In the past few years, this is part of the value proposition. And I hope in the next few years, we can make it a more prominent part of what we do and make it relevant and create value and also generate business out of it. So more to be worked on. I know it's still a bit generic for today. But there are some examples you're aware of.

(Equarium) is something we might comment on later on, on the Life & Health side. We started P&C as well. This is a platform for exchange with Fintech companies, which is expanding. And we make it open to our clients. We have some good traction on the telematic collaboration with the 2, which we use in the German market.

Perseus is an example of a cyber player, who offers services and prevention in the cyberspace. ReFlex is our underwriting tool, which you know about. And we have some pilot initiatives in the personal line space, where we use data analysts and help some of our clients to get some data insights, look for product development opportunities, look for cross-selling or opportunities to fine-tune the claims management processes. So these are all areas where we want to see, is there application potential, are there opportunities to create some more scale.

The customer-centricity part I've commented on. I don't want to repeat. But I think as much as we start from a strong base, there's still some strong potential with many of our existing client relationships that we can broaden. We need to have this holistic view of the customer relationships and try to make sure we can capture opportunities across the board and have a conversation at C-suite level. Which is often happening but needs to be strengthened in the future. There's a lot about cooperation and having people who have an assigned role to understand the full scope of the relationship with some of the most important clients.

So we already have a key account management part of what we do, more P&C centric, that we want to expand there and see some cross-selling opportunities in the future. So more on this. And we have a CRM tool, which we'll want to strengthen, to help our underwriters get really important information on our clients and be well prepared for client meetings, et cetera.

So more to comment on in the New Year. And lastly, I commented on talent management, again, something where we don't feel this is new. But this is more of an acceleration. I think we need to be best-in-class in-sourcing key talents, sort of the younger talents coming out of university, make sure that we have a compelling proposition.

And I think what I've seen talking to younger talents in our companies, one consistent theme is the fact that they're very early in their career, they can take responsibility. There is this sense of empowerment in the company that is unique. And it's not always easy for younger people, graduates to, after a relatively short amount of time, to take ownership for projects and be a really part of the business team.

So I think we offer something different, somewhat different, as we say, to our talents. But we know, we are well aware of the fact that there is a tough battle to be fought and we want to win that battle. I mentioned mobility, not for everyone. But I think the notion of having opportunities for some of our people to move and to have more of an end-to-end view.

And leadership skills, generally, we continue based on our work in that space. We need to make sure we can also adapt to a different mix, probably in terms of mix of generation. But also more diversity in the next few years.

And last but not least, the fact that some of our key people in the next five years will be in their retirement age and the fact that we need to prepare for that moment very thoroughly. So succession plans is a key part of what we do.

These are not groundbreaking, new topics. But I think it's worth mentioning because it will gain an importance in how we manage the company.

So to finish off. And then this is a bit the starting point, which we had a few months ago. We had the 150 top leaders at Hannover Re meeting in Berlin. And this was a bit the base for our discussion. I think the mission is really to strive to perform at our full potential. I think we have a lot of potential to continue to outperform the market. I think the client-centricity aspect is very important to me. And I'd like to hear that positive client feedback in the future.

And the fact that we want to outperform the market in terms of growth, in terms of ROE, remains part of the mix. We want consistency in that growth and our performance pattern. And the notion of partnerships is very much key to what we do. That's why we said we want to be the go-to partner for our traditional clients. But also for new entrants and for brokers on the P&C side. So more on these aspects.

This is the platform for our team to work on. As mentioned, January is an internal milestone for us. And in the new year, we'll get back to you with a bit more specifics. But I hope it gives you a sense for the general direction. So the message is a lot of continuity, respect for the model. We want to build on it. These strengths are recognized. But there is more potential, is the message. Thank you very much.

Karl Steinle {BIO 1986424 <GO>}

Well thank you. Thank you very much, Jean-Jacques. I'd like to open the Q&A session. And as always, I would ask to wait for the microphone so that everybody can hear your question, even those who are participating via the webcast. And I already see some hands up. And we start with Kamran and continue with Vinit and Vikram.

Questions And Answers

Q - Kamran Hossain {BIO 17666412 <GO>}

It's Kamran Hossain from RBC. You've talked a lot about the excellent platform that you've inherited, returns being fantastic over a number of years. You talk about the areas that you're keen to pursue. As you're -- in your review, when you came into the business, what do you think the biggest threat was? Or what's the biggest concern? I just want to know whether it's kind of digital or being relevant or what's the kind of #1 concern on your list?

A - Jean-Jacques Henchoz {BIO 17457677 <GO>}

So indeed, a lot of my observation points were validating and confirming the model. And I think it's sufficiently agile and flexible to adapt to new opportunities and circumstances.

What I feel is the challenge put forward to us as a team is that short term, I think even without changes, I would see a similar pattern in terms of the numbers we produce in the next three years, just roughly, more the short-term view. But the question of relevance will increase in importance. And my sense is that we have a few years ahead to get prepared. It's not that we need to change everything next week. But we need to adapt. And it's not yet clear to me where. But it's clear that we need to make sure that as we invest limited resources into growth, into the model, keeping our cost leadership, we need to take a stance on these 2 or 3 items, which are important.

But I would say, short-term outlook very positive. Midterm, the 3; to 5-year view, some unknown on where things are going, how clients will behave. Consolidation is one example. Technology is another. And we need to take a stance on where to invest. Not across the board, we want to be very focused. But these items are certainly -- which I mentioned today, are certainly top of mind. I think innovation generally will be more and more part of the mix in reinsurance. And what we do more in life and health, where innovation is really part of the game to get access to the business, we'll probably be more prominent in P&C in the next few years. So being innovative in terms of mindset. But there's also capabilities, will probably be the midterm imperative.

And if we don't do anything, we don't try to strengthen our position there, there is a midterm threat. But I don't see -- again, I said that we're optimistic about the outlook. I think we feel the reinsurance space has plenty of room to operate in. With our market share, it's also obviously easier to say than if you have a larger market share and you feel the glass ceiling. But I do believe that there is a midterm unknown on where it's going and innovation should be a differentiator.

A - Karl Steinle {BIO 1986424 <GO>}

So the next question is coming from Vinit.

Q - Vinit Malhotra {BIO 16184491 <GO>}

Vinit Malhotra, Mediobanca. So just -- I'm surprised you highlighted Asia Pac because I remember in the last years, we have seen so much conversations around, say, the C-ROSS or the Chinese motor quota shares, you name it. I mean Hannover Re has been in and out and has been very prominent in some of those trends. So if you could just elaborate a bit more about why you see this gap or where you see the gap. And just speaking to territory, as you mentioned, that the glass ceiling is not there. And I think you mentioned the context of a U.S. meeting you had. Isn't then the U.S. really the area that you should continue to keep pushing?

A - Jean-Jacques Henchoz {BIO 17457677 <GO>}

Yes. I think we have been there in Asia Pacific. It's not that we -- we've been consistent. I think we've been building a very sound portfolio. So in a way, this is not something which comes as a new topic, quite the contrary. As a matter of fact, as I came in earlier this year, (inaudible) was also focusing on that. So I took it with me as part of the mix.

It's -- the difference with the United States or North America generally is that we need to adapt a little bit in terms of our setup. That's the difference. So it's not that United States would not be top of mind. It is top of mind. It is very much part of our portfolio strength. The growth outlook continues to be there. But we feel we're very well positioned and we have what it takes. So there is no need for me to make it a strategic initiative. This is more of a business as usual setup. And if and when there are emerging opportunities, we'll invest. But we don't need to take an extra look at it. I think the line organization, the responsibilities are very clear and it's without a doubt a key market for all my tenure, however long it will be. And that's not the notion that we are less interested in North America. Quite the contrary.

But we need to operate with more local footprint in particular. This is a process which needs a bit more attention. So it's not a new focus on Asia. It's simply an acknowledgment that over the next few years, I showed the 27 figure, the growth pattern is evident and we need to be there as well.

So it's a continuity and an acceleration of an existing strategy rather than a topic coming up new. We are very well aware of the many hurdles and potential challenges, be it regulatory challenges or competitive pressure. So we don't underestimate how challenging it is to operate in that region. But it needs to be part of the mix. It needs to be part of our diversified portfolio. That's why it's highlighted specifically.

A - Karl Steinle {BIO 1986424 <GO>}

There's Andrew -- Vikram.

Q - Vikram Gandhi {BIO 18019785 <GO>}

Vik from SocGen. Just a couple of quick questions. Can you give us an insight or perhaps numbers around the P&C business mix in terms of broker versus the direct business? And the reason I ask this is over the past few years, at least from 2015 to '18, what I've observed is your admin expense ratio on P&C has been quite flattish, which is great, between 2% and 2.5%. But your acquisition expense ratio has kind of gone up significantly.

A - Jean-Jacques Henchoz {BIO 17457677 <GO>}

The one that's in the...?

Q - Vikram Gandhi {BIO 18019785 <GO>}

The acquisition expense ratio on the P&C side, I see a steep increase between '15 and '18 consistently year-over-year. Just a sense of what's happening in the mix in terms of broker versus direct business. That's question number one.

And second is you mentioned telematics briefly. I just wondered if you can perhaps expand a bit more on what your thoughts are as a business opportunity or what's really going on in telematics in Germany, because that's been quite prevalent in Italy, telematics. And perhaps even in the U.K. Yes. That's all from my side.

A - Jean-Jacques Henchoz {BIO 17457677 <GO>}

Well thank you very much. On the mix, if I'm not mistaken, I think the 60% plus to 2/3 of the P&C business would be broker. So a very prominent part of what we do in P&C. I think we have a conscious model, particularly in the Anglo-Saxon part of the world, where we feel this is the best model to operate in. But in the end, this is not our decision. This is a decision which the clients need to take. And we respect the clients' decision-making. But we operate very well on the broker side. And indeed, that means that we don't have huge teams taking care of client relationships or trying to focus more on R&D and servicing, the brokers do part of it.

I cannot really respond to the question on the acquisition expenses, if there's a specific driver on transactions. But I don't know if Roland, if you have insights on the driver for the '15 to '18%s?

A - Roland Helmut Vogel {BIO 16342285 <GO>}

As you are referring to the commissions -- is this -- do we just push? Okay. Thank you. I think one. And I don't have the number with me now, Vikram. But we have increased our proportion of proportional contracts rather than nonproportional contracts. I think Silke will comment on more advanced solutions. And in that respect, the commission in that area of proportional contract is higher as compared to the nonproportional. So I think that mix has also driven the commissions up.

I don't think that a change in acquisition approach is really the driver behind it. And commission is a matter of the pricing in P&C.

A - Jean-Jacques Henchoz {BIO 17457677 <GO>}

On telematics, we have decided to work with a specialist company developing a tool, which can be used by our clients. That's a service which is provided to the German market at this stage. And it's still early stages. A pity that Michael Pickel is not in the room because he would give you a bit more color on the project itself. But it's an idea to really support our clients and as a contribution to receive some reinsurance proceeds out of the collaboration, be it on the motor business piece of the portfolio or other, we're not going to operate as a fee-based player there. That's not the model at all.

But it's an example. Still small in terms of earnings contribution, which offer us the possibility to give service without building up our own infrastructure. We -- again, this is this idea of taking the capabilities where we find them strongest. And here, you have a fintech type of setup helping us servicing our clients.

So if this is successful, if we feel there is traction, obviously, there's always this question on replicating the model elsewhere. In Europe, Italy is the most obvious market and U.K., of course. But it's early days for us. So we need to gain an experience this year, next year in the German market.

A - Karl Steinle {BIO 1986424 <GO>}

Okay. We have another question from...

A - Jean-Jacques Henchoz {BIO 17457677 <GO>}

I think Andrew has been waiting for a while. But...

A - Karl Steinle {BIO 1986424 <GO>}

Okay. Andrew and then Thomas.

Q - Andrew James Ritchie {BIO 18731996 <GO>}

Maybe it's a cheeky question to start. You talked about you were struck by the underwriting culture of Hanover when you arrived. A lot of companies, in fact, I can't think of any company I cover that doesn't talk about their underwriting culture. What is it that's really different? I'm just curious on how you contrast it with any previous experiences in terms of what is the depth of underwriting culture, how is it different at Hannover? The second question, I'm assuming your strategy is reinsurance, only reinsurance. As in you have a joint venture on the direct side with HDI. And that would be the extent of your interest in any more direct operations, I guess, apart from facultative business, which is quasi-direct. So maybe just your thoughts on that. And finally, your predecessor company is famous for its spider diagrams for client contacts and the amount it's done on CRM and the client, making sure you service the client in every possible way. Is that the kind of level of contact you aspire to? And is that -- have you sort of quantified the revenue opportunity there? Is it material? Is there really an underdeveloped -- you used the word CRM lots of times, which is a -- is that really underdeveloped at Hannover? I didn't think it was that underdeveloped.

A - Jean-Jacques Henchoz {BIO 17457677 <GO>}

Thank you, Andrew, for this question. On the underwriting culture, for me, what struck me behind the -- what set the company, as I observed it as a competitor, is the level of empowerment of the underwriter and the ability to really take decisions, take ownership for their portfolio. And there is a decentralized approach. There's a lot of trust in the underwriting judgment. And that level of ownership I haven't seen before. That's the difference.

It might sound a bit simple. But it's very much day-to-day what the clients perceive, say, we are in front of a decision maker. We are in front of someone who is able, if there is a change in conditions, a change in the structure, to reflect and come back to us very quickly and give the commitment, give the capacity, that swift approach. But really with an in-depth underwriting judgment, combined with trust and empowerment is something I haven't seen before.

So this was a really, really positive insights I gained. And I want to nurture that because I think in the end, you need responsibility. You need that end-to-end feeling, you need that profit center thinking, you need to nurture your portfolio and you need to be responsive to the clients' needs. So we continue to build on that very much.

Reinsurance only, indeed, there is a portfolio which we decided to have in cooperation with the Talanx group on some of these specialty lines. And we feel it's a better positioning because in the end, we are, although we are invested into the joint venture, we are a minority investor and we have a long-term arrangement to have part of the business, roughly 45% of the business, reinsured with us. So we feel a bit more in our element, if you want, as a true reinsurance player and then the company can operate with their own underwriting goals and business plans.

So this works for us. And I can only confirm that the positioning is reinsurance positioning. So a different perspective, because we feel that the reinsurance space is attractive. We feel there is growth potential and we feel this -- we want to play to our strength. I know very well how difficult it is to operate reinsurance and insurance in the same company. These are very different cultures, different models. And I think being focused on our core business is the way to go very much.

Fact, of course, is in P&C and also single-risk underwriting, in life and health, the closest you can get to primary insurance. And I do believe in the future, talking about technology, talking about some of the new risks, that we need to have a good understanding for the primary sector and also maybe recruit people who have some primary background. But always with a reinsurance perspective. I think that's the way to go.

And you call it spider, I call it the noodle slide, actually, because they had so many touch points. This is not the model. First of all, we have no intention to change the organizational setup. We are, as I said, profit center oriented, business unit oriented. So we don't want to change that and have a distinctive operation dealing with some of the largest key accounts. That's not the model. I want people to be really operating across segments.

And I think where I see potential is having this notion of a virtual team of people operating as a network so that we have one face to the customer. So that all people who have touch points with the customers do have inside knowledge of how Hannover Re is performing, how Hannover Re is interacting. But in those circumstances, would I want to go that far, because in the end, I think part of the job is the brokers.

And I do believe that, as you said, we have the right philosophy and we are client-centric. So it's not that we're not strong. But as we grow, as there is a certain level of complexity also with our clients, I think making sure that we use CRM as a way to collaborate, to share knowledge and to be consistent across geographies is an important way. But you won't see next year a slide with 700 touch points for a medium-size enterprise study. That is not the idea.

So maybe less complexity and more reliance on the intermediaries would be my response.

A - Karl Steinle {BIO 1986424 <GO>}

We continue with Thomas and then James.

Q - Thomas Fossard {BIO 1941215 <GO>}

Thomas Fossard from HSBC. A high-level question for you on the -- on your assessment of the Hannover Re risk appetite in the current environment. I mean how do you -- how would you qualify the risk appetite of Hannover Re compared to other people in the market? And if you're thinking about accelerating your business, I mean, should we expect a change in the risk appetite? You're starting with a very strong balance sheet, high solvency, strong reserves. Hannover Re has been a countercyclical company in the past. We are seeing a lot of changes in the -- among your competitors in the way they are assessing risk and they are retrenching in some lines. So I mean put it in a nutshell. I mean are you thinking that today, Hannover Re could do more and this is the right time to expand a bit more on the risk -- on the risk curve? Or you think that actually, things are still fine today and this is not the way for you to grow the business?

A - Jean-Jacques Henchoz {BIO 17457677 <GO>}

Thank you, Thomas. No, for me, I mean I was really struck by the diversification of the portfolio. This is really very, very well thought-through, well constructed. And from that standpoint, the short-term outlook is a lot about continuity. I think in each of the different lines, subject to pricing conditions, there is growth potential.

So I would say that in terms of the business mix, I wouldn't see a lot of changes short term. I would say there's a question mark on NatCat depending on where the pricing goes. And there, we see some potential for growth. We have said so in the past. But it won't go to an imbalance. We don't want to jeopardize the diversification on our business mix. But we might be able to allocate some more capacity in NatCat if and where the condition are right. And maybe Silke might have a comment on NatCat generally.

Cyber, I think we arrive at a point where we've been learning a lot, a lot of insights on the cyber exposures. Where we need to work hard on some of the technical questions, there is an industry-wide challenge with silent exposures, which we need to tackle and in the affirmative covers. Obviously, the accumulation risk remains a general concern. So we want to address that specifically. So I don't see continuous long-term growth at the same pace. So I would want to make some progress. So we'll talk about it, modeling of the risk, maybe diversifying, if you can say diversifying in cyber, that's the question mark. But diversifying into different geographies and segments would be another part of what we want to do.

And so clearly, cyber is an area where I'm -- more an environment where we're very, very cautious and have seen some more entrepreneurial spirit within boundaries. There is a natural barrier to further growth unless we can tackle some of the challenges.

Again, we'll talk more about cyber. But I think structured solutions generally is an area, life and nonlife, where I see a lot of traction. And I would be more than willing to continue on that path and see some more deals being completed. But we'll do it pragmatically as opportunities arise. But the exposures are not different exposures. So in the end, it's a bit of a different way to tackle the business, different driver for demand, more C-suite related. But I think we're very strong in that space. And I feel this is one part of our business which will continue to grow. It might be more prominent. But it's more lumpy, it's less easy to plan. But mid long term, it will be a very prominent part of what we do. That's why we wanted to present a bit what we do there today, P&C and life and health.

So no big changes, really, in terms of initial views on risk appetite. But I'm more than ready to openly speak to the team if and where we see opportunities, if there are changes in conditions making some of the lines more attractive. So I think it's more tactical than strategic. It's more cycle management related at this stage.

Q - James Austin Shuck {BIO 3680082 <GO>}

It's James Shuck from Citi. I had 2 questions, please. It seems as if the group is emerging from another period of cost culture, very much focused on squeezing what you've got, to perhaps greasing the engine a little bit more and investing for the future. That might be CRM, it might be digital investments. What is the outlook for the admin expense ratio going forward? As you do all of that, will you manage to keep it flat? Or do you anticipate some expenditure on that front, please?

Secondly, interested on Slide 19, automating the interfaces to clients and intermediaries. How ready are your IT systems in terms of that actual journey? And how do you compare versus peers currently on being able to do that? Are there any particular problems you anticipate in being able to automate and does it require an investment in order to do so?

A - Jean-Jacques Henchoz {BIO 17457677 <GO>}

Thank you very much, James. On the cost culture, clearly, the message is that we want to keep that philosophy. We want to keep that edge. And clearly, that's a bit the ceiling I'm setting myself as I looked at the business plans for the next three years.

For me, it's very, very important that we keep that cost advantage. So I want to make sure we have the differential versus our competitors and that's a little bit budget limitations. It's not that small. I think as we grow, we have potential to allocate more resources. But I want to do this very, very diligently. So if we execute on our plans in the next few years, you should see continuity in terms of cost ratio.

This being said, if we feel there is an initiative, an area where there's a one-off investment needs in the next few years, as a team, we'll need to take a stance on whether there is a case to be made in terms of future competitive advantage, which might lead us to sacrifice 0.1, 0.2 of the cost advantage for the benefit of our future growth outlook.

But the philosophy and the approach I'm taking is that cost leadership is key to success.

Q - James Austin Shuck {BIO 3680082 <GO>}

If I could follow up quickly on that. So one might expect other people's admin expense ratios to improve slightly. You'll be investing a little bit more. So by definition, that gap may close. I'm just interested to interpret what you're saying properly. I mean will the absolute admin expense ratio increase? Is it a case of maintaining that gap? I just want to clarify that.

A - Jean-Jacques Henchoz {BIO 17457677 <GO>}

I think you'll see continuity in terms of cost ratio. You don't see, probably not an improvement at this stage. But you don't -- we don't see a deterioration happening anytime soon. I see Roland being passionate.

A - Roland Helmut Vogel {BIO 16342285 <GO>}

Thank you, Jean-Jacques. I think you would really have to wait another 30 minutes or so. And I will come back to exactly that point. That is one of my parts. In respect of automated account and automization in our internal processes, as compared to the competition, difficult to say. You have seen that we are members of (inaudible), which is the ACORD system. We are the B3i. But this is more the future. We do have, with every bigger broker, automated interfaces implemented. I get numbers on a monthly basis. The last I got was that more than 100,000 of accounts have been processed automatically. Again, I cannot tell you how much that is compared to the bigger competitors. But this end-to-end. And these robot things, which we have implemented so that we get -- our accountants get information, claims information, into there via e-mail, very traditionally sometimes via e-mail. And that is processed automatically into our systems. That is really increasing. That is one point. And I will come back to that, again, in 30 minutes. That is one point where we -- why we feel that the expense advantage which we have should be sustainable.

A - Karl Steinle {BIO 1986424 <GO>}

Well Vinit, you have another question. But we are already a little bit over the time. And so we'd like to continue.

A - Jean-Jacques Henchoz {BIO 17457677 <GO>}

We can come later if you wish.

A - Karl Steinle {BIO 1986424 <GO>}

There's plenty of room later on. So keep that question for later. Well thank you very much for your presentation and for answering all the questions. Thank you for your questions. If you can, please restrain your enthusiasm for the upcoming, soon upcoming coffee break. But we have another presentation from Roland. And according to a long tradition. And a gesture of our transparency, you can now take a look at Roland's desk. The clicker is here.

Since we have only allocated 20 minutes for his presentation, I'm afraid there are only 2 issues he might address. It's the investment update. And the second one is, as James has already referred to, it's about the cost. And so he won't bore you with IFRS 17. But enjoy it.

+++presentation

A - Roland Helmut Vogel {BIO 16342285 <GO>}

Yes. Thank you very much, Karl. As anticipated, you were more interested to hear a young, new CEO rather than an old CFO. This is why I had already volunteered to serve as a buffer. And this is why I have only 2 topics brought with me, one of which is the investment update. I think you're used to the slides still and I also think I have used that as one of the headlines. What a difference a year makes.

So in that regard, it might still be interesting to look at these slides, the portfolio yields, the maturing yields, the years of maturities, currencies, modified duration and then stop one more time to give you a little bit of an indication how I and we will try to cope with the latest or the recent developments on the capital markets, especially with regards to interest rates and especially here, the euro.

Moreover, we felt it might make sense to address the expense ratio issue. More than once during road shows, investor calls, investor meetings, we have been challenged, teased, provoked, not to say annoyed, with exactly the theory which James, you mentioned. We have a competitive advantage today. So our expense ratio is very much down. So we obviously have explored all our potentials. The rest of the industry has more potential. So is this competitive advantage sustainable? Or will there be a reversion to a state-of-the-art or an industry thing? And I will try to do my best to convince you that the opposite is the case.

If we have time. And it doesn't seem as if we will, we can talk a little bit about IFRS 17 or you might have also heard that we have issued a hybrid bond recently, EUR 750 million. There is a first call date upcoming next year. So in this regard, this gave us the chance to potentially refinance that early on.

We've increased the volumes a little bit. So if you're interested, I could comment on that as well. I have no slides with me in that respect.

So let's start with the investment portfolio. And we have defined a few principles, which are to create the framework or define the framework in which we will -- we are investing today.

So first of all, we have again defined liquidity requirements. And that doesn't mean only cash on a bank account. So every single security has a liquidity factor with it. And we have defined the liquidity of the portfolio, which we want to keep. So one of the aspects is, we feel that we are where we want to be. And all the new definitions will have to bear in mind that we want to keep the liquidity profile of the overall portfolio approximately where it is today. So that means if we want to address. And we will come to that a little bit later on, more illiquid assets, then we will have to find substitutions elsewhere to have the profile defined. So that is one criteria.

We are diversifying our credit risk over the whole spectrum. That is, we mentioned that before, we no longer continue to have that barbell strategy. But not only with regards to quality. But also geographical diversification. So we have also kind of explored a little bit, especially emerging markets, credit risk in the portfolio. So that is one point where we are diversifying, where we're increasing the universe of our investment portfolio.

So the same is true, as I mentioned, diversify more geographically around the world. So for instance, we would, also here, emerging markets is a little bit a target area. We have used that up to now more or less to match our liabilities, which we have in these areas. These days, we would also try to diversify into that area, which we see as an attractive move.

We will stabilize and slightly increase our real estate portfolio. That is in a very -- in a world where our portfolio increases very much, it is already difficult to really invest to keep the quotas where they are. But that is on the agenda. And we are willing and prepared to do a little bit more and the same is true for our private equity portfolio.

For the listed equities, our approach stays where it was. We are watching carefully. We are prepared to reinvest. But we are not desperate. And if it takes a while, then it takes a while. And if opportunities arise, we will take them. We still feel that it is not a necessary requirement to be there to achieve our investment goals.

So this is where we are today. So the portfolio on the surface, nearly the same. Again, we are, as I mentioned before, below the surface, we have and we are in the middle of changing a little bit qualities as well as geographies. Other than that, no surprises yet. And I think also, going forward, this composition will not change that drastically.

You see that the portfolio has been increasing. I can tell you that also in Q3. And you will hear the numbers soon, it's really going upwards. Of course, this is driven by currencies, by valuations and by positive cash flows.

And if I want to move that by 1percentage point, I need 0.5 billion of new investments. So please bear that in mind. If we look at the -- on the right-hand side, the composition of income. It's still that real estate and private equity and also some areas of our credit portfolio. And hence, the yield. And you will see a little bit on top of that information in a few seconds.

So these are the graphs you are used to. They are very much different. And we will see the comparison to the previous years and the previous occasions in a little bit of seconds.

So what we see here is the 2.6% locked in portfolio yield. So this is what we have on the fixed income side. That has come down in line with expectations, with maturity slightly. But of course, this actual reinvestment yield from 1.6%, which is. And we've discussed that at our table last night, which is more a yield to maturity.

So please bear in mind the assumption behind these numbers is we sell today, the same second we reinvest. And that would lead to, of course, a lot of realized gains and an ordinary yield going forward of approximately this 1.6%.

We are not investing exactly in the same securities which are maturing. So for instance, in anticipation of a potential question of this audience, I asked my people. So how much did we invest in securities with negative yields or bonds? And that is a low triple-digit million number still. So we are still successfully avoiding that.

But we have to be prepared. And we are prepared. And there is -- it doesn't make sense to just ignore the fact that some of our euro universe securities are only viable with negative yields. We just have to get used to this world. I think that is one of the messages.

Still, we see that there is a difference between the reinvestment or the actual yield and the reinvestment yield. And if we see the changes in our investment philosophy, I would still argue that the real reinvestment yield. So what we really are able to achieve still has a 2 before the dot. But over the next years, if everything stays the same. And that is a story which I've been telling you for years now, the ROIs will go down 5 to 6, 7 basis points, depends really on if everything stays the same. And we will have to get prepared of that. And I think one of the major tasks I have is to make sure we have as a management to make sure that this world is reflected in our pricing considerations.

A little bit more information, details, with -- we will not go into everything. This is the portfolio by currencies and asset classes. You see that 30% of the portfolio is in the euro. This is where the major problem is today. But also, of course, U.S. dollar. Interest rates came down remarkably. You also see the composition. So 30% approximately, half of that invested into govies today. So this goes down. And we have increased the universe, as I told you, to make sure that we minimize the portion with negative interest rates. Please bear that in mind a little bit, because we might need that information. Also, this slide here, I've been showing before the maturity profile of the portfolio over the years and the modified durations by currency. Also, this will become important on one of the following slides, you see that the euro and if I go back to this slide what -- where is the problem. The problem realized between the dark blue bar. And the bright blue bar because this is where the difference in portfolio and reinvestment yield lies. And you see that we have an issue in the euro. In the dollar, you might remember that last year, the reinvestment yield, the dark blue bar was already higher than the bright blue bar. This has changed but not as drastically as before. So please bear that in mind, if we go back to that one slide. The portion of euros maturing over the next three years is relatively low, relatively low. We will have to face that issue that interest rates will go down. But up until '22, I think the portion is a little bit small. And the problem is not as prevalent as it becomes later on. And also, we will see the consequences of that in one of the next slides. Also -- it's also driven because -- and you see that on the right-hand side that modified duration in the euro is higher as compared to the U.S. dollar a little bit. So you have a little bit of higher turnover in the U.S. dollar.

These are the things which then leads to this slide, which, again, demonstrates going into the future, what we face. And again, this is based on a yield to maturity consideration or a definition. The dotted green line on that slide, that is last year. And you see the parallel shift in curves going down. That really demonstrates what has been happening. We were discussing last year here that obviously, this ROI dilution comes to an end. It has bottomed out. Here, you see that this assumption, obviously, was not exactly correct. What has happened in between, it demonstrates here the picture. Here, you see that the reinvestment yield or the yield to maturity that is demonstrated by the blue line. And the difference between the bright blue bar and the blue line, this is exactly what we kind of lose within the different rates for the maturing portfolios. So overall. And the reason why the difference between the 2 in the upcoming years is not as high that goes again back to the euro portfolio, which matures a little bit later. So this is what we just have to accept. This is what we have to face. There is no denying it. We have been coping with such a development over the last 10 years. You might remember, 8, nine years ago, I told you, our fixed income portfolio is at 3.5% over the next 10 years, if everything stays the same, we will be at 2.5%. So we will lose 10 ROI basis points every year. We have to reflect it, then the assumption is that volume -- the increasing volumes and the additional cash flow will make up for that. And the investment income will stay at least the same in absolute terms. What I tell you today is exactly the same story, one more time. I'm sorry for the repetition. But this is how it is.

We expect today that with the shift in portfolios, we will be able to keep the reinvestment yield above 2. We see that the positive cash flow will make up for the loss in investor -- for the potential loss in investment income. And we want to make sure that these new rates are reflected in our underwriting prices. So it has not questioned our business model over the last 10 years. And it should not and it will not over the next. So this is, at least, to try to find a little bit of positive note in the end. Here, you see the yields of our alternative portfolios. So we have IRRs of our private equity portfolio. Again, a good EUR 1 billion in -- which we have -- this is double digit. Sustainably, long term, a very diversified euro and U.S. dollar portfolio. The real estate, a little bit more diverse, of course, depends on where we are. IRRs between 4% and 12%. The same is true for a new venture that is U.S. infrastructure between 4% and 10%. Emerging market debt, we mentioned that. Here, we are at EUR 3 billion. You see the volumes on the left-hand side, fixed income enhancement funds. Also here and a very well-performing CLO portfolio, which also provides higher. So this demonstrates -- this represents approximately 20% of the overall portfolio, where -- and this is the area where we will be trying to outperform or at least enhance the portfolio yields to keep at least the investment income stable.

So that was the update. This is a reality. And again, the message I have, we just have to accept it. We have to react on it. And we will, as we did before.

Now the expense ratio. I think I mentioned that we had been I would say teased a little bit with exactly what James mentioned before. And what you see here is the development of the expense ratio over the last years as compared to the competition. Unfortunately, information about expenses is neither very extensive nor very comparably available in the market. So we do our best to really have internal information available, how we do and how we compare with the competition.

Here, you see that what was kind of suggested that we will be losing on our competitive advantage. And that argument, we heard already five years ago, is not exactly true. I think that goes back a little bit to what Jean-Jacques already mentioned that is the corporate culture, the genes, which we have, to save money. So over that period of four years, the advantage, which we have, has rather increased than decreased. Now such a ratio is always a reflection of the volume as well as the expense development. So the ratio is also, in some years, driven by higher growth and higher volumes but also, these higher volumes should lead to higher expenses, at least over time. So in this regard, what we see here is that we are convinced that there is no reason why the gap, which has been widening over the last years, should be narrowing over the next. What is the reason? And again, I think, especially compared to the competition, this information is not readily available. If you look at our case, we have here the premium per employee, Hannover employee. This graph doesn't look so impressive. Maybe we should have used another scaling. If we compare the EUR 7 million to the EUR 5.9 million, that is an improvement of nearly 20%. So it's 19% improvement. And we have to bear in mind that we also retrocede more than the others and also retrocession creates work. That is not reflected here. We also -- and that has been increasing. And we also have deposit accounted premium, which is also not reflected here in the ratio. And also, I would say our development of the deposit accounted premium has been increasing. So these are factors. And we are looking at years where we have introduced to Solvency II reporting. We have the IFRS 17 projects. So these are years where also we have been seeing challenges and demand. And still, we were in a position to increase efficiency remarkably internally, based on exactly what we had already mentioned before, the automization, the internal automization, the end-to-end processes and more efficiency and efficiencies internally.

So that also logically comes -- there is another question. So do you save too much? And it has already been questioned, where do we invest? How do we just -- are we too frugal? Do we not invest into innovations where we should be investing? Here, you see that -- also, our absolute expenses have been increasing. So they didn't go down. And the composition here, I think that is the one message, which this graph gives us. First of all, we are growing. But we are growing very, very slowly and consciously, plus our IT expenses. And that is intentionally have been increasing from 8 to 11percentage points. So we have especially been investing into the IT side. That is not only internal end-to-end processes that is also systems and IT solutions with our clients.

So why is that the case? Let me give you at least a few examples, I see the 0 on my watch here already. But let me give you at least some examples, which might explain why that is the case and why we feel it is sustainable. We are based in Hannover, Germany. That is a relatively cost-attractive location. This is not New York, Bermuda, Zurich or Munich or Paris. Unfortunately, that is also true for the Board compensation. But that is really something we have, a very, very low fluctuation. Jean-Jacques already mentioned that. People are -- start with us and they stay with us. So in that regard, it is a competitive advantage.

We have a centralized underwriting in P&C, especially in the U.S., we have no operation over there. So we might have higher travel expenses but to have an operation onshore and especially on the P&C side, we are where we need to be. And everything else is done centrally. And that helps a lot. We provide services to our clients. Yes. We do. And we have systems that we mentioned more than 1 today. But we will -- we only do that if there is a clear opportunity to materialize these investments, to monetize these investments. If that is not the case, we wouldn't provide that. One thing, which, from my point of view, is underestimated once in a while. That is -- we didn't have a major -- a real major integration project in our history. So if you merge 2 companies, that always creates redundancies. We never had to do that. So that is an advantage. If you add together, then to get rid of what is superfluous, that is always a big, big issue, which we never had to face.

We have clear responsibilities, no metrics. That is -- Jean-Jacques mentioned that. That is a cultural thing. It also leads to a lean organization. There is one responsibility that can create issues. For instance, with customer relationship management. If you have a profit center being responsible for marine and for life and then for the facultative business. And these guys meet at the clients' entry door and nobody knows from each other. That's an issue. So you have to be -- you have to somehow create systems to make sure that this works. And still, the line function is responsible. We don't have C functions around the world. There's only C function -- one C function that is based in Hannover. I think that is also one of the competitive advantages we have. We have a high degree of delegation of authorities. We don't need committees and references upwards the chain, our people can decide, which really makes us leaner than the rest.

The cost leadership has been a strategic target. It is part of our DNA. We look at it all the time. The internal phrase is, we do it the Hannover Re way. So that is really something which Jean-Jacques mentioned it before, it is difficult to copy. And there is a high degree of internal automization. We have only one administrative system in each and every of our subsidiaries and operations, apart from one. That is still left. We're working on that. And that provides us with the opportunity. So I can give you one example -- or more than 1 example, if -- for IFRS 17, if you had only one system around the world, only one system has to be changed. That might be different elsewhere. So in that regard, we are convinced. And we are working on it. And we see it as a strategic approach that our cost ratio is not owned, we don't -- not only have that competitive advantage that this is, first of all, a sustainable competitive advantage and maybe that our ratio might not decreasing, again, also will be depending on volume development. But we see us well-equipped to keep that advantage and maybe even increase it. Thank you.

+++qanda

A - Karl Steinle {BIO 1986424 <GO>}

Well thank you, Roland, for your distinguished presentation. We have a little time for another Q&A. And I have already seen Andrew. And then we continue with Andreas and

Vinit.

Q - Andrew James Ritchie {BIO 18731996 <GO>}

The low interest rate environment is also pressuring returns on alternative assets, as everyone is seeking to allocate there. You've had exceptional returns on your private equity and real estate portfolio higher, much higher than your target IRR. What -- just give us a color why have those returns been so exceptional? And surely, meeting those target IRRs is going to be very hard given the amount of money flowing into that space and how hard it is to get assets.

A - Roland Helmut Vogel {BIO 16342285 <GO>}

I think we have been -- especially a private equity investor for decades. You have to have a certain track record here. Again, I'm not the expert there. This is what people tell me. The question of commitments. And how much is drawn, of course, requires us to commit even more. You're right. Then you see how much is really called of that money is an issue. There are funds and agents who manage these moneys where, as a newcomer, without a track record, you have difficulties to get in. We don't have that because we are there for decades. I think that is a team which does that for as long as I can think, the 2%. So in that regard that helps a little bit to get the allocations, which we need and want to have. But I can tell you, if our people on the board, they see these returns and also from the real estate portfolio. And they would argue, why don't you do more. It's difficult to -- we see that cash chasing these opportunities. But up to now -- and again, your argument would have been true five years ago already also, I think we have been able to really allocate the resources and also get onboard with the quality. And I'm convinced. Again, I'm not saying it's easy. And we had to change our, for instance, our investment guidelines, especially when it comes to commitments as well as then assumed call ratios of these commitments because what you commit, you could say, from a risk appetite point of view, is already there. If I know -- if I commit 3 billion to private equity. And I know my overall invested assets will never increase 2 billion because these will always be outstanding commitments, then you have to cope with that. And this is -- at least this we addressed internally. Apart from that, I think -- I don't see why it's difficult. But I don't see why we cannot have it also in the future.

Q - Andrew James Ritchie {BIO 18731996 <GO>}

So -- and just to be clear, the assumption that you can keep the overall reinvestment rate at 2% includes hitting the target IRRs on those assets? The midpoint of those target IRRs, I guess?

A - Roland Helmut Vogel {BIO 16342285 <GO>}

Well this has not been really a sophisticated a step-by-step approach. I think -- but yes, I think we will have to achieve or enhance our yields with these assumptions. Of course, it depends also on other reinvestment yield.

A - Karl Steinle {BIO 1986424 <GO>}

So the next question is from Andreas SchÃ¤fer. Please continue. It should work.

Q - Andreas SchÃ¤fer

Andreas SchÃ¤fer, Bankhaus Lampe. I have just 2 questions. One is regarding the exposure to U.S. dollar bonds, it seems that you'll still take more risk on U.S. dollar compared to euro. Could you remind us why this is currently the case? And second point on IFRS 17, could you give us some sort of potential cost relief once the IFRS 17 is implemented?

A - Roland Helmut Vogel {BIO 16342285 <GO>}

That's -- the second is an interesting question. We have always been asked about the cost. Now we're talking about the cost relief whenever it comes. I don't have a number with me with the latest. But I think it is at least a double-digit million number, a low double-digit million number per year. But I'm sure we will find success of projects in -- Solvency II is waiting for an interesting update. And there will be other challenges waiting for us. But you're right, I think that was an extraordinary burden. And that should go away. But especially with regards to the industry, it wouldn't give us a competitive advantage. But the costs overall should go down after the finalization of that project.

With regards to the U.S., this is very dogmatically currency matched. It is a pure reflection of our liability side. So we don't speculate in currencies whatsoever. We have to compromise once in a while, I have to match so many balance sheets. So you have to compromise, it is an IFRS. You can -- it's an IFRS balance sheet and economic balance sheet, a German GAAP balance sheet. So many. So you compromise. But the higher allocation to the U.S. dollar is purely business-driven, purely liability-driven. So we don't bet on currencies at all.

Q - Andreas SchÃ¤fer

Just what I mentioned is that you still earn, I think, 250 basis point spreads compared to Eurobonds, despite having a shorter duration. So it seems that you're taking more risks?

A - Roland Helmut Vogel {BIO 16342285 <GO>}

Well the portion of corporate bonds on the -- in the U.S. is a little bit higher as compared to Europe. This is a risk-reward considerations where we feel that, especially in the U.S. dollar, the universe is larger. And the corporate quarter is a little bit higher. This is why we take more credit risk in the euro -- in the U.S. dollar as compared to the euro. That's right. That's correct. But it's driven by risk-reward consideration where we feel this credit risk is better paid in the U.S. rather than the euro, where the desperate need to find returns has even affected the risk reward considerations, even more in the EUR as compared to the U.S. dollar.

A - Karl Steinle {BIO 1986424 <GO>}

Then the next question from Vinit.

Q - Vinit Malhotra {BIO 16184491 <GO>}

Vinit, from Mediobanca. Just on Slide 10, please. The EM debt with already EUR 3 billion, are your comments suggesting that this has to go up? Or is there rerisking already done?

And that's -- I mean, to me, it looks already like a significant number. And similarly, on that slide, the ABS, CLO, these were 3-letter words a few years ago, the 7.5% yield. And so how is the risk management? How is credit risk? How is all this panning out?

A - Roland Helmut Vogel {BIO 16342285 <GO>}

Well if you look at the composition of the portfolios. I think EUR 3 billion you mentioned, is a significant number. And as I indicated, it will or should grow into the future. Yes, of course, there is some reflect -- but especially when it comes to credit risk there and with the respective government risk, if you look at debt ratios in these countries, far better than other countries also. So there is a very sophisticated risk management. We are not betting. We are moving slightly into it. So in that regard, we feel it's more a diversification rather than a bet on something. When it comes to the 4-letter or 3-letter expressions, starting with the C. This is a -- the majority part of it is a -- and that compares to the history we have in private equity, a very, very long-term CLO portfolio. CLO portfolio, these are corporate loans. These are no structures on top of it. Yes. These are -- and we have been moving, especially in that portfolio from the lower, from the BB, BBB tranches to the upper tranches over the last year. So you have BB CLO tranches. Now we are moving slightly downwards again because we see that the risk-reward works. But also here, we had that before the crisis, we had it over the crisis. And we have it since the crisis. So that was a portfolio which was not reflected. We have some specialists for that. It works out fine. I'm not concerned at all. Of course, these are risky assets. But this has not been a desperate move. We have that on our -- in our portfolio for decades.

Q - Vinit Malhotra {BIO 16184491 <GO>}

Sorry, which EM are these, because 4%...

A - Roland Helmut Vogel {BIO 16342285 <GO>}

Sorry.

Q - Vinit Malhotra {BIO 16184491 <GO>}

Which EM markets could this be, because 4% looks a bit not very high for EM, right? Are you commenting on which EM they could be, which markets in emerging markets?

A - Roland Helmut Vogel {BIO 16342285 <GO>}

I think we use also outside managers to do it. They have a lot of freedom in that respect. Yes. We have a say in it. And there may be 1 or the other countries. So our exposure to Argentina was very limited. But yes, you have Turkey, you have other countries in these portfolios. But on a very diversified basis.

A - Karl Steinle {BIO 1986424 <GO>}

Okay, being time conscious, probably another question from Vikram?

Q - Vikram Gandhi {BIO 18019785 <GO>}

Vikram, from Societe. Just an extension of Vinit's question or maybe question asked slightly differently. Given your strict adherence to asset-light, your derisk management in terms of the ForEx exposure. And in conjunction with the desire to increase Asian exposure, do you think at some point in time it could be a concern, not a real worry. But a concern to find suitable assets, ForEx matched in Asia because the corporate debt market isn't that well-developed, political risk on the government debt, not as much as LATAM perhaps. But still? So yes, business-wise, maybe Asia would be good on the underwriting side. But to find ForEx matched assets could be some bit of a concern going forward?

A - Roland Helmut Vogel {BIO 16342285 <GO>}

I think we do not invest into each and every currency. Some of the currencies are always matched to the next currency with the best correlation. You take a little bit of systemic risk there. So some of the currencies are matched to Asian currencies but also others. Up to now that has not been a concern to these major currencies. Also, I would say, derivatives to match -- to just hedge currency risks should be available, at least for the major -- liquid enough for the major currencies. We have not been using that to a large extent. But we would be prepared to do it if it's really about the currency matching. So -- and you saw in the composition of the asset classes by currency in one of the slides before, very different. Of course, that depends on availability. Some of the -- if you want to -- if you look for Australian dollar credits, not too many available. I have to say, this is why you have more the govies and other countries and I am missing the phrase now. I think this is, of course, reflects what is available on these markets. But I haven't seen an issue. And I'm sure we will be able to cope with that one.

A - Karl Steinle {BIO 1986424 <GO>}

Okay. Probably, the very last one from Edward.

Q - Edward Morris {BIO 16274236 <GO>}

Edward Morris, JPMorgan. Just thinking -- just trying to sort of understand what you're saying, there overall on investment. So you show this 12 basis points per annum as the headwind that you would face if the portfolio was unchanged, which -- and I think you're saying that it should be 5, 6, 7 as a headwind based on your rerisks. So is this rerisking something that has a sort of finite period attached to it? Because presumably, at some point, there becomes a level where you wouldn't want to continue to rerisk. Then does the ROI headwind wouldn't step up again? Or just how do you think about that point at which you wouldn't want to rerisk further?

A - Roland Helmut Vogel {BIO 16342285 <GO>}

I think we have defined the risk appetite and the overall capital we have allocated to the investment portfolio should at least, in proportion to the others, should not increase. We have some unused buffer. So I have more capital allocated to me. And as part of our latest management decisions to allocate capital, we've decreased the investment side a little bit with the potential of having more on the reinsurance side, more opportunities there. So overall, this will define a limit. And I don't see that the allocation of capital to the investment side or the capital market risk will increase over the future. So there will be a natural frame to that. And what is true. And I think we've discussed it last night. And also with other tables, we have to reflect that elsewhere. I think if -- do I have plan Bs, plan Cs, plan Ds for the next 10 years? No. Last year, we were on a totally different track. Today, we are here, we will have to reflect that. The important thing is that we don't fool ourselves and tell us, oh, there will be a reversion to the mean and in 30 years down the road there will be the ultimate forward rate. So we just have to accept where we are. We have to reflect it in our business model. We have to reflect it in our pricing tools and then take it from there. But we -- I do not anticipate a higher risk allocation to the investment side to desperately find -- defend my investment yield if that trend continues or even gets worse.

A - Karl Steinle {BIO 1986424 <GO>}

Okay. Well thank you for your questions. We are definitely desperate for a coffee. So it's coffee time now. And we resume at quarter past the hour.

(Break)

+++presentation

Okay. Well thanks for taking your seats again. We now come to the presentation of Andreas about the reserving position and an update on Solvency II. But apart from that, he also will talk about climate change risk and cyber. So Andreas, over to you.

A - Andreas Markert

Thank you, Karl. So good morning. Also from my side, happy to be here once again. And again, the presentation on capital generation and risk profile. And I thought sort of when I talk about risk profile of Hannover Re, I should talked about the 2 major emerging risks that we think our company and also the industry is facing. So I have some slides on natural catastrophes and climate change risk and also on cyber risk with me. And I'll take you through that. But let's start with Capital Generation, Solvency II, a review of 2018.

So what has happened to our solvency ratio? It dropped basically from year-end 2017 to year-end 2018 by 13, 14percentage points. To walk through sort of the individual elements that contributed to this change, we have, first of all, implemented a model change as announced last year. So we are using now the volatility adjustment under Solvency II. And that is recorded on the model change and makes up for, let's say, 9% of this 11% here that we see on the model changes recorded. We have the sort of the largest numbers obviously, occurring on the operating impact, where -- so we -- this is a general tendency that we see from past years. So that our sort of capital grows in line with our risks, the business growth calls for the fact that we sort of put the new capital that we generate at risk. So there is no additional solvency ratio came from the operating impact as our business growth. And you know that from all the gross written premium, as it's under management figures that you have seen before how our business is really growing. And that also leads to larger SCR. So that's the main reason for this EUR 376 million increase in SCR.

And of course, a part of that operating impact is the life and health new business value, other part is the investment income. And also the P&C new business value, which is not sort of a central steering metric where we look more on the combined ratio there. But I just want to build the bridge here. In terms of market movements, we have seen a significant peak of credit spreads at the end of 2018. I guess, you are aware of that. And that is the sort of major part of this minus almost 19% here of SCR ratio decline, as we have implemented the volatility adjuster, which sort of carves out some of this volatility from credit spread movements. So we regained a little bit. But also you see the SCR moves up quite substantially if credit spreads move up. So that's a reflection of the volatility that we have, then also reflected in our model, the increased volatility, which creates some volatility of the SCR ratio in such cases where credit spreads go up.

Then finally, you have tax effects. And of course, we paid a dividend. And that brings you to the final figures here, the EUR 236 million. This page just tells you that we sort of don't like, first of all, don't like surprises on the movement of the year. Solvency ratio, we have a regular process for planning and reviewing also the solvency ratio. So we have our sort of quarterly full assessments. We have assessments upon significant transactions. And we have our 5-year planning where we plan -- project the solvency ratio so that we always keep track of all the development in the market or business.

And of course, we do not only look at the solvency ratio of the group. We also have to look at the solvency ratio of the holding company and of the -- also the other subsidiaries. And of course, we have to side constraints from the rating agency models at the moment or in the past, we have also always have good buffers under S&P and Best. So that our rating targets from their capital models was always fulfilled. And maybe I'll say something more on that on the projection on the next slides.

If you look at sort of our targets, we still maintain the target of being above 200% as a threshold solvency ratio. So it has not changed. We have also not introduced any sort of upper boundary so far. So we basically look when we think is the current ratio adequate? We only look, of course, don't look only at the current point in time. But also at the projections, here also a short reminder that we have a difference between the internal metrics and the Solvency II metrics in terms of available capital because we have this haircut for minority interest. But we don't have any differences in terms of required capital SCR. So internal measurement is in line with Solvency II measurement from that perspective.

In terms of, say, sensitivities. They are, again, I guess, each individual, sort of a stress test that we conduct, would have, say, limited impact on available capital, we compare it here with the internal available capital at Q4. We see quite some changes compared to last year. I didn't put the figures in here, not to overload this slide. But you would see, if you look at the U.S. hurricane and earthquake figures that they have grown by 10% to 15% compared to last year. That reflects the business growth, also some sort of strengthening of the -- or weakening of the euro against the U.S. dollar but also business growth. You see also quite some increase in the cyber scenarios here in absolute terms. Also, this reflects that our cyber portfolio is growing quite substantially. And I have a bit more on that later on.

Should also say that now this credit spread stress that we conduct here contains the impact of the volatility adjusted. So it's much, much lower and has then some assumptions on the efficiency of the static volatility adjustment when credit spreads move up. That basically the volatility just moves up in a similar way with all the haircuts that the Solvency II requirements embed into calculation of a volatility adjustment.

If you look then at solvency ratio, again, I mean at the moment, all of these stress tests lead to solvency ratios still above our threshold of 200%. That's not necessarily a target but proves at the current point in time that we have quite robust setup here. And individual risks would not sort of stress the solvency ratio sort of more than what we can bear here.

As I said, we've included these 2 cyber risk scenarios, one on the extended power outage, which has a significant silent cyber or nonaffirmative cyber part. We've included these 2 scenarios last year. And from the growth of the numbers here with me, the power outage was EUR 630 million. Now it's EUR 900 million. You see that this is significantly affected by silent cyber that we have still in our current assessment, a significant exposure from silent cyber, that hasn't gone away. Although we are kind of working on that, either sort of in terms of exclusions or getting an explicit premium for that also with clients in the market. But it's still there. And the affirmative cyber figure just also reflects that there's a substantial portfolio growth in this line of business. And also, always recall that there's some impact from the FX rates on all these figures if you compare year-to-year.

So to have an outlook on solvency. So we are -- in Q4 in 2018, we come down as diluted. So it's almost stable within this year. So we have about the same ratio in -- at Q2. While SCR and own funds have grown quite substantially, the growth ratio is similar. Once again, I mean, there's some major effects here in Q2 compared to Q4, of course, from a strengthening U.S. dollar again but also, of course, from declining interest rates and declining credit spreads. So these things have a significant impact on these figures as well. But otherwise, the Q2 result was also favorable, which contributes to operating earnings also on a Solvency II basis.

The outlook to year-end bends downwards. And also, we don't have this projection in figures here. If you look over a 5-year time horizon, we would project a decline of the solvency ratio and that the reason for that is that in our current projections, business would grow at a stronger pace than capital. So we still see quite substantial growth potential in many areas. And that was also a reason why we decided -- so this figure here doesn't include sort of the additional hybrid capital that we issued just 2 weeks -- so 2 weeks ago, yes. So that was before that. So it would improve with this additional EUR 750 million.

And also sort of our projections in the rating capital models would bend down a little. So for that reason, we decided to issue actually (EUR 215 million), assuming that there could be some replacement for a callable bond next year. So there's some improvement from this additional Tier 2 capital.

And also, there's some improvement. We have just filed an application for using the dynamic volatility adjustment to the regulator, which would enable us to also use a changing VA in the SCR calculation, which would make the calculation consistent to do your own funds calculation. So we've implemented that in 2 steps. And that would probably improve the solvency ratio just as a model change. A little more. But in the sort of projections, we see quite a strong SCR growth from business volume growth. So we are putting our capital at risk.

In terms of the capital composition, the maturity stays Tier 1, of course. And we have these unused Tier 2 capacity of EUR 1.7 billion and would have used up EUR 750 million now. And if we were to call the bond, then that would -- next year, then that would increase again for that reason.

So maybe just on the outlook, where we go to. We -- in all our projections also on the different scenarios that we looked over our 5-year planning horizon, we would still stay above our threshold of 200%. So we are not falling below that. But we would probably go closer to this threshold over a 5-year planning horizon if business growth plays out as it is projected by our underwriting teams.

If you look at the capital composition from a risk perspective, we see that sort of property/casualty market risks still are our main risks. They've grown more compared to life and health, which brings diversification, at that level, a little down compared to last year with 36% at the same time last year. And now it's 33%. So let's say there's room for life and health to grow here. And we see really good perspectives, as mentioned by Jean-Jacques before, in different areas, longevity, Asia Pacific. But the strong growth in P&C reduced diversification on that level a little bit compared to last year. Still, we think it's quite a significant degree of diversification that we have. And we continue to steer on that basis.

And the capital allocation for you, what contributes to the EUR 5.55 million required capital, sort of still more than 50% underwriting risk. Of course, this is our core business. So we want to keep that at a high percentage here, which also sort of reflects that we have this risk budget on market risk. And we are not sort of -- have a lot of appetite to increase the riskiness of the portfolio and to make us more heavy on market risk strategically.

So that's maybe on Solvency II high-level -- top-level risk profile, Solvency II developments. And now a few things on climate change risk. I mean we think this is the main emerging risk for our company. I guess this is sort of in line with many market participants. And I guess, not only in the insurance or reinsurance industry. And I just want to give you some sort of insights from research we did, other people did and the current, say, state of the art, how it's embedded in models, how we see sort of business development under a changing climate.

First, this is the required capital on a net basis for different natural catastrophes or scenarios of perils and regions. Our 2 top scenarios, as you know, are U.S. tropical cyclone and U.S. earthquake. I'm showing this slide for 2 reasons. In the context of sort of diversification, it shows that we are sort of also diversifying within our NatCat book. We have quite a number of risks also if we extend beyond the top 10 that are in the range of net EUR 500 million to EUR 600 million. So that's a quite broad basis for receiving premium from different perils, which are hopefully not strongly correlated to each other and cause for diversification.

We have steered this diversification also in this year's planning process in the sense that the growth for these peak scenarios was like more restrictive than the growth for all the other scenarios. So like underwriters came -- on the P&C side came with very ambitious plans, how they want to grow their portfolios. And we cut that down for the peak scenarios a bit further than we did it for sort of scenarios outside this top 10 list or outside the, say, top 2 peak scenarios here.

And the other thing -- the other reason why, I'm just drawing here in the context of climate change risk. As for most people, most intuitive impacts would be on wind and flood risk. You see flood risk is not within the top 10. So in a sense, those impacts may have -- that come from climate change may have a lower impact on the overall Hannover Re book. These are -- there's a lot of earthquake scenarios here in this chart. But of course, we have a number of tropical cyclone perils here, which could be affected by climate change risk as well. So those scenarios have a particular attention when we discuss both models, impact of climate change on models and also on business.

Also, I mean, just to set the theme here. I guess we are all aware that there is a protection gap. These are different figures that we have taken from a model loss -- from a vendor's statistics on modeled losses, say, on the average. And if you look at a 100-year event, the protection gap is still more pronounced as of today. And it has sort of basically not come down over the past years.

So there is still substantial protection gap in natural catastrophes as of today, with the ongoing climate change, although if we look at regions, there's a difference. Of course, there's a larger protection gap in Asia on developing markets, one could say, than in developed markets. But also for developed markets, it's still substantial. So it's not -- we know that also from the U.S., from U.S. storms, looking at the 100-year event, there's still substantial protection gaps in the U.S. I should say this is sort of modeled exposure.

There's also unmodeled exposure. Maybe the protection gap on unmodeled exposure is even, if larger than it is on modeled. So it's not -- we're not starting in a world where climate change has stronger impact, which is already completely insured. So we're starting already with a significant protection gap here.

And now on climate change, just a few graphics. Temperature is increasing, I guess. And temperature is increasing sort of differently on a local scale, more pronounced on land than on water, more pronounced in the Northern Hemisphere than in the Southern Hemisphere. Sea levels are increasing. And we have a number of local phenomenon here. I mean local in terms of jet stream variation. That's basically a global for the Northern Hemisphere. But it has locally different impacts. Just as I said, jet stream is becoming unstable, which paves the way for more heat waves in more southern areas and more, say, cold waves in more -- or more heat waves in more northern areas and more cold waves in more southern areas.

And these things are here, I guess, a few statistics. There's no kind of interpretation from somebody into that. And everybody can sort of get this data. That's just a matter of fact. And it's also a matter of fact that we are in the midst of climate change. So it's not starting tomorrow or next year. It has started sort of 100 years ago at least. And it's accelerating at least the temperature increase since the '80s. But we are in the middle of climate change. And we can already, as of today, attribute certain phenomenon, say, from Storm Harvey or Dorian or things that we observe to climate change, that has happened. So there are attributions. I mean still methodology at an early stage, I would say. But there's attribution to climate change for current -- for recent events.

So that's where we are. So what -- if we have an outlook, I have a few graphs here that say, okay, where are we going to. So what is the scale of the challenge that we are facing and what could it mean for us in terms of -- I'll first start with temperature. So this is a graph taken from an IPCC document, the Intergovernmental Panel on Climate Change. They are preparing these climate conferences like in Paris.

And you may know that Paris has the target here of restricting the temperature to -- first, it was 2, then 1.5 degrees until the end of this century. And they have -- they came up with a number of scenarios. This sort of kind of a scenario that is leading to, say, the targets of the Paris Agreement. But there are other scenarios which are laid out in the report, which would then lead to larger temperature increase. This sort of 3.2 was, at that point in time, kind of a baseline projection based on sort of, say, current policies that we have globally in place, what would be the temperature decrease. So there needs to be sort of quite some substantial sort of additional measures to be taken to bring us to the Paris target.

And sort of as a risk manager, you say, okay, there's also worst cases. And they have still substantial probabilities here where we could end up with 5 or 6 degrees, especially like in a world where -- I mean, where we had in 2018, again, a record emission year of carbon dioxide. So that -- if that would sort of continue, then we would have probably end up more in that region.

And keep in mind that sort of these -- this is sort of the global average. So that will be different between Northern and Southern Hemisphere, between sea and land, locally different. And we'll have sort of a lot of local impacts.

And another graph from one of their reports is what do we have to do in terms of carbon emission. That's the rate of increase of carbon emission since 1850. So you see here, we have new records like every year, basically. I think it's ending at 2015, maybe. Not quite sure when it ends here. So it's not up to 2018 anyway.

Then these are a few parts, sort of scenarios that they have. So if we want to go to, say, the Paris targets, 1.5 degrees, maybe 2 degrees, then we would have to go to a reduction. I mean this is a bit bumpy because they take different assumptions on what technology and what policy measure is going to be effective in which year. So don't sort of look at the jumps. Just look at the scale. So we are increasing, increasing in reality. And that would be the reduction that would be needed to reach this target.

And you see here, we have this 4% or 5% sort of kind of scenario. Even that would need the acceleration to go down. So even in that scenario, we would need policy measures and reductions there. So it's a huge challenge to really sort of, say, put the right measures in place to reach the Paris Agreement.

And this is a slide which shows sort of attached to current policies. It's a bit more up to date. So the baseline has now already moved to 4 or maybe also a little bit a different calculation scheme. The baseline has moved up to 4 to 5 degrees optimistic policies. And you see, this is kind of the graph. It brings us to Paris. And sort of an actuary would maybe sort of draw a straight line here. This is also the baseline. But you can also imagine that there is an exponential growth. And to bend this curve down of sort of global emissions requires huge efforts.

Otherwise, we -- and if you don't manage to do that, we end up in a world with much larger temperatures. And larger temperatures means sort of more humidity in the air, more power, more energy for convective systems that create storms and floods. So like if we think about the scenarios, there's one optimistic scenario. We put all the policies in place. Everybody reacts, industry policymakers. And we reach the Paris Agreement.

There's also sort of a scenario that would say we managed to go to a low-carb economy. But that happens in a sort of disruptive way. We take the wrong decision at the wrong time. Some industries go bust. So that would be maybe a bumpy transition. Then a bit polemic here, end of civilization, like if we release 5 degrees or more, the world will be a different place. And it's just sort of optimistic in a sense that we can sort of, say, adjust our infrastructures in terms of the flood protection and sort of, I don't know, only air condition and those things to a world like this. So for that reason, we have given it a more polemic name here.

So that's the scale of the challenge. It's huge. So what is the impact? So first of all, sort of this -- you can imagine, okay, there are some impacts on sea level rise, coastal assets to defend. So it's a huge, of course, challenge to sort of adjust, adapt the infrastructure to rising sea levels in different areas. And of course, the rise is sort of different also from place to place, maybe not a huge variation.

And we have potential impacts on storms. These are, let's say, more illustrative figures than really your best estimate of another slide on that. But on top of that, we get a lot. I mean what we already know, we get a lot of sort of local extreme weather conditions, maybe heat waves, cold waves or extreme rainfalls. We get these much more often. And it's a bit more unclear what tropical cyclones are going to do here.

And of course, we have a lot of additional risks that come with that, not only natural catastrophes. We have eroding biodiversity, liabilities arising from climate change, could have stranded assets, economic risks, some, as I said, some industries facing significant challenges in the transition period. And a lot of additional risks also from agriculture and reputation risks would come. But of course, there's also a long list of opportunities arising in a sense that like if we manage to go to a more sustainable economy, that has many chances also for us, as a reinsurer, to be quite well prepared in a sense.

But let me just point to this slide for a moment just to tell you a bit more how it's going to be reflected in the models. This graph tells you the impact on tropical cyclones per region. Each sort of small picture has 4 graphs in a sense where the first one is what is the projection on the overall frequency of tropical cyclones, what is the projection on large storms, the lifetime of a storm or a tropical cyclone and the precipitation rate.

And you see that a lot -- say, North Atlantic, for instance, here, which is probably one of the most relevant for us -- large storms in North Atlantic. There are projections which say that we get 100% less large storms and -- or 200% more. And this is just a collection from sort of current studies that take different assumptions on what is the consequence of larger temperatures.

So we have to say there's huge uncertainty around sort of the impact on storms. It will be locally different on tropical cyclones. And we don't have a best estimate view as of now what's going to happen. Also, this is, of course, the projection toward the end of this century. So not for next year. So these models are very complex. And we have a lot of uncertainty where we go. And of course, we have to -- one of the major uncertainty is how effective our policy measures are going to be.

So this said. So I would say as a key takeaway from this section, I mean, we are -- the middle of a climate change has not started yet. The speed is kind of uncertain. Temperature increase is increasing since the '80s. We -- there's also -- I would say the third point, any impacts that we have seen up to now should be already in the models because they validate against historical events. Maybe not the events that have happened this year or last year. But -- so there is some delay in putting all the knowledge about the current events into the models.

But as I say, the climate change has started in the 19th century already. So there's quite some substantial elements of that, that are in the models. But there's certainly no strong trend yet in the models. And one reason is that there's really protection uncertainty, what the impact would be, especially locally. And of course, there's also -- I mean what helps us here is, of course, the 1-year contract nature of natural catastrophe contracts. So we can react from year to year.

We feel ourselves well positioned as a reinsurance industry to cope with this risk. But I guess we need to do much more work in the coming years to understand really what the pace is going to be, where we will see the changes maybe in a shorter scale and where we will see changes on -- in a longer -- mid; to long-term horizon. So I would say ongoing sort of research in that perspective.

I will have already used up my time if I interpret this number correctly here. So I'd be a little bit shorter on cyber because Silke has that on her agenda as well. So there's some overlap also between the 2 presentations.

Here's just a number of events that we had in the last couple of years. I just wanted to give you the universe that is there on cyber events. So we have these kind of individual data breaches to individual companies. We have sort of ransomware attacks on a larger group of companies and institutions like WannaCry or NotPetya. And also, we have sort of attacks on infrastructure like a DDoS attack on a DNS provider. So we have really, I would say, a broad range of scenarios.

Over time, as our portfolio was growing, we've also collected a lot of sort of experience in terms of losses and for us as Hannover Re, from our statistics, data breaches, all these individual events. It's by far the largest part of cyber event losses that we see in our portfolio. And all the larger, more systematic events, DDoS attack, or say, attack on critical infrastructure, even they happen more rarely. But also, I should say maybe sometimes the assignment of an attack to an individual element here is not -- is a little bit blurred.

In terms of coverage, I mean, one thing is that when we talk about cyber, we talk about a whole bunch of sort of products. And there's today more of a pick and choose nature. So we call it a modular concept which rates sort of risk management. This is quite challenging because each contract may have different exclusions or inclusions there. So there's less standardization, which makes data management and exposure management quite challenging. Also, the wording difference -- differs by policies. And not all policies have been tested for all aspects of coverage in a sense. So from a risk management perspective, still a challenge.

If you look at the portfolio growth that we have growth rates of not more than -- not any more than 100% but 50% growth rates. It's probably sort of declining a little bit the pace of growth here. And we are -- our portfolio is still focused a lot on the U.S. Also, this is per cedent location, a premium split per cedent location here. Also, some of the U.K. client write substantial U.S. business. So a larger portfolio is on the U.S. side. So there's also some concentration here.

And if you look at the modeling then, as I said, we have sort of these larger sort of number of smaller events with smaller losses. And we have these systemic large events that can occur. Like the small events would be denoted as individual data breaches. And larger events can be sort of cloud service provider, which affect really a large number of companies and institutions. So we have these 2 basic phenomenon.

And I come now to the reserving level. I know you're curious about that. And potentially, everybody here in the room has already flipped to that slide, last slide that I have here. Just to remind you that we are now sort of moving from, say, economic measurement to IFRS. And this is the walk-through from Solvency II to IRS (sic) (IFRS). So we are looking at a different sort of level of technical provisions here for life and health but also for P&C, I mean, if you look at the next slide.

And so this is the development of the reserving level. We have -- I guess by year-end, we had an estimate that we would probably have a reduction between EUR 100 million and EUR 200 million of reserve redundancy or sort of booked versus strict best estimate of the external party. And that comes down now to EUR 118 million. So it's in the lower range of what we had expected. So we have supported our result last year by 1.1% combined ratio impact or loss ratio impact here by releasing some of the redundant reserves.

Still, we think the level is quite comfortable for us as an instrument to also have flexibility in terms of IFRS result. And of course, as an actuary, I'm not -- I'm convinced that we don't have a substantial risk of underreserving here in that area. So that has also confirmed once again that almost in every line of business, we have reserving buffers.

So if you zoom in, also, this is the case not only in Hannover for the business that is written in Hannover but also for the business that is written in our branches and subsidiaries. Almost every branch would have -- and subsidiary would have a sort of best estimate below their booked reserves, substantially below their booked reserves. So that is our reserving practice, which is also with the rollout of our systems now rolled out to the whole P&C community.

And also again, this is also a statistic that you know before we have this large amount of additional IBNR that we put on the cedent-advised case reserves, partially cedent IBNR but also our own IBNR, which sort of again reflects sort of the prudent approach in certain setting reserves here in IFRS. Q&A.

+++qanda

A - Karl Steinle {BIO 1986424 <GO>}

Thank you, Andreas, for your presentation. And I guess there are some questions. We start, again, on the left side with Andrew and then Ivan and Vinit.

Q - Andrew James Ritchie {BIO 18731996 <GO>}

Just if I was just doing back-of-the-envelope, you said that you think your Solvency II ratio over five years falls to about 200%, given the expected growth. I mean it's hard to do -- there's not a lot of transparency on your normalized capital generation. But I think that implies 8% to 10% growth per year in SCR or thereabouts. Is that what you are assuming?

And second question, you have no interest rate sensitivity, or virtually no. I've always been surprised by that. I know you don't have any guaranteed traditional savings business. But the risk margin is actually an interest rate -- is a driver of interest rate sensitivity mechanically. Why is that not the case for Hannover Re, given the risk margin is a significant component, particularly of life reinsurance business, given the biometric risk?

And the final question is, about half of your liability reserves are excess casualty, I think, roughly from your disclosure. There's a lot more uncertainty on excess casualty in the U.S. these days, given what's happening on the underlying loss trends. Maybe just tell us, have you done any additional work on some of the loss trends in casualty? And is it the case that perhaps on excess casualty these days, you might actually have to hold a bigger buffer than you would historically, given excess casualty is very, very geared to any underlying trend issue?

A - Andreas Markert

Thanks. On your SCR ratio -- question on the SCR ratio particularly, I didn't mean to say we are going down to 200%. We are staying over the 200%. I would say we are going down from 240% to 220% maybe in some of the projections that we see. So not going down to 200%.

That -- I mean it's almost like in every scenario that you use to project a 5-year horizon, you use some assumptions on where do the interest rates go, where do the credit spreads go, where do FX rates go. Under each of these scenarios, you would see the SCR sort of grow at a different speed. So it's not -- it's not as easy as this thing, it grows at 8% or at 5%.

Q - Andrew James Ritchie {BIO 18731996 <GO>}

I guess I'm just trying to judge the business growth versus -- it sounds then you factored in some market stress scenarios in that as well, maybe.

A - Andreas Markert

I would say our base scenario, that assumes basically no change in interest rates, no change in FX rates and sort of stable credit spreads in a sense. And there, the reduction from 240% to 225%, I think, in that scenario of a 5-year horizon would be only driven by business growth and not by any market variances. But if we then run scenarios on our 5-year business plan, then we would also run scenarios in terms of interest rates go up or go even further down. That scenario is then -- sort of the rate of growth in the SCR would be different from year to year, depending on what's going to happen.

The interest rate and risk margin, yes, a good question. To hedge the risk margin for interest rates is a challenge because it's quite a, say, recursive function to calculate the risk margin. The interest rates are embedded in the calculation several times. So when we do ALM, we see the risk margin as a cash flow, as a liability. We hedge for the risk margin as well, not only for the purpose of Solvency II. But also in an ideal world, the risk margin would be part of your dividends that you pay in the future. So you need that cash flow at that point in time, if you really release the risks at that point in time. So we really include the risk margin into ALM fully.

You're right that in practice, that is complicated and you will not be able to hedge anything out. In a simple sensitivity like plus 50 basis points, we would also have to admit, have a simplified movement analysis for the risk margin. So we would not do the full recalculation, maybe on every element and sort of do full new cash flow projection underlying that. So maybe in terms of risk margin, it may be slightly understated. But as it is embedded and also the experience shows that we can hedge for interest rate risk quite well.

On excess casualty, I would say, the largest part of our reserve redundancy sits actually on casualty reserves. So not only with sort of the recent development in the U.S. market, we would say that this is sort of an area where we have particularly cautious in our reserving policies but we have cautious in that area. And traditionally, at the moment, we don't see in our portfolio any sort of, say, strong adverse developments in the overall U.S. excess casualty book, I would say.

So also, the redundancy level on that part of the book stays consistent to prior years. But really, the largest part of our reserve redundancy sits on the liability book anyway. So that was always sort of the case. And the policy hasn't changed for recent developments.

A - Karl Steinle {BIO 1986424 <GO>}

Okay. Probably we stay on the left side, Mr. Michael Haid.

Q - Michael Hermann Haid {BIO 1971310 <GO>}

On the level of reserve redundancies, the reduction, only 1 -- from EUR 1.8 billion to EUR 1.7 billion. And when I look at it over a longer period, I found it surprisingly stable. There are many factors that have affected the reserve redundancies. You had EUR 1 billion gross reserve releases. You put back some of this into the reserving of the new underwriting years. You must have had some assumption changes and so on, last cost inflation, discounting, whatever, FX also. Is there anything that sticks out which surprised you when you -- from one year to the other in this movement from EUR 1.8 billion to EUR 1.7 billion?

A - Andreas Markert

I mean actually, not because we were talking about sort of our estimations before and they were basically in the ballpark of what is the outcome. And also, I guess, our expectation was that now we see the results of a softer market period coming through. So that's always with a delay. When we have a -- you see, we can build up our reserving level when -- some years after a hard market phase. Maybe in -- say, '13 to '15, we had a strong increase of the reserving level as these hard market years, say, 2009, '10, '11, would materialize. And we would show that as redundancy. Now we see more soft markets coming through. And it's not surprise. And that's also, I think, been our communication that in that years, we may use this redundancy -- more coming down. The tendency is more that, that we don't have such strong positive developments from the years and we may have to use some of this reserving buffer for supporting the result. So I would say it's consistent to what I was expecting, in a sense, to happen.

A - Karl Steinle {BIO 1986424 <GO>}

Okay. We continue with Ivan, James, Vikram.

Q - Ivan Bokhmat {BIO 15378004 <GO>}

It's Ivan Bokhmat from Barclays. A couple of questions. First one related to the, perhaps, the NatCat topic and just a broader -- how much do you think the loss cost inflation in the past few years was driven by those climate changes? And how much do you think was covered by pricing actually through the, let's say, the past five years. And maybe specifically, the past two years when prices started to increase?

And the second question was on something that Roland mentioned earlier, the proposed changes to EIOPA models. What impact would that have on Hannover Re?

A - Andreas Markert

NatCat, loss cost inflation is a good point because a lot of impacts maybe from climate change were overlaid by just pure loss cost of wealth in inflation wealth growth. So we saw actually those impacts in the last 20 years being much stronger than actually maybe phenomenon which we could directly relate to climate change.

In terms of pricing, I mean, what we basically do, we use our pricing model also for aggregate management. So what we do, after we even check whether we have a reasonable return period for individual events. And I have to say that our models performed very well in 2017. And also recall that we use an adjusted ARR model. So we put a lot of on top of ARR in terms of unmodeled risks. So if they come out of a loss estimate on Japan storm and say, okay, this is now without flat risk because it's not modeled in our model. So for us, we would have an extra loading on their model to cope with that flat risk. So from past years, 2017 especially, models performed very well. 2018, we still have some doubts about Jebi. If we probably pay out all the reserves that we have put on Jebi now, we would say that our return period would be too high for that event. And we would have to adjust our pricing models. But that's sort of current -- subject to current validation.

And for this year's event, Faxai, I think that was well covered by the model and for Hagibis, I would say it's just too early to say. Dorian is also something that we think was well covered in our pricing model in terms of return period yet. But certainly, the underlying, say, phenomenon like this stationary sort of nature of Dorian is something that needs to be implemented into the models in future years. That's not sort of -- especially for the Atlantic hurricane model, we are probably not there to really have this stationary phenomenon.

So I would say this is a constant process of improving pricing models. There were no strong adjustments to our pricing models in the last 2 to three years due to sort of nonperformance under events. So that's true for our portfolio. It -- for our portfolio with many clients, there may be bad performance on one client's portfolio and better performance on another client's portfolio. But overall, it seems to work out well.

Then on your second question, EIOPA. EIOPA is now -- I mean, kind of -- there are a couple of changes proposed, which relate to additional work, additional reporting here and there on cyber, on natural catastrophes. We are impacted by that. So maybe we have -- see a slight increase of our expense ratio due to coping with all of that additional requirements that are there. The whole industry, really, this increase.

And in terms of the changes that they make to the actual valuation model, the most sort of relevant changes are to the way they sort of they set their interest rate curve and the volatility adjuster. We are exposed to both in a sense. For interest rates. So our sensitivity is probably not as big as the sensitivity of other market participants. Volatility adjustment, we would also see probably some impact for us but not a huge impact because my assumption is that they don't want to sort of, say, double or half the impact of the volatility adjustment but make still reasonable adjustments because then the impact on other market participants would always be much larger than Handover Re. So I think the impact for us will be rather moderate, I would say, on that.

Q - Ivan Bokhmat {BIO 15378004 <GO>}

Is that in balance, a negative or a positive?

A - Andreas Markert

Oh, God. That's very hard to say. I would say from EIOPA's current proposal, I would assume that solvency ratios go down more than they would go up. But I would also say it's not tested yet so there might be sort of surprising results also for individual companies.

But of course -- I mean EIOPA has the mandate of not increasing policyholder protection. So then the question is, will the commission adopt sort of any sort of decrease of the whole market. Solvency ratio, this was not the mandate of EIOPA. So that's just the proposal now. We have consultation. Then the commission needs to adopt those changes. And then we'll see. I think many elements also do work quite well from my perspective so we probably don't need huge adjustments, which change great -- huge changes for -- on the solvency ratio of the whole market.

A - Karl Steinle {BIO 1986424 <GO>}

Okay. James?

Q - James Austin Shuck {BIO 3680082 <GO>}

Three for me, please. So just on EIOPA again. Could you just be a bit more specific on the last liquid point? So extending that from 20 to 30 years, what's the impact on your solvency? And also provide a sensitivity to the UFR, please, just those 2 specific things.

Secondly, on the capital generation, the operating impacts that you show on Slide 4. Would you mind just breaking out the P&C new business value and the assumption variances in the eligible own funds change? And what's the breakdown, the increase in the SCR between the life and health re and the P&C re side, please?

And final question was just on the NatCat exposure. So the slide that shows the 2020 outlook and the outlook for 2019, I may be misreading this. But obviously, if I add up all the boxes and the increase year-on-year, there's about EUR 1 billion of extra capital. Obviously, a lot of that would diversify away. What's the increase in SCR you expect from the increased risk appetite around NatCat for 2020, please?

A - Andreas Markert

Yes. So start with EIOPA. Last liquid point on UFR. It's very easy, UFR, we have a very low sensitivity on the UFR. It's all below 2% of -- like if UFR would now be set to the final value currently, then our impact would be below 2% solvency ratio. The last liquid point. It's some time ago that we have really calculated that but as our interest rate sensitivity is not so big there, it's also a small. I would say, also in the ballpark of below 3% solvency ratio impact if the last liquid point changes from 20 to 30 years.

But also that depends -- there's a lot of -- there's also a change in extrapolation method. So it depends on which variant you're actually looking at. Previously, that is -- 20% to 30% was based on the same extrapolation method. Now they are proposing a new extrapolation method as well. So there are several elements to the change of the interest rate from 20% to sort of ultimate forward rate, from -- form last liquid point to ultimate forward rate.

Then on Page 4, a few comments that I can make here. I don't have all the numbers that you request with me. The one thing is we have currently a negative new business value for P&C as our sort of -- especially in 2018 as we reserved sort of the current underwriting year. At a prudent basis, we don't disclose any or calculate any redundancies on that. But it's sort of close to 100% combined ratio with a risk margin, then that makes a negative new business value. That's also why I'm not showing that. This new business value of P&C is not really sort of a stirring metric for us. At the moment, we are more looking at the financial year combined ratio at a sort of reserve development from past years at the reserve redundancies. But that's more a negative contribution to the operating earnings even under Solvency II. So we have there consistency between -- for the youngest underwriting between IFRS and Solvency II.

In terms of SCR change, the largest impact on the SCR change was the EUR 376 million. I would say, probably 80% comes from market risk and P&C. So because there, the volumes have just increased more substantial than on the life and health side. The life and health is just a small contributor to the SCR increase. And...

Q - James Austin Shuck {BIO 3680082 <GO>}

If it's negative for P&C. But it's likely this is at least EUR 290 million. Is the implication is, what, there's EUR 800 million of positive operating variances?

A - Andreas Markert

That's -- no, there's also the investment income sort of under the roll forward. These are these elements of this operating impact. So they actually contribute for the largest part of it. Then we have a positive impact from reserve development on the P&C side. I don't have the figure for Solvency II with me now.

On your last question, NatCat. NatCat is already reflected in the figures that we have for Q2 here on that SCR that's on Page -- what is that, 6, I think. Or Page 8, actually, where we show the SCR breakdown for Q2. That already reflects this growth as we are already calculating with the 2018 sort of projected NatCat exposures. And is it -- you're right, a lot of this growth diversify us away. So what we typically see the impact of U.S. tropical cyclone and U.S. earthquake, the increase there has a substantial contribution to the overall SCR. So that would impact the growth, what I call the business growth impact from Q4 to Q2 on the P&C SCR.

Q - James Austin Shuck {BIO 3680082 <GO>}

I guess, my question is just in terms of the increased capital allocation net of diversification. So i.e., the increase in SCR expected from the 2020 growth from NatCat, can you actually give me a hard number on that? I'm interested to know how that relates to the 5.5% of SCR.

A - Andreas Markert

I think we haven't finalized this calculation. So if you are asking me what the 2020 exposure growth, what impact that would have on the Q3, Q4 SCR, those figures are just not finalized so I cannot answer that right now. I would assume it would be consistent to our projections over a 5-year time horizon where we also increase the NatCat exposure according to our planning. And we would see a slight decline of the solvency ratio, as mentioned mainly -- and also the projection to year-end from 245% solvency ratio to 237% reflects that there is a growth in NatCat and that's about -- I mean I guess some contribution to this 7% to 8% decline would come from additional exposure from NatCat.

A - Karl Steinle {BIO 1986424 <GO>}

Okay. Then we continue with Vikram and then Vinit.

Q - Vikram Gandhi {BIO 18019785 <GO>}

Vikram, SocGen. A bit related question to the one from James and Andrew. The primary projection of the solvency ratio from 245% to, let's say, 220% or thereabouts implies about 5percentage point erosion per annum roughly, on average, basically. Against that, you are showing some projections of what you intend to do on your NatCat risk for '19 as well as '20? So I appreciate all of your Solvency II erosion for the coming years wouldn't necessarily relate to just the incremental NatCat risk. But a large part of it would indeed come from NatCat. So the message I'm getting here is in order to have more business growth, it appears now, we are at a point where you really have to increase the NatCat risk to get that. I mean, underlying that interpretation from my side is perhaps if you can shed some light on what does this increase in SCR or the reduction in Solvency II translate in terms of the increase in premium volumes on P&C. And maybe that can help square this? Then what does it really imply for your retro strategy because you are increasing your NatCat risk? So that's question number one.

And on the redundant reserves. I think back at the first half '19 results conference call, it was mentioned that part of the reversal in the Ogden rate was already assumed as being redundant back at the end of 2018. So EUR 120-odd million reduction in the absolute level of redundant reserves. What would that number be if the reversal in Ogden rate wasn't assumed as being redundant already? So i.e., what would be the gross reduction in the redundant reserves if you hadn't taken the benefit of the reversal in Ogden rate? So it should be more than the EUR 120 million you're showing. That's basically what I'm saying. Because that includes the benefit coming out of the Ogden rate change.

A - Andreas Markert

Okay. Yes, I think I got it finally. On the -- I mean on the business growth and the SCR growth, we are looking that we sort of grow the business in a diversified way. I would say that NatCat is growing at a slower pace as overall P&C and sort of non-peak NatCat is growing at a larger pace as peak NatCat. So we try to steer that to diversification. Still, overall NatCat -- so we didn't show this granularity here -- contributes only, I would say, 30% to the overall P&C risk. So there's other large blocks, of course. So if we grow NatCat, that doesn't have immediately a very strong impact on the SCR. So it's not that our decline is mainly due to growing NatCat business. It's growing -- it's due to growing the whole P&C business, also life and health on a diversified basis, I would say. So maybe that's a -- so we are not particularly growing NatCat business stronger than anything else, I would say. So do you want to -- I guess, that's --

And on the Ogden rate, I think on a Solvency II basis, we were reserved at a 0% Ogden rate. So we have basically some adverse development there. It's a low 2-digit million number. And on IFRS basis, we didn't show any redundancy by year-end on Ogden, which sort of is now also no redundancy. So -- and it was also not shown to the -- in the previous year, 2017. So I think we are comparing like-for-like, no redundancy in these figures from Ogden. I interpret your view that I didn't get your question right? So maybe you can rephrase it.

Q - Vikram Gandhi {BIO 18019785 <GO>}

We can take it offline. But I'll give it another shot. What I'm trying to say is at the first half '19. And if I've understood this correctly, it was mentioned that part of what you had -- part of the hit that you had taken when the Ogden rate was moved to minus 0.75% was already assumed as being redundant at the end of FY '18. So this is even before the new Ogden rate was announced. So what I'm trying to say is, if that part, if you've taken that benefit into account for your redundancy. And net of that, you're saying the actual fall in the redundant reserves is about EUR 118 million or EUR 120 million. But what would happen in the gross number if you hadn't taken that benefit into account? That's my question. And the one that I think I was curious about what does it imply on the retro strategy, the increasing NatCat risk? I mean, this is related to the previous question.

A - Andreas Markert

Well maybe you can answer. I think I'm not getting your question right. Maybe we can ask somebody else.

A - Roland Helmut Vogel {BIO 16342285 <GO>}

Does it work now? Yes. It works now. And Vikram, I think you remember correctly, we mentioned Towers Watson. And now you have to distinguish, we have our internal actuaries review. This is something, I think, Andreas was referring to and which is also then the basis for Solvency II. And we have Towers Watson. And as with all the actuaries, if you have 2 actuaries, you have 2 opinions. And we are at even always a little bit more conservative than Towers Watson.

We mentioned that Towers Watson in their review had already taken into account some redundancies. We have not reflected that in our own results. But in our definition of redundancies, they had already taken into something. So in that respect, you'll find it. I don't have the concrete number with me. But it should be a high double-digit amount, I would say. So I think that consideration was a little bit more complicated. They looked at different -- at single cases and what have you. But their consideration was that 0 should be something and what was on top of it, they considered part of that as redundancy. So in that regard, if you -- if the number you're driving at should be around EUR 200 million potentially. I would say, if you take one instance out, it's always a bit difficult because we had movement in other instances as well, which you could take in and out and adjust for. So in that respect, I would still refer to the EUR 118 million, which we lost. But I think that is the background of your question.

A - Andreas Markert

On the retro strategy, to answer this question. I think there's no fundamental change on the P&C retro strategy. There is gradually, we may have seen Chile creep up a little bit here. So we may include that in a different way in our retrocession as in previous years. So that's not covered on the K in this year. So we may want to change that, discuss that with our retro partners. But that's more a gradual change, no fundamental change in our policies. Of course, we depend also on the markets and sort of on the, say, performance of our retrocession in this year and in past years.

A - Karl Steinle {BIO 1986424 <GO>}

Okay, being time conscious, last question is from Vinit.

Q - Vinit Malhotra {BIO 16184491 <GO>}

A very quick one. Just Slide 10, please. What about Japan? I mean all the losses -- I mean we talk about Jebi, we talk about Faxai, Hagibis and is it comparable or not?

A - Andreas Markert

Yes. I mean the Japan -- you have to say that these are net figures at a certain point and then our retro through kicks in. Then it's just the question if scenarios become larger if there are some spillover of our retro on this 200-year events. So -- but Japan tropical cyclone would be maybe 12, 13 and would be about in the same range as the 8, 9; 9, 10. So that's in that area.

Q - Vinit Malhotra {BIO 16184491 <GO>}

It could grow because of the losses? It could grow, right? I mean...

A - Andreas Markert

I mean, there's just one thing. We could need to adjust the model for where we carefully look at Jebi now. I would say that there would maybe be some impact but not a huge impact. Of course -- I mean if rates would be increasing in Japan, we could think about growing our book and then it would grow as well.

A - Karl Steinle {BIO 1986424 <GO>}

Okay. Well thank you for your questions. We will now break for lunch. And I trust you will enjoy your meal. And it would be good if you would be back at 1:30, not to miss Silke

Sehm's presentation.

(Break)

+++presentation

Well thank you very much for being so punctual. I have -- I think you're -- I hope you have enjoyed the lunch. And I'm really sorry that we have to cut the conversations a little bit shorter. Normally, I would point or invite Sven Althoff to do the presentation. And as mentioned earlier, he has phoned in sick -- ill. And the only good news here is that the topic today is about structured reinsurance and Silke Sehm can step really easily into that role without missing a beat.

We specifically have chosen this topic because we have received a number of questions in the past months on this issue. And this is, of course, a very good opportunity to introduce Silke to you. She has been a member of the Executive Board since the beginning of March this year. And some of you already know her. But for those who don't, Silke is a mathematician by nature. She started her career with HDI as an actuary and into -- in 1996, she joined Hannover Re and has since pursued an outperformance journey in the field of structured reinsurance. Her promotion to the Board is -- or reflects the track record she has succeeded in -- on this journey. So I'm really looking forward to your presentation. Thanks for being here and over to you.

A - Silke Sehm {BIO 20544220 <GO>}

Thanks a lot, Karl. A very warm welcome also from my side. I'm happy to be here today and also give you my -- yes, my insight in structured reinsurance in Advanced Solutions, which I have done now for 20 years at Hannover Re. The topic is growing segment in P&C. So I will talk basically about structured reinsurance, Advanced Solutions as the main topic. But then I also will give a short feeling what we are doing currently in cyber.

So growing means what is currently is the amount in premium on volume we are writing in structured reinsurance on the P&C side at Hannover Re. So here, you see almost last 30 years and the premium development. And you also see in the last years, we tripled our volume and what are also during the journey were certain effect while the volume was up and down. We talk about breathing volume because it's really demand-driven. So it's not that we have continuous contract. We also have that. But we also have certain demands, maybe for three years, for five years, for one year. Then the treaties with us normally for 100% or niches. Then if the demand has gone, we write new treaties.

And you see on that slide, there are certain effects all over the years. I only point out a few. So -- in '92, '93, you see the FASB 113, risk transfer test. This is the old 10-10 rule, maybe you heard about that, 10% probability of 10% downside to pass risk transfer tests that you can book as premium. Today, it's the ERD, the expected reinsurer's deficit. So this is really the expected value calculated with Monte Carlo simulation on the deficit on the reinsurer side. And this threshold is 1% today. So this replaced. So to speak, the old 10-10 rule.

And you see in 2014, there are certain demand coming from Solvency II, which increased our volume. And so regulatory changes also might give us new opportunities. And I come to this later.

Before I go further -- and one additional point I would like to mention here in green, you see our deposit accounting volume. This was already mentioned earlier. So we book as premium the blue column. And the green column, you don't see as premium. This is deposit accounting. And also that it can be larger or smaller depending on the risk (transfer), which is included. When we do a deposit accounting transaction, we always make it sure that the client also knows that it's deposit accounting written for Hannover Re. So we have a clause, a deposit accounting clause even in the wording, letting the client and auditors and regulators know that Hannover Re booked that treaty as a deposit accounting because we feel that this has not significant risk transfer for being booked as premium under our accounting standards.

So now I go to the next slide. So how has Advanced Solutions developed and what is Advanced Solutions? There is an internal definition at Hannover Re for Advanced Solutions that are structured reinsurance, tailor-made solutions and aggregate covers. So the majority, more than 95% of the business is tailor-made reinsurance solutions. Sometimes very innovative, sometimes quite straightforward; sometimes very complex, sometimes very simple. So we have the full range. But it's always coming from a holistic balance sheet management point of view. So normally, we talk to the C-level guys at the company, the CEO, CFO, CROs. And talk about capital and risk management. So this is a holistic approach for the full balance sheet. So to speak. And this is also the reason, when it's in tailor-made, why we write it for 100%.

So we don't have a product go to a client. We really go there, discuss, hear what are the demands and then try to develop something, what fits for the individual needs. Here, this is a historical overview. Today, in our portfolio, we have basically 3 components. This is surplus relief quota shares. And I give you a case study, a very simple example on that. We have aggregate excess of loss covers -- no, this is a small return and we have some spread loss covers. These aggregate covers quite often are whole account stop-loss treaties, multiyear, multiline to cover the whole balance sheet.

Well everything is normal P&C reinsurance. So this is just simple P&C business, what we are writing there. And with a unique structure. Sometimes individual needs cover, things like that. From the volume today, you see here the EUR 3 billion. And you see the geographical split. So we have more than 50% today in the U.S. And four years ago, the majority came from the APAC region and Europe. So this is what I said earlier, there are certain needs, certain demands. We are then in the market. We write it if the client needs our support. But it can be that after 3 or five years, there's a different demand.

Contract -- no, sorry. Contract-wise, you see we are coming from 96 contracts to now 130 contracts in the portfolio. So you can imagine this is a small number for Hannover Re, how unique and tailor-made these contracts are.

The rest of the business. So majority is still U.S., the rest is coming basically Europe and also APAC. And you see the number of contracts, the largest amount number-wise are coming from Europe. This is also solvency-driven, volatility-driven, multiline, multiyear.

So what is our underwriting approach? I mentioned already it's traditional P&C business and with special elements in. We are active in 50 countries. We do our own marketing, worldwide. A lot of the business, the majority is written via the broker community. But this split amongst 50-plus countries gives us a huge diversification in our own portfolio. Also from regulation point of view because sometimes it's also the individual demand, because of certain regulation. So a huge diversification is good for us also for the demand.

The underlying business is identical with our traditional P&C business. There is no difference regarding systemic risk or also asset risk. We do not have any asset risk at all. We don't cover it because from an actuarial point of view, I have the clear opinion that you can't calculate it. So I mean, I can have certain assumption and calculate something. But I can't assess it from an actuarial point of view, I personally think. So we never touch asset risk and won't do in the future. And there's also no systemic risk in different -- or not different to the P&C side what we normally have.

Each of our contracts is modeled individually in our DFA model. So we have -- we do the quote, the calculations, the actuarial calculation by our own. And this is also modeled individually in our DFA model.

The business is less exposed to NatCat compared to our traditional P&C book because we write it normally on a very reduced risk transfer level. So if the intention is capital risk management-driven volatility taking out, then we quite often have NatCat events in it or loss ratio cuts and work with that.

The profit realization is a little bit delayed sometimes because we would like to be evident that the full profit is achieved when we recognize. So for example, if you write a long-term contract -- and the majority is short, I have to say. But if you write a long-term contract, we don't realize any profit at all in the first three years. So in year 4, we start to think whether a portion can be realized or not. And also in short to medium term, we are very careful in realizing profits.

So -- and A.M. -- this business is contributing quite nicely to the overall P&C book because it has lower risk transfer in general. It's diversifying and it's xRoCA accredited. In the last 3, 4, five years, probably even longer, the average xRoCA was double digit, almost 20%, to give you a feeling of the profitability. It's less volatile, the business as such. So therefore, we also have less capital allocated to that line of business because it's more diversifying.

The margin requirement we also calculate individually on each contract. And the margin on a single contract is a function of the ERD, of the expected reinsurance deficit. Meaning, if you have a higher ERD and higher risk transfer, then the margin has to be higher and the same as for our normal P&C book. So we have then the same margin requirement. And we also take into account the volatility. So higher volatility, also, cost margin recalculate.

This is in full alignment with our traditional margin requirements on a risk-adjusted basis. The 3 key period normally is 1 to three years. We also have sometimes even shorter one for six months. We sometimes have 4 or five years. But the majority of the business is 1 to three years. This gives us then also the flexibility to react to certain market cycle changes.

We have a Compliance Committee established, 15 -- roughly 15, 16, 17 years ago. And every new transaction goes through that Compliance Committee. The Compliance Committee consists of 4 voices. So to speak. It's an actuarial check. It's a legal check. So the actuaries are doing the risk transfer check, whether these are the right assumptions, the right ERD, the legal check for compliance things, if we work with special purpose vehicle, which is very seldom the case but so also consolidating issues. Then we have 2 accounting voices in. So our group accountant and our technical accountant to also make sure that we always have the proper accounting. If you have a multiyear contract and there are certain risk components, you have to accrue for future premium or not profit commission things and this is for us, key to have these high compliance standards.

The deposit accounting clause I mentioned earlier that we put it into the wording in order to be transparent and have full disclosure about our accounting is also part of that high compliance standards. Furthermore, we like also to talk to regulators. We don't -- we are not shy away. We say we are open. We are transparent. We like to explain what we are doing. And yes, looking for the exchange in the countries, because we think this avoid also reputational risk. And to work with each other and be open and transparent helps us.

Now I'm coming to an example of a very straightforward surplus relief, quota share, which we have underwritten. This is more or less a simple treaty we have in our book. So straightforward quota share. The sliding scale conversion is -- was only 3percentage point loss ratio scale. And the intention, the motivation to buy was just supporting growth opportunity for that client.

You see this just as a premium of EUR 350 million with a margin of 2%. This, if you compare this with a traditional treaty. And I have that on that slide, you can see the blue line here. This is a traditional treaty. And you'll see here the present value of the reinsurer's result. And here, you see the loss ratio. And with very low loss ratios, the reinsurer is making good profits on the traditional side more than on the structured reinsurance side. And if you come to the -- to more worth, loss ratios, you see the loss potential is also reduced with structured reinsurance compared to the traditional treaty.

So the expectation is to be here in the middle range. So which gives us a margin of 5.7% or even more with the probability of more than 66%. But we can also make a loss here. The probability is normally a little bit higher than 10%.

And this is also where you see the difference to the traditional reinsurance, our loss potential is -- the loss potential on the traditional P&C side is 100. For our side, it's 10. So this is the easiest thing to compare it.

Did I miss something here? I think. So as a conclusion, coming already to the conclusion. We are with Advanced Solutions. We are the leading provider of structured reinsurance products worldwide. We see quite high demand on Solvency relief transactions worldwide, because if regulation systems are implemented like Solvency II IFRS 17, BCAR, things like that. This also gives demand for structured reinsurance, which basically is on a tailor-made reinsurance on that individual client for capital management. And we have clients, they have the full variety of surplus notes, equity and structured reinsurance and traditional reinsurance. Our focus is on high-quality concepts. We are known in the market as being very innovative and very unique with this kind of concepts. And we really try to match the individual needs of the client. Give you one example, we have one treaty, where the client has asked, can we trigger it to his own SCR ratio. So we had done a double trigger concept based on the SCR of the client. If there's a drop in the SCR that this reinsurance can work as contingent capital for that client. So there, you see it sits in the hybrid capital area from a client perspective balance sheet.

Furthermore, we actively promote captive solutions. We started with that 8, nine years ago, I would say. So for corporate, who have an own captive, we can also offer reinsurance. And for a captive, it's quite of interest because the core business is something else. And the captive does not like to have the volatility coming out of the non-core business. So we've kept that business. And it's roughly 10% of our book. We do multiline, multi-year volatility cover, taking out the volatility of a captive book. Then we intend also for the future to have further geographical diversification. And as I mentioned before, we strive to lead our treaties. So most of the treaties we write for 100% or at least having a leading share because the structuring and all the knowledge, accounting, regulatory knowledge, actuarial knowledge, compliance, this is everything in one hand. And our team will see on the write-off.

So this was what is in our division, Advanced Solutions structured reinsurance, quite tailor-made, innovative, holistic balance sheet concept. And now I'm coming to the second field of growth at (inaudible). This is cyber and Andreas Markert already gave you a little bit insight into cyber. I start with one example from the market. Andreas, you had this on your slide as well. There, you see the loss of data, there was 380 million set of personal data that were allegedly stolen. There were addresses and passport numbers, credit card details. And you see there are certain class actions in the U.S. 100 class action, which gives them a cost of roughly EUR 500 million to EUR 900 million. And the interim cyber policy, identify only up to a full limit of 250 in that case. So you can say also, there is a certain protection that's still in the market with cyber. And we have the affirmative coverage cyber policies, where you see Andreas had this on his slide earlier on, the 7 different modular pieces where it can come from. So you see from the first-party side, where it can come from and also from the third-party exposure. If you have set the privacy, it's not only the network and the BI, it's also that information becoming available then, on persons, from credit card numbers and things like that.

So what we see is a modular concept, where we can pick certain sections, which are requested by the clients. So far, there is no standard market wording in the market. There's a specific language, policy by policy. And cyber is often neither explicitly excluded nor included. So we have the silent exposure also in our traditional policies. We see a strong demand and growth there. So the estimated global cyber insurance market in gross written premium. You see here, it's a little bit more -- it's roughly USD 6 billion in

2018. And you see the growth potential. And you see also the Hannover Re reinsurance cyber book. The growth which we have seen. And we are very confident to further see.

So now you can ask, what is the combined ratio or the loss ratio on that. So far, we have an average loss ratio of roughly 19% from the years 2016 to '18. And our risk strategy is to closely monitor the exposures to include loss cut in our treaties or event limits on quota shares. We avoid cover on that cut and bodily injury. And more and more, we are in the process of developing our own existing database that we become better in pricing and assessing the risk for the future. So we now also start with the probabilistic pricing model because we have collected the data now. We also have certain (RDSs) for cyber at Hannover Re. So we have roughly 4, no 5 RDSs. So the most interesting one is probably blackout northeast in the U.S., where we calculate this as an RDS to calculate our exposure to what is the market loss and what is then the silent cyber exposure out of that to have a feeling what is the risk we can have on that debt.

So the opportunities which we see, specific coverage with separate and additional premium. There were already certain markets, probably you heard about Lloyd, who started to say either we exclude silent cyber or include it. And then it is a price attached to that. Cyber for Hannover Re also means diversification, because it's not or limited correlated with other coverages, especially with not cut. We also see opportunities. It was mentioned earlier by Roland or Jean-Jacques with (inaudible) where we have partnerships to risk mitigation things with cyber. So where we can avoid certain risks in advance and also in the claims handling than be supportive for our clients. And in the future, we will -- we expect to see an event definition for cyber, which is not existent so far.

So as a conclusion, demand for cyber will definitely increase. We will be very well positioned in the market and will continue to grow with our clients. Demand is becoming more diversified from a geographical perspective and also in terms of industrial type and we can -- because we accumulated the exposure, we can better price it in the future.

That was it from my side. So I think I'm good on the time.

+++qanda

A - Unidentified Speaker

Thank you, Silke, for your presentation. And I'm sure there will be some questions.

Cameron?

Q - Unidentified Participant

Two questions both on the structured side. Could you just talk through why you don't recognize full profit until we have the full profit or you don't recognize any profit until you have the full profit. If it's so much less volatile than other things. So it feels like it's less risky. But in fact, the message you're giving to -- or to me, because it feels like there's some kind of horrible tail on this. So that's the first question. And the second question, we hear a lot about how the bigger reinsurers are differentiated because they can offer these types of solutions. How difficult would it be to replicate offering structured solutions. If you were a pot of capital with 2 or 3 very smart people attached to you?

A - Silke Sehm {BIO 20544220 <GO>}

So the profit recognition. As I said earlier. So the majority is not long tail. Nevertheless, we realized profit similar to the premium development, if you have an underwriting year contract. There's also the premium and -- to come. So -- and when we are confident that we don't have any exposures and we realize everything, for sure. But we only have the evidence when the treaty is commuted. So if it's really shorter. So after 2, 3, four years, it will be commuted and then we realize. If it's not commuted, there is still an exposure. And we like to be prudent. And then we don't realize.

Q - Unidentified Participant

So I guess, if we look at your chart of the fairly rapid growth for the last three years, that suggests there's a block of unrecognized profit that is going to -- okay.

A - Silke Sehm {BIO 20544220 <GO>}

That's true. Absolutely true. And so this is -- we call it embedded value. So you know it from our life colleagues, they also have this embedded value. And we also have this, which we monitor. So if everything goes as we expect then there is a good embedded value. But if one treaty goes in a different way than we haven't realized too early. So to say. So just being prudent. Secondly, we have another reserve, we call it (Bike)-IBNR, which is comparable to our segment result, which we have on the P&C side. And I told you earlier, it's P&C business. So we have our own segment reserve, we call Bike -IBNR. So from the profit realization, we always put a certain amount aside for that case, for that segment result because this is a portfolio reserve. If 1 out of 10, 1 out of 15 treaties go wrong, then we have an additional reserve to smooth this out. And this is also what we then use for that. So there's even more than what we have realized. So to come to that question. Your second question was more or less competition or start-up of competition. I think it's not so easy.

First of all, you need very good people for that. And our team, basically, most of the people are mathematicians or have a mathematical background, most of them or are very analytical innovative thinker because you need -- you have the capability for that. And at the same site, you need marketing people, go to the client, address it, explain it, be open, be creative. Then in addition, you need certain seniority or experience on that so that you can -- through the ERD, I said. I was asked to write the paper on the ERD to establish this as a risk transfer measurement as a guidance. So and all the knowledge and experience, you can read and try to gain it immediately with all the regulations all over the world. It's different everywhere. You have CROs in China, you have in South Africa, their own risk transfer assessment, things like that, capital calculation. Solvency to IFRS '17. So if you would like to consult the client in the best way, then you need all that experience. from risk transfer, from accounting, if the client asks, how do I account for with this. It is an embedded derivative, if I trigger with the SCR or not then we like to have the knowledge on one hand and to establish this from day 1 to the next, I think, is not so easy. Does this answer? Yes?

A - Unidentified Speaker

Okay. Any further questions. On the right-hand side, we start with Vikram and then Vinit.

Q - Vikram Gandhi {BIO 18019785 <GO>}

Vikram, Silke. Just one very simple question on cyber. There is a lot of enthusiasm in the market just before GDPR was being implemented. And about the potential demand coming on the cyber side, has it really translated at an industry level? Or is it still the U.S. that leads the way for cyber?

A - Silke Sehm {BIO 20544220 <GO>}

I'm not sure whether I understood the question correctly. You mean the GDPR and created demand for cyber?

Q - Vikram Gandhi {BIO 18019785 <GO>}

That was the expectation. Yes. And it was reported in the media, that's going to happen. So has it really happened? Is the question.

A - Silke Sehm {BIO 20544220 <GO>}

I cannot say whether it came from GDPR or not. I mean, the majority of the business we are currently writing is U.S.. So I would say, roughly 90% U.S. Andreas gave you the chart early on, with 50%, 60% U.S. and large portion U.K. where that was a client from the U.K. but writing out. So the majority is till U.S. In the future, I see more demand, also outside of the U.S. also there, there will be a geographical diversification coming. We see it already. But so does this answer your question.

Q - Vinit Malhotra {BIO 16184491 <GO>}

This is Vinit from Mediobanca. I have 2 questions, please, both, hopefully, just clarifications. One is on the slide, I think it's 10.

A - Silke Sehm {BIO 20544220 <GO>}

Yes.

Q - Vinit Malhotra {BIO 16184491 <GO>}

Yes. The one where you showed the chart. Here.

A - Silke Sehm {BIO 20544220 <GO>}

Yes.

Q - Vinit Malhotra {BIO 16184491 <GO>}

When you said that, this was like a quota share treaty. So what was different between a quota share treaty and the simple structured solution. So in a sense, to me, just this level of understanding I have, it looked like the same thing. So what was the difference? If you could just elaborate, it will be a very nice answer for me to understand what's the difference? And the second question was on the -- on Page 5, you compare -- you sort of show the kind of products? Yes. That's a plus relief. And is it a fair assumption that the '17 and '18 year the business growth came from basically surplus relief treaties or even aggregate covers? And is it that you still see more demand in future years for this kind of bar chart to remain or? So that's 2 questions.

A - Silke Sehm {BIO 20544220 <GO>}

Thanks for your question. I'll start with the second one. And maybe I need your help a little bit there. The questions you said, 70, 80 or? If it's a picture, that's the page number...

Q - Vinit Malhotra {BIO 16184491 <GO>}

This is just -- I'm just trying to see that you have somewhat limited appetite. And I'm just trying to see the last 2 blocks surplus relief and aggregate cover. Is it an assumption that those 2 are the ones driving the growth?

A - Silke Sehm {BIO 20544220 <GO>}

No, no. Now I think I have understood it. And this is not driving growth. So the driving growth are 3 basic concepts. And we do not have it in that simple way. Quite often, it's a combination with other things. 1/3 you can say is concept wise, treaty wise, 1/3 is surplus leaf quota share treaties, 1/3 is spread loss covers, what you see here in the beginning. So these are multi-year excess of loss treaties and 1/3 of the portfolio is multiline, multi-year stop loss treaties. So this is only one when it was added on. And for example, aggregate cover the last one, they're less than 1% in our portfolio. So we can write it. And we can authorize more than we're actually write. But if we don't think they fulfill our margin requirements, we don't touch them. So it's only what comes on. But it don't say anything. And if you ask me, what is the demand tomorrow or two years or three years, it's the same.

So -- and the second question was the slide. And there, you were asking what is the difference between structured reinsurance and traditional reinsurance? Yes. So you see we try to compare, it's not so easy. But we tried it and say, you have the blue and the green line here. So -- and the blue line should show traditional reinsurance, where the green line should show the structured reinsurance. It's more or less the same. It's a simple quota share. The difference is you limit here, your upside potential with structured reinsurance and you limit your downside potential because this is, in that case, very less volatile business. So the probability to end up with our expected margin of the 2% is 90%. So that it comes to that extreme or to that extreme, is very unlikely.

Q - Vinit Malhotra {BIO 16184491 <GO>}

I understand the chart. What is the difference in when you were selling it or making the contract or like what -- which feature led to ...

A - Silke Sehm {BIO 20544220 <GO>}

The ingredients. Okay. Sometimes we have in such cases, we have very broad sliding scale commission. Broad means here not so broad because it's not very volatile. But if it's very volatile. Let's say, you have an expected loss ratio of 70% with a standard deviation of 10%. Then you would give a very broad sliding scale commission to be in the right range. So in a very good year with extreme positive loss ratio, the client does not have to give extra profit to the reinsurer. And on the other extreme side, if it goes very, very bad, the reinsurer and -- does not end up with a huge loss. So because it's for capital management buying. Does this answer? Okay.

A - Unidentified Speaker

Thomas. And then Dieter.

Q - Thomas Fossard {BIO 1941215 <GO>}

A quick question on cyber. Just to understand how you're going to recognize profit and margin on cyber risk because I guess that this is still a fairly (inaudible) business lines. And I guess that you're going to build reserves, IBNRs, (risk). So when are you going to extract profit from the cyber book.

A - Silke Sehm {BIO 20544220 <GO>}

We -- so also here, we are quite prudent with realizing our profit, the expectation of the runoff of our cyber portfolio is roughly 3 to five years. And so -- and if we then feel very confident we would realize. But finally, also, we would realize if we commute treaty because then we are only 100% confident. I look to my colleagues, Roland and Andreas, would you like to add something to that?

A - Roland Helmut Vogel {BIO 16342285 <GO>}

I was just going to mention and to make sure that and clear that the 19% loss ratio.

A - Silke Sehm {BIO 20544220 <GO>}

It's initial.

A - Roland Helmut Vogel {BIO 16342285 <GO>}

Which you have mentioned is what -- these are the reported claims. This does not mean that we have realized the profits on top of it, this is not yet the case, we have IBNR set up for those contracts.

A - Silke Sehm {BIO 20544220 <GO>}

Absolutely correct. Does this answer your question.

Q - Dieter Hein {BIO 1557192 <GO>}

Dieter Hein from Fairesearch and (inaudible). I have a question regarding your cyber business as well. This business is a new business with extremely attractive margins. If I look to your loss ratio of 19%. And you mentioned that you, over the time, we'll get more precise pricing and risk evaluation. You do -- you get better datas and you get smarter. But I would believe that your clients may be get smarter as well. And if I look to your current loss ratio expectation, what would you expect that the development of the loss ratio is maybe in five years?

A - Silke Sehm {BIO 20544220 <GO>}

Yes. Thanks for that question. So Roland already mentioned, this is the initial loss ratio of 19%, which we set up. We have also IBNR on that. So far, we think it will be probably in the range of 30% to 40% so far. And from the data collection, I'm not sure whether -- do you like to answer on the data collection prices?

A - Andreas Markert

Maybe one thing. I guess, certainly, this line of business has the potential of being very volatile as well. So we've already seen some large losses coming through. So low loss ratios for some years, high loss ratios in other years. It could be sort of -- sort of -- could also have a natural catastrophe type of or the large loss type of say, character, this line of business. So we still need to wait and see. Of course, we try to have a diversified portfolio below that and try to avoid systemic elements as long as possible. But it has this potential, I'm not surprised that it can have a very low loss ratio. I would still say that the average would probably move up over the long term. But it could still have individual years very low and other years of higher loss ratios there.

On the data collection, I guess, I mean, there's a lot of reporting going on, also regulators setting up standards for that. We have a relatively reasonable sort of reporting from our clients on exposure and losses, given that it's a very sort of young line of business in a sense. So we are optimistic in a way that we can increase quite rapidly or quite soon our analytic capabilities, substantially based on this data. So we are not working sort of on very sparse data here. It's actually rich data in many areas in terms of sort of events that occur, losses that occur portfolios that you have. It's better data than in other lines of business, I would say, here. So we are optimistic in a sense to increase. And we have a program going on that's sort of trying to increase the capabilities, the analytical capabilities there, bit by bit. And we have made the first steps actually this year and last year.

A - Silke Sehm {BIO 20544220 <GO>}

Does this answer your question? Not really?

Q - Dieter Hein {BIO 1557192 <GO>}

Yes, I think so.

A - Unidentified Speaker

Okay. We have another question from Andreas SchÃ¤fer.

Q - Andreas SchÃ¤fer

So I have just one question on cyber reinsurance. How have you gained this sort of knowledge or experience, you need to run this business, do you work together with software companies or cybersecurity companies? Do you have some sort of joint ventures there?

A - Silke Sehm {BIO 20544220 <GO>}

So first of all, we have itinerary, a center of did competence for cyber. So we write it out of different divisions and they form a team and also exchange knowledge about their experience and their datas and their wording they see. So they meet on a regular basis and work as a center of competence together in that way. So we don't have a separate one. Then in addition, we work with certain company partnerships. I mentioned (inaudible) and we also have other activities in that respect, where we try to develop certain cyber terrorist (with SME) companies and also have those for our clients. And there we gain the experience from. Andreas, would you like to add something?

A - Andreas Markert

Maybe we have to mention that we were working a lot of -- with the Lloyd's market there as well. So they are also reasonable capabilities.

A - Silke Sehm {BIO 20544220 <GO>}

It's working.

A - Andreas Markert

Working? Okay, right. And also, we -- I mean, there are a lot of -- you're right, there are a lot of data providers or the model providers, we have decided so far to build our own cyber model for pricing and accumulation control, why we looked at a number of model providers and sort of their current capabilities. But have decided for an in-house solution because you felt kind of more black box, what we could buy at the moment. And we didn't want to rely on the black box area. But we have a number sort of providers that provide individual data, say, I don't know, company information, which help us to assess our cyber exposure on sort of individual risk assessment of individual companies and also sort of event type recording providers. So that we can get a sense on frequency of and severity of sort of individual events.

A - Unidentified Speaker

Okay. Are there any further questions? It doesn't look to be the case. So thank you very much for your questions -- and for the answers.

A - Silke Sehm {BIO 20544220 <GO>}

Thanks for listening.

+++presentation

A - Unidentified Speaker

We now come to the next presentation, which will be held by Claude. And as Jean-Jacques mentioned in his -- in the presentation this morning, we are going to expand our footprint in Asia and Claude will now shed some light on that topic.

A - Claude Jacques ChÃ¨vre {BIO 21916781 <GO>}

Yes, sorry. This works? Yes. Excellent. Yes. So normally, I give you some insights into the Life & Health business as you know, this time, no, this time, let me just bring up maybe the right presentation. Not this, this, yes.

This time, I'm going to talk about Asia. And as you see, I was supposed to do this presentation together with Sven Althoff and we try to be very innovative and present the 2 together. That was the plan, at least. And unfortunately, Sven is probably watching me now over the TV. And he handed over his P&C responsibility on Asia to me, at least on a short-term basis. And I must say, it's a real honor for me to be able to have the honor to present a little bit of P&C also.

So I'm going to talk about Asia. And maybe just quickly, what I'm not going to cover. So the definition of Asia for me is not APAC. It's not Asia Pacific. Just to make it clear. So I'm not going to cover Australia. I'm not going to cover New Zealand. I'm not going to cover the Middle East, neither because certain definitions of Asia, they might include the Middle East. And I'm not going to talk about the ReTakaful business, which is a very special business. We can -- I'm happy to talk about that one day, if you want. But we're doing that out of Bahrain. And we shouldn't forget that in Asia, you have also a lot of ReTakaful business like in Indonesia, for example. But that's not part of the presentation. Just to make that clear.

Let me just move forward. So what you see here on the slide is you see the current footprint that Hannover Re has in Asia. And I don't want to bore you with the history of how we moved into Asia from 1995 until now. But if you look at it, at the footprint on the offices, in a nutshell, you see that we have -- we have composite branches in Shanghai. We have a composite branch in KL, in Kuala Lumpur and we have a composite branch in Mumbai. So these are the composite branches that we have in a nutshell. Then we have life and health branches in Hong Kong. And we have a life and health branch also in Seoul. Then we have a service office in -- which is a composite service office in Japan. So that's more or less the footprint that we have in Asia right now. Now you might probably say, "Geez, why are you guys not in Singapore because any other competitor's in Singapore?" This is for historic reasons. We bought many years ago, we bought a company who had an office in KL in Malaysia. We maintained this office. And today, my P&C colleagues, at least they say they can perfectly cover the Singapore in broker market, the P&C market, which is Singapore broker market out of Malaysia. So that's why we have decided to stay in Malaysia, not to have an office in Singapore right now. Distance wise, not a big issue. So we're continuing to do that.

The next thing you might ask yourself when you look at this? Is it -- why do you have so many offices in Asia. I mean, let's compare it to Latin America quickly. Just let's make the bucket. If you look into the Latin American business that we have, we don't have any single branch in Latin America. We have an office, a service office in Mexico. We have a service office in BogotÃ¡. And we have a same small office in Rio de Janeiro. But that's it. So why is it like this? And the reason is very easy. The reason is that reason is that Latin America is much more, let's say, a common market. It's a common language. It's a common culture. And you can easily cover Latin America out of Europe. That's absolutely fine.

So on the life and health side. We are #1 life and health reinsurer in Latin America, we don't have a branch in Latin America. Yes, very interesting. So why do we need all these offices in Asia. Asia is just different. Asia, I'm always laughing when somebody said, what is your strategy in Asia? Sorry, Asia is very diverse. If you compare Asia, if you look into Japan, you look into Korea and China, you have this famous (Pesoto) line, Beijing, Å olta, look at it on a map. I mean, you have to feel -- a feeling businesses alike. These are totally different markets and then take India, another cup of tea. You take Southeast Asia. I mean, take Singapore and Malaysia and compare it to Vietnam, Thailand, Cambodia and Laos. I mean, it's really a very diverse situation. First of all. So very different languages, different writings, different cultures, very difficult to do Asia out of Hannover or to do Asia out of one location. This is the reason why we have set up all these locations here. And we have the feeling that the footprint that we are currently have is pretty good. So that's one of the reasons why you see this different approach for Asia compared to, for example, Latin America.

Well one thing which is also very important, of course, is that we have always tried to make sure not to open too many offices, because the risk that you have, if you open a local office, is that these guys, they feel obliged to write business at any price. We don't want that. So we always considered very well and clearly, strategically, does it make sense? Do we have a business case to open an office or not. For us, for us, opening an office means that we need to have the potential for at least EUR 100 million premium. Rightly priced, of course. If not, we're not going to open an office. And this is the kind of strategic approach that we had so far. And I must say. So far, we have the feeling that the footprint we have is absolutely fine. Now maybe quickly on the premium evolution. That's also an interesting thing. If you look at the chart, you see that we started very small. And then it moved up, up to 2015. Then you see from 2015 to 2016, you see this drop. And you might say, what happened there? Very easy explanation. We all know C-ROSS has been implemented in China. C-ROSS, is this kind of Solvency II-like solvency regime, which that they went from Solvency I into Solvency II regime. And that made some of our solutions that we have been selling very, very well in the past, just redundant. So let's say, the P&C side. And somebody was mentioning that these motor quota shares, with high profit sharing.

I mean, it's a little bit like the business that you were showing to us. So this makes absolutely no sense under C-ROSS. I mean, this was just a capital relief. But which was not really reasonable. I mean, because they got the capital relief, which was a percentage of the premium they seeded. So it's clear that you see the high percentage of premium with high profit sharing so today, under C-ROSS economic valuation, no chance to make these treaties anymore. So we had a big drop. And on the life and health side, we had a big drop on the financial solutions on the financing treaties, also where we were -- you remember that probably where we were financing the initial year commissions of the clients. Then we have very, very high premiums. And we recovered all this financing over the future years. I mean, this has, from a risk point of view, no impact on the capital and receivers. So we had to get rid of all these treaties and come up with new concepts, concepts, which are much closer to the risk than they were before. And this is the reason why you see this drop over there. So we had to drop. And then we recovered, we came with new solutions and that's the way it goes. So that's just for you to understand how it works. Sorry, yes, that's fine.

So let's move forward. So how does it look today quickly. And again, I don't want to bore you. But today, the total premium volume that we have right now in China, in Asia -- in Asia, sorry, is EUR 2.5 billion across the board, P&C and life and health. And if you look into the biggest regions, I mean, let's have look at it, you see Greater China. Greater China, meaning -- I mean, Mainland China, Hong Kong, Taiwan, which is a big part, it's more than 50%. You see Southeast Asia when we talk about Southeast Asia, I would say, 95% of the premium that we have out of Southeast Asia comes from Malaysia, Singapore, Thailand and Indonesia, whereas, Indonesia is really P&T driven more so that Southeast Asia, as you see, Japan, India, Korea and some other countries. I really don't know what these other countries are, by the way. But I probably have forgotten anything. So this is what we have there. And if you look now and you split between life and health and P&C. It's quite interesting. I mean, this is the funny thing, I've never looked into that like this. But you see -- let me start maybe with the P&C guys. The P&C guys you see, premium-wise pretty much the same on both sides right now. But P&C has very nicely, I would say, diversified portfolio between Greater China, you have Southeast Asia, which is quite prominent. You have a lot in Japan. We talked about Natcat. So it's nicely diversified. Whereas, if you look in the life and health portfolio, it's really it's Greater China driven, okay? So again, P&C, if you look at that, we have also been growing quite substantially in Greater China. And when we talk about Greater China in the P&C side, it's really mainly Mainland China. The P&C, Hong Kong, Taiwan, pretty small, whereas in Mainland China we're pretty big on the P&C side. What is the reason for the growth.

We have started to propose our clients, let's say, whole -- I don't know how to say that. But something like a whole account reinsurance treaties over every single reinsurance treaty that a single client has. So you have one client with 20 different reinsurance treaties with all the lines of business that P&C knows. And we take a share of each of these reinsurance treaties. I don't know how we call it, it's something like a whole account approach. And this has made us grow quite substantially. The advantage of this is that if you look into the client relationship on the P&C side, you have something which is quite stable. Nicely balanced, whereas for the client, the nice thing is that we take the good treaties as well as the bad treaties. So it's a lot of -- a good value proposition for the clients. We have started to do that. And that was the main reason for the growth in China for the P&C guys.

If you look into the life and health side, on the life and health side, we have been growing by having a really huge footprint in China. We have 97% of all the Chinese clients, life insurers, are active treaty clients of the life and health business. So we have really a very strong footprint. And that's the reason why we have been growing quite fastly. You shouldn't forget on life and health side, that we have also quite a big volume of EUR 200 million about, from Hong Kong and Taiwan, which is not the case in the P&C side. But these are the reasons for the growth for the strong percentage of rate China within the 2 business groups.

On the P&C that, if you go back to the P&C side, you see also that we're much stronger in Southeast Asia. So 24% of the total P&C premium comes from Southeast Asia, whereas in Life & Health side, it's much, much smaller. P&C has been very active in Malaysia. Let's be fair. On the P&C side, we have also a good portfolio out of Indonesia, Thailand. So it's very promising. And we see quite some promising growth opportunities on the P&C side also from the Southeast Asian region.

If you look again into the 2 circles, you see that P&C is, of course, much bigger in Japan. For evident reasons, it's a Natcat-exposed program. So you have huge premium volumes out of Japan in the P&C side, on the life and health side, tiny, tiny. As I told you before, you remember, we only have a service office in Japan. We don't have a branch like in the other locations. This is a competitive disadvantage for the Japanese market. And that's the reason why we're not that big on the life and health side in Japan.

India, maybe just a few words on India. I mean, India is growing slowly, let's be clear. But we believe that the decision to open up a branch in India has still been the right decision. And even today, I would say, yes, it was right. I mean, the P&C guys, as you see, they have been writing 8%, which is what is 8% of 1.3%, that's 8x13 that's something like EUR 100 million. That's not too bad for the P&C guys. On the life and health side, I mean, it's peanuts. It's what is it. You cannot see it is 1%. The life and health business, I explained this to you already in previous presentations. The growth is just smaller because you get all the access to the new business. New business is slowing -- it's growing slower, of course, than on the P&C side. But this is more or less where we come from.

Let me move quickly to the staff. We have, today, 220 FTEs. These are the locations that see the heavyweights, heavyweight is Shanghai. And KL. So China and Malaysia, then you have some bigger branches, which is Hong Kong and India. And you have the smaller branches and service office and the rest. If you look at the development of these FTEs and have just to check this out. In 1995, we had 0 FTEs in the region. In 2010, we had 100, in 2015, 160. And now we're at 220 FTEs. Just to give you a feeling on the footprint that we're having right now.

Okay. So I mean, this is really just stating the obvious, I would say, if you look. And Jean-Jacques has mentioned it. I mean, if you look into Asia, I mean, it is just growing tremendously the whole of Asia. And you see here just a few things. I mean, the first thing is the expected global GDP share of Asia, I don't talk about insurance, I talked about the GDP share, it's going to be 36% in 2029. So this is more than 1/3 of the total worldwide GDP, that's just massive. Then look into the expected insurance penetration rate. It's going to be bigger than 3%. And now, again, we need to distinguish. You cannot say Asia is 3%, forget about it. Let's just distinguish a little bit. So let's have a look into life and health penetration rates that we see.

The biggest, best penetration rate we observe on the life and health side is coming out of Taiwan. Taiwan has a 17% penetration rate on the life and health side, hugely developed markets. Everybody has at least 3 life policies or instance. It's crazy. Yes. It's also a lot of savings, of course. But I mean, it's 17%, whereas if you go then into India or China, it's only 2% on life and health side. If I go to the P&C side, the penetration rate, it's a little bit less extreme. It goes from 5% in Korea. Then it goes down to 2% in China and 1% in India. But you see -- so the average doesn't say too much. But we know that it's going to grow. This penetration rate has to grow. And it's going to grow definitely.

Let's look into the nominal premium growth, it's about 7%. If you take the real premium growth. So you adjust for inflation, you end up with 4% to 5%, which is not bad at all. Then one thing, which I find absolutely amazing. I'm sorry to say. But this last -- the second before last bullet point is expected global insurance share. This is going to be -- I mean, according to various analysis we have done and certainly analysis we have read, it's 43%, make it 40% in 2029. So 40% of every single insurance premium, which is produced in the world is going to come out of Asia, this is massive. So what is the reason? The reason it's growing middle class, that's clear for everybody, okay? So people, they will buy more, also health covers, they will buy, they will buy much more insurance cover also on the life side. That's very clear. But then you have on the P&C side, you have some big, big infrastructure project. And I don't know if you heard about that one. But that's the One Belt One Road initiative. You know that. And if you don't know it, look it up. This is massive. This is going to be a massive project, infrastructure project over the next 25 years. This needs P&C cover. So that's where everybody believes that -- where the growth is going to come from into the future. But there is absolutely no discussion and no doubt about that. Then if you look at the cession rates, 5%, again. Careful, you need to take this, of course, per line of business. You heard me talking about cession rates on the life and health side. We know that we don't have any reinsurance business out of the savings premium. 97% of the premium is savings. So cession rates cannot beat the 5% on the life and health side. But on the P&C side, it depends also, of course, on the lines of business. But still -- I mean, if you look at it, I mean, it's a no-brainer. Asia -- you need to be in Asia, okay? That's very clear. But I told you, we are in Asia. And so two years ago, I have to tell you a story. We were in a management session with -- it was still (Ulrich) at that time. JÃ¼rgen GrÃ¤ber was also there. We're sitting there and talking about this. And we just said, guys, is Hannover Re Asian enough, okay? So looking to our Board. I mean, there's no Asian amongst us. We have 2 Swiss, okay. But we're even further away from Asia than the Germans, okay? So that doesn't count, yes. And when we look then into the managing directors, which is the next level, there is not one single managing director at Hannover Re, who is located in Asia. Yes. Then we said, "guys, are -- is our setup still the right one looking into this" and that's where we decided to say, "okay, guys, let's step back and let's start an initiative and a project." And we were working for more than 1.5 years on it, to know to see what could we do in Asia. How could we set up ourselves. Now

I'm not going to give you all the details because -- I would love to give it to you. But there are some competitors who are watching us right now. So sorry, I cannot give you too many details. I'll give you some flair of what we try to achieve, okay? So this is on the next slide. So this is what we were looking at. So again, you see the EUR 2.5 billion up there. I mean, we said if we continue the business as usual, yes. It's just the same thing, 220 FTEs. We'll add a few FTEs every year. We remain like we are. We continue with the same kind of product, same risk appetite. Everything the same, we would end up by 2023 with EUR 3.5 billion. If you make the calculation quickly, I did it before because I'm not a mathematician by nature as Silke. I'm a mathematician by training. So I have to make the calculation. 7%, yes, 7% CAGR, which is not too bad, yes. But that's -- I mean, what is the assumption behind that? It's really business as usual. We'll continue on the life side. We will continue to do the same thing. We'll continue to grow with the market. It's really growing with the market. On the P&C side, why would we achieve that? Because we would just increase the footprint that we have in China. In China, I told you on the life and health side, we have 97% of all the clients. Our active clients in P&C side is maybe 2/3, more or less, or not even. So there is still room for improvement for the P&C guys in the Chinese market. So that's what they will be doing in a very standard, let's say, business as usual scenario. Then we came up with these initiatives. And this is just a summary. I'm going to give you a little bit more detail, of course. If we started to focus on an expansion and 2 things a little bit differently, not totally differently. Well I mean, we're still Hannover Re and we keep the Hannover Re way of doing things. That's very clear. But doing things a bit differently, we will be able to increase the EUR 3.5 billion to EUR 4.8 billion by 2023, which is a CAGR, which is double digit. I mean, you can make the calculations. So it's quite a good story in a way. How would you do that? I mean, the P&C guys, they would say, well, we increased our product space. So we start to have more -- a broader product range than what we had before. And they would also, on the P&C side, that's also a bit new for P&C, they would say. Well let's start to provide some services to our clients, which was never the case before. Before we took reinsurance, business as usual. Now let's say, whether we can provide services, certain very targeted services. Of course, as Jean-Jacques said before, I think, of course, in return for reinsurance. We're not consultants. We're getting paid by a reinsurance. That's very clear. So this is the P&C side in a nutshell, okay?

And on the life and health side, well, we said, well, we have already a very good footprint. But let's be fair. Are we really considering every single business opportunity that we have? Do we have enough people on the ground to be able to quote every single business opportunity? I'll give you an example, just on Greater China, on Mainland China. In Mainland China, the insurance companies, we talk about approximately 100. They file every year 3,000 new products, okay? So 30 new products per company. Go to the German market and then compare. I mean, 30 new products per company. You can now ask myself, it's right or wrong. But that's the reality. We, Hannover Re, were pricing 1,500 products per year. But we could price 2,500 had we more staff. So on the life and health side, it's really increasing the footprint to be able really to analyze all these opportunities that we're not even analyzing because of the lack of resources. It's kind of easy. But now looking at that, that looks all good. But then, of course, I was afraid because, I mean, no Board member at Hannover Re is going to propose any kind of initiative without talking about cost ratio. Yes. You know that. I mean, Roland was talking. Most of his speech was cost ratio. Jean-Jacques was assuring you, we're not going to increase the cost ratio. Yes. This is Hannover Re. We're Hannover Re. So we looked into cost ratio. And there is something which is really funny. I mean, look into the cost ratio development. Doing a business as usual approach compared to do a focused expansion approach. And we're very, very surprised to see that we were able to have a focused expansion and still decrease the cost ratio. Now the graph is a little bit misleading. You see that we changed the scale there. I mean, if we -- if I showed you the whole scale, you wouldn't see difference. So it's peanuts. It's peanuts, just to show you. But we have a good business case. We were able, with our approach, which is a focused approach, a very strategic and also tactically right approach to add additional premium, additional profits. So remain -- keep the profitability at the same stage by decreasing the cost ratio. So I'm not going to hire 250 new people that make a resource center in Singapore, that will definitely not have this impact. And we're going to do something different, okay? So let me maybe elaborate a little bit on it. What we're doing -- so the way of getting the things done for us is really, first of all, is we want to build on the existing infrastructure. So we're not going to build a nice office building in Singapore and hire 250 people, as I said. That's not going to be the case. So we're using our current infrastructure. Very important, because adding offices is -- comes always at a very high cost. So we said, that's fine. So build on the current infrastructure. We want to further strengthen client centricity. That's also something that Jean-Jacques was saying. That's really our DNA, clients' interests. I'm going to come back on that one. And we want to focus on certain growth areas. So not spreading services across Asia. That's not our way of thinking. So region by region, country by country, client by client, deciding what makes sense and what makes no sense, where can we really get the return on our investment. So that's mainly the thing. And here, you see a little bit more details. So again, I mean, no additional office locations. That's very clear. That's what I told you before. The fully decentralized underwriting. What that means is really that we want to provide our local offices, in particular on the P&C side, it's very important with more authority. So that they can decide and take decisions locally much faster than what was the case today. Again, Jean-Jacques was telling it also that our clients, they love to have contact with our client manager to have the feeling that they talk to somebody who can decide. And this is decisive in Asia. Speed is decisive. So when they start to feel that also on the P&C side the local guys have an authority which is higher so that they can take decisions and well made decisions, of course, that will have a huge impact. Then one important thing is also that we want to make sure that the local capital that we're pushing into these offices wherever we need capital is in line with business. So far, we have always been a little bit reluctant. I mean, we're looking at Roland's. And he is probably nodding or at least thinking, yes, it's right. We're always a bit reluctant to put capital into local offices. I mean, we have -- our principle is that as much capital as possible within Hannover Re. And if you put it in local office, it has to be fungible. We have to be able to take it out, put it in somewhere else. You need this flexibility. And that's the reason why we are always a little bit reluctant on China also because it's not easy to get the capital out of China, Roland. But we decided this time here, if we have business opportunities, the capital should follow, not we restrain ourselves, our growth, because we do not have enough capital locally in the office. That's one of the minor changes, which is quite important. And the next one, I would say is even more important. At Hannover Re, we have something which is very interesting. We write the business first. And once we have written the business, then we ask for the resources to manage it. You were mentioning in-force management, et cetera, et cetera. Here, we say, no, no, guys, let's think first, let's think what we want to do, let's hire the resources and write the business and not the other way around, because our business model in Asia has come, let's say, to a kind of a level, you might call it glass ceiling. But it's a level where you cannot manage it like that anymore because it becomes too big. So we need really to have the resources first, the expertise first and write the business afterwards. And this is also something which is a little bit different to what we have been doing so far. So this -- on the existing infrastructure. On the client centricity, again, I mean, one important thing. And that's also -- that's key of Hannover Re. We decided to move into Asia. But keep the fast decision-making process that we have today. And why do we have a fast decision-making process, because we don't have any, let's say, management layers, who do not add any value. We're very, very slim. We have very few management layers. You have the Board. You have the MDs, the GMs and that's it. We don't want to lose that. So we're not going to build now, or install a head as CEO Asia. That would have been an option. We thought about it. CEO Asia. The CEO Asia will be sitting in Singapore, nice offices. He will have his

HR. He will have his corporate communication. He will have his reserving, his risk management, his administration. He will have the team, yes. We said we don't want to have this. We want to continue with this network approach and empower the local offices. But still have a centralized governance structure and not having additional layers of management. We're sitting in the region with their own politics, own agenda. That's something we don't want to have. And this is one of the reasons why we believe we can grow faster in Asia without increasing the cost ratio, for example. Enhanced local expertise, very clear. And that's something which is important. We have quite some strong expertise right now also on the P&C side, in particular, centrally in Hannover. But we need to make sure that this expertise goes into the local office to enhance the decision-making process, to show the clients that we have the expertise locally and not in Hannover. This is very important. Then service proposition. I told you in return for reinsurance, that's really very important for the P&C guys, very new. But we need to offer something on top of just reinsurance. And we have seen that very clearly. And the access to decision makers, that's clear. That's a very clear thing. Then the growth areas. That's also something that we saw. When we thought about Asia, we came up with very specific business initiatives. And again, sorry, I'm not going to tell you which these initiatives are, for evident reasons. But mainly, they really mainly go on the P&C side to give you a little bit of flavor into a broader product spectrum. So we really think that there are certain products we haven't touched so far that we could touch in the future, by having the expertise locally, decentralized in the offices. And that's one of the things which is very important. And the life and health side, I gave you already some insights.

The bundling proposition. That is also very important. We don't want to duplicate functions. We don't want to have duplicate expertise in the offices. So one thing which is also very special for us is that we said, okay, we don't need an expert on everything single line of business in every single office. So we will have centers of expertise in certain offices where it makes sense. Centers of expertise for certain lines of business, maybe. Centers of expertise for data analytics, which is also a very important topic. I mean, Jean-Jacques told about it. Everybody was talking about data analytics. Who can do anything today without having a data analytics center of expertise. So we will also bundle these value propositions into units so that we're even more efficient and we don't need to duplicate functions. Then, of course, I mean, this is also very clear that the risk reward profile has to be right. That's very clear. Now in addition -- by the way, I forgot on the P&C side. In addition, to this broader product spectrum, we see also a lot of opportunities. Let's be clear on the agro side and on the health side. Why? Because in the whole of Asia, governments, they are pushing for covers. And we see that Agro health is going to grow. So we need also to increase our expertise over there. On the life and health side, we are really going to focus on living benefits. Asia is a market for living benefits. And it's not that much a death benefit market. It's living benefits. So we talk about critical illness. We talk about the short-term and long-term health business. That's something that we're definitely also going to continue to do. We have already quite a big portfolio. And we are also focusing. And we heard about from Silke, on the so-called structured reinsurance solutions in China. I told you last time. I think, if I'm not mistaken, that it's the golden age for structured reinsurance in Asia, in China in particular. And you remember why. You remember that Circ has joined together with the banking regulation. So you have -- this became CBIRC, Chinese Banking and Insurance Regulatory Commission, as you know. And since they have CBIRC became even bigger than it was before. So processes are even slower than before. So given that all the companies there growing incredibly, they need capital and the process to get the capital released or accepted by CBIRC has been so long. So slow that the companies they need some kind of structures -- reinsurance solutions from us. And that's all something that we're going to focus on the life and health side.

So this -- the way of getting the things done. The next slide is really just -- what I wanted to make sure is that you understand that whatever we do in Asia -- what we're going to do in Asia is a perfect fit with the global strategy of Hannover Re. Global strategy meaning, we're still somewhat different. Again, this client proximity is absolutely key for us. And Jean-Jacques said, you were stuck when you saw -- I mean, we have at all levels. And it's difficult to explain this to you. But at all levels we have incredible good relationships with clients. And this is so important in Asia. I can tell you that's no way that the German who has learned Chinese at school can have these relationships in China, as we have them with our local Chinese, with the Chinese colleagues, with the guys who they have been at university with, the guys they know from childhood. And this relationship, this kind of proximity, this kind of centricity is just the DNA for us on the marketing side. Then I told you no hub, very important and the local empowerment. That's something that we have already. But we want to further push the local empowerment into Asia, in particular, on the P&C side.

Cost leadership. Again, I tell you again, why this is going to work. And some of these points -- sorry, Roland has already mentioned them. It's clearly the case. It's also very Hannover Re like. We're not going to put 250 people tomorrow into Asia just because we have a great idea. We're going to implement this, I would say, in a gradual way. So, slowly but surely. And if we see that any of these initiatives doesn't work, we just get out. There is no problem at all. So in the worst case, we have the standard scenario, which is the figure I showed you, business as usual. In the best case, we have the other one. We might end up somewhere in between. But we're not going to push initiatives which we see after one year that they do not work, that do not -- they do not fit with our risk reward profile, that they need too much resources, that there is no market for whatever reason. We're not going to push them just for political reasons. That's also typically Hannover Re.

Now I need to give you a little bit something to you guys. I know because I haven't shown you any figures this time. I'm really sorry, apart from the premium. So I thought what could be interesting for you guys is maybe just this because you know our top metrics, the global -- the group targets. You know them. I have just taken the business unit targets. Now the business group targets are not Jean-Jacques' other targets. And you see -- if you compare now what we expect to achieve within the next 3 to five years out of Asia, is absolutely fulfilling the target. That is even better than what we expect on the group side. You might be surprised maybe on the combined ratio. Combined ratio grew 97%. Combined ratio, Asia, 96%. How can this be? Reason is easy. It's our Advanced Solutions business, of course, which we have just seen, which has very low EBIT margins for the reasons we know, which pushes the combined ratio 0.7percentage points up for the group. If you take this down, then we, I would say, the business that we're writing, we want to write into -- in Asia on the P&C side has similar profitability as the business that we're having right now on the P&C side. So nothing new on that side. But the only thing which is new is that we are growing much faster. We expect to grow much faster, I told you, double-digits CAGR, remember. You see 10% to 11% in the next few years out of the

P&C business, which is very clear. I mean, that's -- there's no right or wrong. On the life and health side, similar story. Also there, we expect higher growth out of Asia than out of Europe. To give you an example, 7% to 9%. You understand the growth in life and health. I explained you various times how this works, because the biggest part of the business is the in-force business. Growth is only the new business. So that's why growth figures are maybe a little bit lower. But still 7% to 9% is huge. EBIT growth also, of course, in line because we expect similar profitability on Asian business on the life and health side, like the rest of the world. And the value of new business contribution that we expect out of Asia should be north 80 million. So you see that it should be more than 1/3 of our value of new business that we are generating out of the whole of the life and health business should come out of Asia.

So that's it from my side. Sorry, I don't -- I'm not going to give you much more details on the initiatives. That's very clear. I hope it was interesting guys. And I'm ready for questions. Am I in time. No, ahead of time. I don't know.

+++qanda

A - Karl Steinle {BIO 1986424 <GO>}

Thank you, Claude, for your impressive and speedy presentation. So we have a little time for Q&As. Roland?

Q - Roland PfÃ¤nder

Roland Pfander, ODDO BHF. Could you speak a little bit about the risk management. You said you might call up to 2,000 policies. So how do you manage this? How do you follow-up that things are going in the right direction and also in a profitable way? And maybe second question. What is the churn rate in China in terms of your employees situation there?

A - Claude Jacques ChÃ¨vre {BIO 21916781 <GO>}

Okay. Let me take the churn rate maybe first. We -- I must say, again, it depends on which business group you are. You talk about China -- sorry, yes, China. In China, of course, we are a composite office. So we have life and health and P&C. We have a little bit higher churn rate on the P&C side. The reason's not 100% clear. But that's just what we have observed. You talk about -- probably, I would say about 10% to 15% of the people. So it's less than what other reinsurers experience. The reason for the high churn rate, by the way, is also that you have new reinsurers, which are established, local reinsurers who are established in China. They attract, of course, talents. And where do they get the talents from? Well from the international reinsurers. They take the dedicated people. And they attract them. So we have a little bit higher churn rate on the P&C side.

Life and health. We're within standard 5%, which is still higher than the rest of Hannover Re. But it's about 5%. So we're not -- I understand your question, we're not training our people and losing them. By the way, just going back to that, that's one of our issues, of course, that we're having -- hiring more staff into the region means we need to train them or -- and we need to make sure that they stay with us, not at any price. But that's one of the things that we're going to have.

Risk management. I mean I told you just the number of products, okay? So today, we have 1,500 new products. Now we have to be careful. A new product in China is not the same as maybe a fully new product in Germany, okay? I don't know when we had the last new product. But in China, it can be something like you have a CI product with 100 critical illnesses. And the client wants a CI product with 105 critical illnesses. So it is not completely new. There is not completely new products coming on. If there was a completely new product, we would anyway have a new product process within Hannover Re, which means that home office will be involved, risk managers involved, everybody is involved. Here, it's really not about that. It's tiny features. But again, the clients, what they want. And it's difficult to understand for us. When I was with Chinese insurance companies, I visit them. They have 30 new products. They're proud of it. Then I asked the product guy, why? Well the CEO wants it. But everybody agrees. 30 products, filing 30 products every year. This is a big hassle. This is a big cost. This is big. But they -- what they do in general is they sell a new product for three months. That's already enough. Then there is a new product, again, the new product, new product. And some people, they churn their actual product and they buy a new one. It's like changing the car in a way. It's a different approach here. So from a risk managed point of view, it's not the new product that you have in mind. So no issues. We have, of course, something we need to do on the risk management side. And looking at Andreas, we need, of course, to monitor our global exposure in certain risks. That's one of the things that we need to do, of course, because these -- let's say, these 100 insurance companies, they're all selling more or less the same kind of products. I mean they copy each other. So that's something that we need to manage. But on a single product side, it's not a problem.

A - Karl Steinle {BIO 1986424 <GO>}

Another question from (Theresa).

Q - Unidentified Participant

A quick question. So as you know, Chinese government now basically opens the door like to allow overseas insurance to come to the Chinese market. So I would expect like a lot of competition like from this year and to go on. So what do you think is your like key competitive advantage, like well, I know you can't talk about the business initiatives. But any like advantage you think compared to your peers?

A - Claude Jacques ChÃ¨vre {BIO 21916781 <GO>}

So you talk about reinsurers now, not the insurance companies.

Q - Unidentified Participant

Yes, reinsurers?

A - Claude Jacques ChÃ¨vre {BIO 21916781 <GO>}

Reinsurers, yes. Well our advantage is really the way we do business. And I'm probably repeating things that everybody has already said today. What clients like with us is that they get, what I would say. And this is across the world, it's especially right also in the U.S., by the way. It's -- they get this deal certainty. They get a very clear, yes, we can do it or no, we can't do it. We're not going to discuss with clients for months in China, whether we do something or not. So they get this deal certainty. That's one thing. The second thing especially on the life and health side already on the P&C side in the future, they have this decision-making people visiting clients. And this is so important. If you start to reduce the decision power of our client managers just for one year. And we did that in one year in the past, you immediately see the ratings from clients going down because they say, who are you. Yes. If you say, I have to ask Hannover. But I don't want to know about Hannover. Are you a decision-maker or not? And this is something which is not easy to replicate. You need to have locally trained, good resources. We want to have Chinese in China, very clear, because we have the Chinese in China, the Malaysians in Malaysia and the Hong Kong Chinese in Hong Kong because they are what they are, because they have the culture that they have. They have the culture of our clients. So that's the first thing. Then they need to be compatible with us and organizing this in an efficient way. This is not easy. This is not easily done just by having a license to do business in China. And I can tell you, I can't imagine writing business in China, as an example, out of Europe. I mean if I look at the complexity of this market, at the innovation which is happening in China, which is a market for himself, the Chinese are not copying the rest of the world. They don't care about it. They have their own innovation. Let's be fair. Do you want to know what's coming on. You need to be in the market. So between us, I have absolutely no fear from any competitor who tries to write business from abroad into China, no problem.

A - Karl Steinle {BIO 1986424 <GO>}

Another question from Andrew.

Q - Andrew James Ritchie {BIO 18731996 <GO>}

Just a simple question. The targets are not in line with the focus on expansion. The targets are somewhere halfway between the 2. Is that right?

A - Claude Jacques ChÃ¨vre {BIO 21916781 <GO>}

Yes.

Q - Andrew James Ritchie {BIO 18731996 <GO>}

Your own targets don't assume.

A - Claude Jacques ChÃ¨vre {BIO 21916781 <GO>}

Yes, because you have just calculated the CAGR, I guess, no?

Q - Andrew James Ritchie {BIO 18731996 <GO>}

Well crudely.

A - Claude Jacques ChÃ¨vre {BIO 21916781 <GO>}

Yes. You're absolutely right. I was expecting the question, by the way. No. It's -- the reason is very easy because here, the target matrix here. This is for the next three years. But the focus on expansion is over five years. And that means that we expect, of course, to have even more growth in the future than at the beginning. So the growth is not coming from day 1 on. This is the reason.

Q - Andrew James Ritchie {BIO 18731996 <GO>}

Okay. So it's all '23 and beyond. No, hang on, '21 and beyond, yes, sorry.

A - Claude Jacques ChÃ¨vre {BIO 21916781 <GO>}

Yes, yes. absolutely, absolutely right.

Q - Andrew James Ritchie {BIO 18731996 <GO>}

Then I think you probably touched on this. But CI products in China, there's been quite a lot of focus on definitions. There's been a drift of too many conditions included. And the number of your peers have tried to get a little more cautious on that. What's your experience been?

A - Claude Jacques ChÃ¨vre {BIO 21916781 <GO>}

We -- I mean we see what they have seen. We don't see it in our own portfolio right now. You need to see one thing. I mean CI is not equal to CI. I mean it's maybe the same product. But according to who the client is we're selling the CI product, you can get very, very different experiences. I shouldn't say that. But in China, some people don't really disclose. So you have, let's say, limited underwriting. They don't say what they had. They buy policies and they claim within a year, within two years, which is a bit weird. And you see that in China, by the way. So with certain clients who accept that they know that their clients -- that their insurance clients, they don't disclose. And to accept that you see a very high incidence rate in the first two years. And then it goes down in year 3, 4, 5 to normal levels and then increases later again when people didn't really get, let's say, kind of standards here. If you look into companies, I don't name them, of course. But we know them, who do look into non-disclosure because there is a possibility to make sure that you detect these guys, because it's easy in China. You know perfectly whether Mr. X has been at hospital last year, last year or a few months ago. You can see that. And the clients who do this, they have a 50% better claims ratio the first two years. We know that. And again, to the question of the lady or international people going into China, you can notice only if you're there. And you know how the practice is done. So different underwriting practices per client. And we're adapting the pricing also to this. The second thing that we're doing also. And I know that our competition is also copying us more and more. We're also introducing the right to increase premium. So whenever we see a drift, we can increase premiums, not only on the new business. But also on the portfolio. This is something which is very new for the life and health business. And we introduced that because we don't want to be exposed to this exactly. A very good question, yes.

A - Karl Steinle {BIO 1986424 <GO>}

Vinit?

Q - Vinit Malhotra {BIO 16184491 <GO>}

Just a clarification. This is purely organic initiatives, right? Because what happens is that the initiatives are not realized. Because Asia (grows), expanded in the wheels. And I've seen that a few times, having lived that most of my life. Then what happens is that people then go and buy stuff. So how are you -- I mean, is there...

A - Claude Jacques ChÃ¨vre {BIO 21916781 <GO>}

Yes. You know us. We're not political. I told you again. We have initiatives that are absolutely organic. Organic means we're not going to buy anything. We might buy a team somewhere, maybe on the P&C side, some product idea. We're going to buy a team. That's okay. But we're not going to buy companies. We're not going to buy portfolios. That's not the idea. It's organic. And again, we're very clear. And everybody here in the room knows that. I mean our -- my colleagues, very clear. If an initiative turns out. And we're going to monitor each of these initiatives. And there is a couple, okay, of initiatives. We have already concentrated on a few. But there are still quite some initiatives across Asia. We're going to monitor each of these initiatives very, very clearly. And if we detect anything, which makes us a -- it was the wrong thing. Only stupid people don't change plans. We're then turning it down. Do we have a problem to have too many resources. No, because even in the standard scenario, we will need more resources. You cannot do with 220 FTEs. You cannot do what we would do in the standard scenario. So if these initiatives. And the worst case, all these initiatives are bad, okay. Let's say, it's not going to be the case. But if everything turns out to be bad, any resources we have hired at the beginning of the initiative, we will need them anyway, two years later for the standard scenario. So we're not taking any, let's say, operational risk to hire people and have to fire them again. That's not our style. So that's why we believe that we do the right thing. And we do it in the Hannover Re way as Jean-Jacques was saying. Also this, it's just us.

A - Karl Steinle {BIO 1986424 <GO>}

I think one question. Then thank you very much. Thank you very much for your questions. It's almost coffee time. So we break for another 20 minutes. So we'll begin to resume at 5 minutes before half. And -- but before that, I would like to trouble you again with my question or my -- well, for the feedback form, which is on your table, that would be very helpful if you could fill that out. As I said earlier, it's very important to us.

With that, there is more coffee to come.

(Break)

+++presentation

Thank you very much for coming back on time. We are now going into the last presentation of today. We have not talked about life very much. So Klaus Miller will now dive into that. And as Silke talked about structured reinsurance, now we have the equivalent from the life and health side, the financial solutions. But apart from that, there are many other things. So thank you.

A - Klaus Wilhelm Miller {BIO 16886879 <GO>}

Yes, for the introduction, Karl. I would like to talk a little bit about usual risks with an unusual return on equity return. In the last couple of years. And now we come from the wild East to the wild West. I have to explain to you the somewhat negative results or disappointing results we had from our, in 2009, acquired business. Today, I would like to talk a little bit about the Financial Solutions business, which we discussed internally is that the cash cow or is it the (XX1). I still support the cash cow view. And I would also like to talk a little bit about the digital age and what we do to support our clients in the U.S. to help them to get new business. But first, I was told I have to give you an update on project, what we call the Project Reboot internally and an update on the YRT rate increases for the mortality solutions of security Life of Denver, the business we had acquired. And we are managing for them as well as reinsuring it. So let's start with what has happened last year. We have increased rates for 101 insurance groups. In fact, these were more companies. But the groups were 101, in total 778 treaties. Pretty massive, an awful lot of work. We had to face IFRS losses of 332 million last year. Just to make it clear, this is not payments from us to any clients. This is our accounting difference between the purchase gap in 2009 and the locked-in assumptions and our very positive view about this business 10 years ago. And when this business was recaptured because not all of the client companies accepted our rate increases. When this business was recaptured and was gone, then any negative reserves linked to certain treaties had to be filled up. And this added up to 332 million in total. Still from an economic point of view for us positive because we would have expected very negative results in the future. And we also expect still 45 million of negative IFRS results from these recaptures in 2019. The still open treaties or issues with a handful of companies is heading towards arbitration. We have initiated or the client has initiated arbitration for a handful of companies where we believe we have all the chances of winning these arbitrations. Why do we believe that? First of all, when we started the whole thing, we asked our own internal legal department whether these rate increases are justifiable. And they told us they are. We got external expertise. We asked 4 or 5 different legal companies and they told us, after looking into the treaty wording, this is okay, this is valid. And the question is why is then anybody heading for arbitration. Of course, they can have a different view. But what is more important to me as a non legal person. I'm a mathematician, not by nature, also by training or, in fact, a statistician by training. And I got a lot of comfort out of the situation that nearly 100 independent and negatively biased legal departments from all our Security Life of Denver clients told the CEOs, we don't like it. But you can either recapture the business or pay the premium increases. There is no point in going to arbitration. So most of the clients did not challenge our right or the right of Security Life of Denver to increase the rates. Just one point on something else here. I sometimes say we because we manage the business on behalf of Security Life of Denver. Why? Well these rate increases issued on behalf of Security Life of Denver. We are reinsuring the business. And we are also managing the business for Security Life of Denver. And we have an obligation to do that according to professional standards. And the counterparty Security Life of Denver facing is to the majority -- for the majority of the business our U.S. company. So they are very keen to see that the U.S. company can pay all claims of the retroceded business. If we would not have increased the rates on behalf of SLD, then there would be theoretically a risk that our U.S. company accepting the retrocession gets into trouble. And Security Life of Denver would not like that. So we have agreed and signed a contract with them 10 years ago that we will professionally manage the business. And that includes the YRT rate increases. So what will happen in 2019, 2020? Arbitrations take some time. Absolute minimum is a year, expected time two years, maximum three years. You never know. These things take time. What will happen in the meantime? We have to account for the results of these treaties in arbitration as if we had not increased the rates. So what you will see as losses from these treaties and arbitrations for the next 1, 1.5 to two years? And my guess is currently, that by the end of 2020, we will have showed so many losses from these treaties that any recapture, which will, from my point of view, undoubtedly happen, if and when we win the arbitration. And that would obviously after recapture cause some IFRS losses from the recapture, will be offset by the claims we have shown until then. So that means if the business is recaptured two years from now. And we will have to offset the purchase gap numbers in our accounts, then we will have -- because this will be recaptured retroactively, we have shown so much losses that this will be a wash or a slight positive, slight negative. But nothing what really concerns me any longer. So I hope that with these rate increases, we have definitely solved the biggest problem in our legacy portfolio. The IFRS sufficiency -- sorry, I've slipped. There's one slide? No. So we will have hopefully solved the main problem of the legacy business. You have seen in the past. And this slide was already shown by Jean-Jacques earlier in the morning. You have seen some ups and downs. Unfortunately, I'm not able to show you more than this blood line here because the Third Quarter and annual results are still finalized and it's not up to me to give you any hint where this would end. But if I had really concerns and would expect large negative impact, then I would have to have reserve already today. And then you would have seen that already in the half year accounts. So currently, we expect everything goes according to plan. The IFRS reserve sufficiency will continue to grow with our new business. And I cannot foresee any unlocking event of our GAAP accounts -- IFRS GAAP accounts in the future. One thing which should be explained here is probably the EUR 100 million extra profit from the Viridium deal. It's not the radium deal. It's the -- our investment in Viridium. I read a lot about it in the press. And most of it was wrong, saying that this is the Generali business. This is before we bought the Generali business. The reason why we had to disclose these hidden reserves were that Generali wanted to sell their life company in Germany to Viridium. And they also wanted to invest in Viridium itself. And in order to do that, there had to be a validation -- valuation of the value of Viridium before the Generali deal. And suddenly, we did not only have our book value and what we paid in before and some profits we made in between. But we also had an outsider valuating the business. And an external firm was asked to do a valuation. And for this valuation, Generali bought it. And this means that the EUR 100 million is for Heidelberger, Skandia and (Anteon Roxionow), they have changed the name. So this was the valuation before the Generali went in. Then the Generali was bought. And now we carry the investment for Viridium at the new book value of EUR 100 million plus what we paid for the Generali deal.

Despite the encouraging news from Claude about China and Asia, which I fully support and hope this will all come true. For the next five years, I still see that the U.S. will be a substantial part of our EBIT, of our net income, of the profit for -- on the life side.

It was substantial in the past. We had some very negative years, 2015, '16 and '17. '15, we already had pretty good growth elsewhere in many regions of the world, mainly from Claude's area. But '17 probably was the worst year from the old block before we increased the rates in the U.S. And if these problems are now really solved. And I firmly believe that, we should expect that these 2 bars here at the right should become pretty positive and encouraging in the future.

The question which is left is did we miss anything? Did we really solve all the problems in the U.S.? Or is there anything else what we should take into account and be a little bit cautious?

The 3 big issues when you ask anybody about the U.S. is long-term care, its reduced mortality improvement, what we have seen in the past. And it's the so-called post-level term for the coinsurance business. These are all well-known problems. The first is not a big thing for us. It's a huge thing for the U.S. insurance industry. Long-term care is a multibillion, double-digit billion dollar problem for the industry. For us, our reserves are about USD 310 million. Statutory reserves and our IFRS reserves are nearly the same. I guess it's $295 million. So we don't have a big difference between IFRS and statutory reserves. We have not included an awful lot of rate increases, which are possible if the regulator accepts that. And we have used a relatively modest discount rate of 4.25%, what we are currently making for this portfolio. So the allocated assets provide this return.

We have other hybrid products, long-term care plus mortality, which has not the same problems as the old traditional long-term care product. The old long-term care product only paid in case of long-term care. The new one pays either in case of death or in case of long-term care. Then the -- in case it has to pay out with the long-term care claim, then the mortality cover is significantly reduced. So this hedges basically itself.

The mortality improvements are lower than originally expected. That's correct. Part of that has been corrected with the -- for the old block with the rate increases. Most of our organic business or nearly all of it is YRT with favorable rate increase language. Don't bet Hannover RE really plans to do that. But we get a lot of comfort out of it that in theory, it's possible. And it will not have the same effect as it has now with the all like increase we have been forced to do. The organic business has individual language and the treaties so that we can increase rights if necessary. Currently, this is definitely not the case. The organic business is profitable, even slightly more profitable than expected.

Another point is we have shifted more to a financial solutions business, my main topic for today I would like to talk about. And we have also supported this by some changes -- structural changes in the U.S. We have merged the FS and the MS team in the U.S.. And it's now headed by the same person. Reason is we are much more happy with the financial solutions business right now and believe this is more profitable. And we don't want to have any pressure on the people to write mortality solutions, especially whole of life business, which could run 50, 60 years. And where we seem to be much more conservative than some of our peers.

The next slide just gives you an idea who is active in the market. I would still call RGA and SCOR as the 2 top leading reinsurers, followed by Swiss Re, Munich and Hannover. And just last year, Canada Life with some really, really big group deals got to #1. These things can always happen. I doubt that this is really -- I don't know anything about the deal Canada Life did there. But I would suspect that it's something where they still have to book it as fully premium. But it's probably a financial solution still as well. I can't believe that anybody really wanted to get rid of all the business. There must be other reasons. And knowing Canada Life, they are our main competitor in the financial solutions area.

As I said earlier, despite the growth in China and Asia in general and also some other markets in Australia, I still believe that the U.S. will contribute a substantial part of the life and health profit in the next five years, hopefully growing.

This is a slide you have seen many times. It shows our Hannover Re new business volume. And the -- what you can't see because this basically ended 2005 or '06, cession rates went down from more than 60%, nearly 70% in the early 2000s down to 35%, meanwhile around 30%. So this is mortality solutions business. The organic business, as I said, is pretty stable, developing returns slightly above our expectations. So we were happy with that.

And the small downturn in 2018 is not so much a result of the Security Life of Denver rate increases. It's more a result of our cautious underwriting in terms of outages. So we have much less permanent business than our competitors. So we are happy with term 10, term 20, even term 30. But whole of life business, we seem to be pretty uncompetitive. And this is on purpose.

And it's also our focus on the financial solutions side because we believe the client should only pay for what he really needs and not just for a quota share. There are 2 ways you can solve all financial problems in an insurer's balance sheet. One is you go to your shareholder, ask for a couple of billions of equity, new share capital and hopefully no or small return. And if you get it, then you don't need reinsurance at all.

The other solution is. And I've seen that recently in the last couple of years in the U.K., a lot of companies offered 100% reinsurance. So all the business they write, they tell the reinsurer, "We do the underwriting, we do the clients management, you take the risk." We don't do that. And we have seen that in the U.S. as well. Cession rates of 60%, 70% in the early 2000s definitely led to pretty bad results for the reinsurer. So if reinsurers are willing to accept 100% quota shares on razor-thin margins, then Hannover Re is not in that business. In the U.K., this is happening in the last couple of years. The U.S. became much better mid-2000s, 2005, '06, '07 when it got much better. Meanwhile, the trend goes in the other direction again because the rates the reinsurers offer seem to be pretty good.

So we think it's much better to do financial solutions and only offer -- and we have seen something similar what Silke explained today. We only offer to solve the problem the client has and not use the big gun to like 100% quota share, which can solve everything. But it has to be much more expensive. And it's not worth paying that.

So we analyzed a little bit the capital funding costs. And you might have seen this slide earlier in a totally different environment. It's the Maslow's pyramid of needs. So the original one has all the physiological needs; at the bottom, safety needs, love and belonging; and esteem and self-actualization at the top. But you can also use it for reinsurance as, say, the minimum level is equity-level financing. There is some legal requirements from the regulator what you have to have. Then there is redundant reserve financing. This was once applied to Triple-X, you know that. Then surplus relief. That means you want to show profits. The equivalent is love and belonging. You want to be loved for showing your profits probably by your shareholders. Then surplus relief is probably esteem and self-actualization. That means you boost the ego of the CEO.

So this is how we sell it usually. And companies really need that now because they have done everything they could in reducing expenses, I mean, (that many) expenses. The only thing they can do now is reduce capital costs and costs for redundant reserves.

There are many ways to do that. You can start with securitization or you ask for equity, hybrid capital, debt. All these things are theoretically possible, usually much more difficult than reinsurance. Reinsurance can specify the risk, exactly what you want to transfer, not everything, usually not much costs involved in reinsurance other than the price you have to pay for that. But there are no transactional costs of any reasonable size. We can implement that pretty fast. We have done these things within a week or 2 in some cases. In some very complicated cases where others failed twice, we did it within two months and helped the client to -- and this was again a CEO who promised to release capital. And he promised back to his shareholders and then was desperately looking for something to achieve that. And these are some of our most profitable businesses where we can come in, help the client and do that usually before the end of the quarter.

Is there a market for that? And will there be a market for financial solution? That is the question I always get. If you look at the individual life insurance financing. And I don't want to go into all the details. But even in the years 2000, Triple-X was introduced. Traditional coinsurance was inexpensive. But it was a solution. Then 2005, captives started. 2008, the financial crisis hit. Captives became a little bit more difficult. Regulators suddenly became open to new opportunities because they realized even LOC banks can go bust. Lehman Brothers was one of them. Then in 2011, the new captive structure evolved. 2014, AG48 -- I don't want to go into the details. But it says whenever regulators change the rules, we have an opportunity. It, most cases, doesn't even matter which direction they change it because what regulators usually do as they look, how does it look for the total market, for the entire market. And you can get it right for the entire market. But you can't get it right for each and every company. There are always winners and losers when you have new regulation. Some say, oh, with our product landscape, it's perfect. Another one is disadvantaged because of that. And we help the disadvantaged people.

I don't give you any details because, as earlier mentioned, we don't want to give all our secrets away to competitors. But the same applies to the retirement market. There was the Retirement and Savings Act 2019, which will probably create new opportunities for us. You have similar things in the past where regulation changed. We have developed solutions, even including asset risk transfer. Now you might be a little bit surprised because everybody here tells you we don't like asset risk. Nobody touches asset risk other than Roland. He has to. It's his job. But on the reinsurance side, we don't do that. That's right. But there is a demand for it. And we don't want to do that. So we invested in 2 companies in -- minority investments in Bermuda. We are shareholders of Monument Re. We are shareholders of Somerset Re in Bermuda. Somerset Re is more looking towards the U.S. Monument Re is more looking towards Solvency II to the East. We are minority shareholders. We have investments between $40 million and $50 million. And these companies are doing both extremely well. And we support them for the biometrical risk. They like asset risk. They take it all and pass on the biometrical risk to us. We have done deals with these companies and consider to build that -- on that in the future.

The financial solutions business, we have written today. And this is just the in-force. The figure last year was USD 328 million. The half year for 2019, you can see here. And the gray is the runoff of the in-force. By no way I would like to indicate this business is in runoff. We will write more of that. But I refrain from giving you a 5% or a 10% or whatever increase rate here.

We have pretty ambitious goals here. And the only reason why I try to put it this way here is to show you that this is stable business. This is running off probably over 20 years. The average term of these deals is 5 to 20 years. So we don't have anything ultra-long like 40, 50 years. That doesn't exist. Nobody tries to solve the financial problems over 50 years. They might solve it over 20 years. But that's the maximum.

These numbers will even change as soon as Roland starts with IFRS 17. Then there will be a break. And it will all look different. This is still IFRS 4 until 2023. And this is just the runoff of the in-force business if we stop writing this business right now. So that was pretty encouraging for us.

Now I would also like to highlight some facts about financial solutions. The underlying risks are absolutely identical, it's mortality, it's laps, it's the standard risks. And if anything goes wrong, it would hit risk solutions much earlier than financial solutions. In some cases, we would meet 200%, 300% of mortality to see a loss under these treaties because they were not designed that way. And this is also the reason why we don't have to show that as premium all the time. Sometimes, it's just deposit accounting.

The risk profile, it's pretty stable. And we expect that this will continue basically forever because I can't see that regulators finally agree on one rule set and keep that in place forever. This will always be possible for us to write more business.

What do we do in the distant future? We have developed things like ReFlex and QUIRC and -- 2 underwriting engines we are offering. In Europe, in Americas, that is ReFlex. In Africa and Middle East, in some Asian countries, it's QUIRC. Meanwhile, ReFlex is even underwriting P&C business. Our parent company, Talanx, is using it for P&C business as well. And it's not so much about getting close to 100% underwriting cases you can do with these systems. It's more about analyzing application, changes in distribution and a seamless end-to-end process, which allows you to distribute costs efficiently.

The other thing we are doing is we are supporting a lot of InsurTechs, not necessarily by investing in them. Most of them don't even like us to invest in them. But we are cooperating with them. We have exclusive arrangements. The biggest success. And this is from the NMG survey, the nominations they got from the industry who are the most important ones. Ladder Life is one of our clients. They write their business on a different paper. They have a life insurance company, Fidelity Security Life, offering their paper. But they do the distribution. They are probably currently the most successful life insurance online distribution in the U.S. All the blue ones, we have closed cooperations. We have a small investment in Sureify. And I guess this is the only thing on this list. LexisNexis might be something which should be mentioned. It's predictive modeler. They're using nonmedical data, credit and public records. And we have validated their modeling, use it for underwriting together with ReFlex.

These are not necessarily our cooperation partners. We partner with them but for the benefit of our clients. It's not -- otherwise, we would private equity investors and think, "Okay, we should invest and sell it in five years." Our partnership, our time horizon is much longer. Basically, we don't want to stop at any point in time. And this means we have a lot of cooperation partners. But not necessarily huge investments. The investments, I mentioned earlier, are in reinsurance companies. They will be around for a longer period. But we don't want to be bothered by these investment rounds with these companies.

And this is a quote from the CEO, from the founder of Ladder Life, Jamie Hale, who did an extensive search in the market and finally decided to go with Hannover Re, basically for 2 reasons. One was the quality of the IT we provided. And they are the IT experts theoretically, not us. And the second thing they liked about us was we didn't want to invest in them. We didn't want to have a share of their cake. We just wanted to cooperate with them.

So coming to an end, the key takeaways today should be, my guess is, my conviction is Security Life of Denver, we have resolved the legacy issues now despite the fact that arbitrations might take 2 or three years. This should have a significant positive effect on our future life and health EBIT. Financial solutions should continue basically forever. We have minimal exposure to any risks we don't like, like asset risks. If this is required, then we place it with somebody else. We have strong runoff earnings from the existing block of business. And we are working on an awful lot of new deals right now. And the InsurTechs probably will play a role in years -- not 1 to 5 but maybe 6 to 10 in the future. But we have to prepare for that already today. And we are hopefully an innovative partner to them, helping them to get the contact in the industry. And we also help our clients to get a better understanding of what's possible with the InsurTechs currently around.

Thanks. And I'm happy to answer questions.

+++qanda

A - Karl Steinle {BIO 1986424 <GO>}

Well thank you, Klaus, for your presentation. I guess there are some questions. Are there? We start with Andrew. Then...

Q - Andrew James Ritchie {BIO 18731996 <GO>}

Just a very quick clarification. I think, originally, you had expected $100 million of recapture impact in 2019. Or was it $50 million to $100 million? Is that a change of guidance then today on that? And I think the run rate life EBIT was EUR 400 million to EUR 500 million or something on a clean basis. Is that still how we should think about it?

A - Klaus Wilhelm Miller {BIO 16886879 <GO>}

Yes. That is still the expectation.

Q - Andrew James Ritchie {BIO 18731996 <GO>}

Then the recapture effect is less now for '19 than expected minus the arbitration, I guess.

A - Klaus Wilhelm Miller {BIO 16886879 <GO>}

I don't think that -- all the numbers I remember are $45-ish million, $50 million. The guidance for 2019, I guess, was offset by -- or at least at that time was EUR 400 million plus. And we still stick to that. And it should be well above.

Q - Andrew James Ritchie {BIO 18731996 <GO>}

Including the $45 million?

A - Klaus Wilhelm Miller {BIO 16886879 <GO>}

Including $45 million, yes.

A - Karl Steinle {BIO 1986424 <GO>}

Okay, Vinit?

Q - Vinit Malhotra {BIO 16184491 <GO>}

It's Vinit, Mediobanca. So just on the Project Reboot Plus, the one -- the handful of arbitrations in terms of number of clients. But is that a bigger number in terms of actual potential problem? Because the arbitration could go against you. And then you'll be stuck with the treaties for...

A - Klaus Wilhelm Miller {BIO 16886879 <GO>}

Forever. So natural runoff.

Q - Vinit Malhotra {BIO 16184491 <GO>}

Yes. So is that also a minor millions -- euro million problem? Or is it just the fact that -- because it could be one big client or 5 big clients, I don't know.

A - Klaus Wilhelm Miller {BIO 16886879 <GO>}

No. It's definitely 5 big clients. I can assure you that nobody with $500,000 premium treaty will go into arbitration and paying 5 to whatever million just for the arbitrators. It's larger companies. Theoretically, yes, you can always lose an arbitration. I tried to make it clear that I don't expect that because these are YRT treaties. It means yearly renewable terms, you can change the rates. If you can't change the rates, then somebody has to set up reserves. Guaranteed rates require Triple-X reserves. Nobody did these to set up these things, neither the reinsurer, not -- so that means you can increase rates.

I admit that in arbitration, you never know what happens. But if we lose one of them, it will be a high number over the next 30, 40 years. The average age is around 50. You know that we have increased rates for people above 80. So the -- it all depends on the portfolio. And it's a couple of different companies. Some of them might even recapture part of the business and only use -- runoff the rest with us. But I don't expect anything from that. If we lose 5 arbitrations, yes, then it will be a bigger number.

A - Karl Steinle {BIO 1986424 <GO>}

Okay. We have another question from Roland PfÃ¤nder. And then we continue with Vikram.

Q - Roland PfÃ¤nder

And so what would be the premium volume you expect from these InsurTechs next years, maybe life. Possibly also if you have the number for P&C. And maybe I'm not quite getting the point why these InsurTechs would really partner with Hannover Re. What do you provide them besides maybe underwriting know-how, IT technology? What is your USP to attract them in the end?

A - Klaus Wilhelm Miller {BIO 16886879 <GO>}

First of all, all these InsurTechs are not insurance companies. Very few are. There might be 1 or 2. And Ladder is currently maybe thinking about getting their own license at some point in time. But the numbers are not big for the time being. And they will not be very big in the next 3, 4, five years. What you see in Europe is that larger companies, suddenly insurance companies get interested in these InsurTechs and start buying them. So they don't see them as a competitor but try to buy something what they don't have themselves. What these InsurTechs get from us is the contact to insurance companies. They want to sell their services, whatever it is, customer relationship, the greatest app in the world, the vitality stuff or whatever it is. Vitalities, for instance, it's an example where there is a life insurance company. The interest they have is that they need the contact. If you're great in developing an app and think this is the best thing in the world and every insurance company should use it, you still have to market it. How do you do that if you have absolutely no contact? This was one of the reasons. And I guess Jean-Jacques mentioned briefly, Hannover Re equarium, this platform, the -- in Apple terms, this is the App Store for InsurTechs where you can get access to. It's a platform we have built and where our clients -- I guess, Claude, we have 800 clients right now on the platform?

A - Claude Jacques ChÃ¨vre {BIO 21916781 <GO>}

Right now we're around 800 clients and 100 InsurTechs.

A - Klaus Wilhelm Miller {BIO 16886879 <GO>}

And above 100 InsurTechs who offer their services, present themselves on this platform. And the insurance companies can get direct access to them. We don't charge anything for that. But we make it exclusive to our clients. And they get this contact out of it. The main problem for us is -- and this is the reason why we don't want to be an investor. We do it in the rare case. But we don't want to be an investor because the InsurTechs have a different time horizon than we have. If we go into something, this is forever. Claude did not present the exit strategy for Asia. If we go to Asia, this is basically forever. If we write business with the help of an app, then we have this business for 20, 30, 40, 50 years. The InsurTech might want to sell -- or the founder of the InsurTech might want to sell in five years from now, be rich and retire somewhere on a nice island. But this is where we can get this -- where we think the cooperation model works better and where we can be the matchmaker between the insurance industry and the InsurTech. They don't work for us. They work for our clients.

A - Karl Steinle {BIO 1986424 <GO>}

Okay. And Vikram?

Q - Vikram Gandhi {BIO 18019785 <GO>}

Yes. Vikram, Soc Gen. Klaus, sorry, I'm being a bit slow on the point about arbitration. Just trying to get my head around it. So what you're saying is if the handful of cases hadn't gone into arbitration and assuming the clients would have preferred a recapture, you would have had that $45 million or thereabouts loss booked because of the recapture. Now since they are into arbitration, you are -- it's business as usual. And you're booking the losses on those treaties. And at the end of the arbitration, like you say, there is a high likelihood that you, as Hannover Re, you will win. If the client recaptures then because you won, it is retroactive, which means it is then that you would have to book the losses. But you've already booked the losses in the interim period. So it's a wash. So basically, it's not incremental loss because of the recapture then because you've already booked...

A - Klaus Wilhelm Miller {BIO 16886879 <GO>}

Yes.

Q - Vikram Gandhi {BIO 18019785 <GO>}

And when you win, there are again 2 options, i.e., the client recaptures or it agrees to pay at the high prices.

A - Klaus Wilhelm Miller {BIO 16886879 <GO>}

Yes.

Q - Vikram Gandhi {BIO 18019785 <GO>}

Right. So what happens if the client agrees to pay higher prices, saying, okay, we've lost it. But we don't want to recapture if it will be at high prices? So again...

A - Klaus Wilhelm Miller {BIO 16886879 <GO>}

Then they have to pay the higher prices retroactively as well. So just to make it clear, the recapture losses come from the purchase GAAP accounting 10 years ago. We had a better or, let's say, a more positive view on this business 10 years ago. And that's led to some negative reserves. And now if the business is recaptured, then we have these to fill up these negative reserves. This has nothing to do with any payments to the client. It's just to get our books straight.

This is -- and this might be the -- so I'm just going back to Andrew's question, the $100 million. There is a $45 million from one recapture we expected happening in Q3, we now expect to happen in Q4. If it doesn't happen in Q4, it will go into arbitration. And there is another $45 million, $50 million for the others in arbitration, which will happen the next two years. These are the numbers that they all recapture. But the losses we see in the next two years will be probably of the same order of magnitude. Will the price increases would be of the same order of magnitude, with a different sign-off, obviously. So then we are totally indifferent, whether it's recaptured or the higher prices are paid. We will slowly show the losses from the purchase GAAP time over the next two years anyhow. But the order of -- not these losses. But the order of these losses will be -- flow through our P&L.

A - Karl Steinle {BIO 1986424 <GO>}

Okay. Then we have another question from Jim Shuck.

Q - James Austin Shuck {BIO 3680082 <GO>}

Just interested in how you think about the growth on the P&C re side versus life and health re. Your diversification credit is 33% at the group level, which is a bit low relative to peers. So are you looking to actively grow life and health re faster in order to maximize diversification benefit at the group level?

A - Klaus Wilhelm Miller {BIO 16886879 <GO>}

I don't think that we have a real strategy to grow faster. We try to write all the good business we can. In the past, when life was pretty small, there was always capital available to do that. If we need more capital, then we have to compete for this capital internally. If there is a hard market, then life might have a tough time to get the capital because we decide it's better to do that -- to invest the money on the P&C side. If there is a soft market, we might get more capital. The problem is, of course, that once life has the capital, you can't get it back. Silke could reduce on the P&C side the exposure next year, not this year because she has signed the treaties. But next year, she can do -- Roland is even faster. He could switch assets, not from one day to the next but within a couple of weeks. He could go either into the stock market or out of it and change capital requirements on the life side. It's a little bit harder. What we have, we have for a longer period.

We try to grow and even find capital elsewhere. Honestly, I believe we are not here only to take risks. What we can do best is assess and manage risks. I'm very happy to share risks and get an overwriter from, let's say, friendly competitors. And the top 5 you have seen on my list are not among them. They're nice people. Personally, I have very good friends. But we would not share business. In the old days where Munich and Swiss and Hannover had an awful lot of reciprocal business, these are all over. But there are some good companies who are interested in investing in reinsurance. And we are quite good in assessing and managing risks. We don't have to find all the capital ourselves for that. But we can make an extra dollar on business we are just organizing for somebody else. And of course, take our own share of 20%, 30%, 40%, 50%.

A - Karl Steinle {BIO 1986424 <GO>}

Okay. Okay. Any further questions? This does not seem to be the case. So thank you very much, Klaus.

A - Klaus Wilhelm Miller {BIO 16886879 <GO>}

So I'd like to add, my best intention is to be short. But...

A - Karl Steinle {BIO 1986424 <GO>}

Without further ado, Jean-Jacques will now summarize the day and take another brief look forward. But as always, the emphasis is on brief. So that will be -- we are not providing any new guidance at this stage. So you have to wait for the Q3 conference call for the guidance for 2020. After this, I'd like to invite you to join us outside of this room for snacks and drinks. And in doing so, I certainly like to thank you on behalf of the management but also on behalf of the Investor Relations team for being here today and showing your participation and with a lot of good questions. So that was really gratifying. And on that note, I hand over to you.

A - Jean-Jacques Henchoz {BIO 17457677 <GO>}

Thank you, Karl. And I got the message on Brevity. And I'll comply. I think it's time now for the last drinks. But I think we had an informative day. I hope it matched your expectations for today. We try to really focus on our value creation. And I had the title -- the outperformance journey, being very cognizant of the 10 years of outperformance and focusing as a team on outperformance in the next decade.

We have an optimistic outlook. We see a lot of opportunities. And we feel we're very well positioned in the market. I stress the business model continuity. Doesn't mean that we can fine-tune a few elements of what we do. But this Hannover Re way, the lean model, the underwriting culture are key to success. And I think we'll build on what we do in the coming years.

And I highlighted a few success factors, a few elements where we're working in different teams to look at ways to broaden a bit our scope. I mentioned CRM. I mentioned digital. We had a presentation on Asia. So a number of topics which are more an acceleration of what we initiated already. In P&C, we had a focus on advanced solution or structured solution, which was a timely opportunity for Silke to give you the -- an update and concrete examples on what we do. This, with an underwriting focus, with an underwriting discipline and with a keen focus on profitable growth. Bottom line goes above everything. But where we see traction, we see continuous growth also on the top line side.

Life and health. Again, a focus also on structured solutions or financial solutions, which will go forever, I heard, which I liked. We're building on the resolution of our challenges in the

U.S., which are well on track and strong active management of the in-force to support profitable growth in the future. Roland gave a very good overview on our investment management. Obviously, the challenges of the interest rates are what they are. I think we believe they are manageable. We have growth of the income as well in some alternatives, not many. But I think private equity and real estate were really success stories. And emerging markets is another angle for us to support investment income. And on the asset, an overview on our risk management with a focus on capitalization, solvency, reserving. But also some key issues and challenges for the industry. The climate change was mentioned and the link with nat cat. We work very diligently on this. And cyber, of course, is an ongoing opportunity but also a challenge in terms of accumulation management and growth.

So I hope we gave you a rounded picture. It's obviously not the time where we really issue the new strategy. But in the new year, very clearly, we will do so as soon as we've gone through the discussions in the Executive Board. So thank you very much once again for your active participation. Thank you for the challenges and questions. This was very useful for us. And I hope you have a bit of time just after this. So I formally close the Investors Day and thank everyone also on the phone, on the video conference. Thank you very much.