Schroders

Annual Results 2017

Results presentation transcript

Thursday 1 March

Peter Harrison, Group Chief Executive

Good morning, everybody and welcome to the Schroders 2017 full-year results. Thank you for making the effort through blizzards on the first day of spring. We've got quite a few people online, so if we could be disciplined with microphones later on that would be very helpful.

We're going to do the normal running order this morning. I'm going to take you through the high-level numbers. Richard Keers, our Finance Director, will then take you through the detail and I'll come back and talk about the outlook and one or two strategy points.

But overall, we feel these are a strong set of results. We've delivered 15% increase in net income to £2.06 billion.

Strong cost control has meant that our cost to income ratio has fallen from 64% to 61% and that led to a 24% increase in net profit after exceptional items to £800.3 million.

Assets under management hit a new high at £447 billion when you include assets under administration.

Our net new business was £9.6 billion for the full year.

We declared a full-year dividend of £0.113 which is up 22% on the previous year.

What I would like to do now is just quickly go through the flow numbers in a bit more detail because I know that's important to you.

Overall, £9.6 billion of new business and one of the features of these results is that it is spread pretty broadly across all areas of the firm. So Institutional saw inflows of £4.2 billion, Intermediary of £3.4 billion and Wealth Management made an important contribution of £2 billion of net new business.

One of the things we talked about at the interim stage was a very large outflow in sub-advisory and we said we were going to give you more detail on the sub-advisory element of our business. So if I could just now split out those sub-advisory flows.

You can see that £5.8 billion outflow in the US, which occurred in the first half, for the full year we actually had outflows from sub-advisory of £4.2 billion which meant that the branded flows were rather higher than shown on the previous page. Branded flows were actually £7.6 billion which was the highest level we've had since 2009.
I think big mandate losses will always be a feature and internalisation is definitely a theme in the marketplace. But the resilience of the business with Intermediary, Institutional and Wealth Management all contributing was an important part of the performance.

If we just now look at flows by asset class, again, the same pattern emerges. Equities saw a small inflow, Fixed Income saw inflows, Multi-Asset saw inflows and Private Assets, which we've broken out to a separate segment, also saw inflows.

If I just look at those splits for you between Institutional and Intermediary which you may find of help, Equities was a small inflow of £0.1 billion, actually masked £3.1 billion flowing into Intermediary and £3 billion out of Institutional which a large chunk of that relates to our quantitative equities group which saw £2.7 billion out, particularly in Australia where the market dynamics are certainly changing. But we saw good inflows, particularly in global equities and in European equities.

Fixed Income with a flow of £3.5 billion was split £0.7 billion into Institutional and £2.8 billion into Intermediary. Really there, all areas of our Fixed Income business contributed, particularly the credit areas and emerging debt, but a good contribution there.

In the Multi-Asset area, £1.5 billion of flows. There £4.6 billion of Institutional flows and £3.1 billion out of Intermediary which is that big mandate we talked about earlier. So they're important inflows, particularly China, in risk mitigation and in total return mandates.

Finally, Private Assets which was £1.9 billion of flows into Institutional mandates and £0.6 billion into Intermediary. But you can see a number of areas of the firm contributing.

If I just now look at that by region to give you a flavour of that, the UK saw £3.1 billion of flows split £1.2 billion Institutional and £1.9 million Intermediary, which is a good performance from the UK.

Europe had another strong year of £4.3 billion of inflows. £0.4 billion out of Institutional, but £4.7 billion into Intermediary and really good performances - Germany, France, Spain, Italy, really across the piece. We did see an outflow of note in Switzerland, an outflow of note in Benelux, but broad performance across Europe as a whole.

Asia was somewhat more muted than normal, £0.9 billion of inflows of which £0.8 billion were in Institutional.

Pleasing for me was that Japan and China, which are strategically very important to us, saw cumulative inflows of 3.3 billion. But these Australian dynamics saw outflows of 3.7, so there is quite a big barbell within Asia between developing Asia and more mature markets.

Then finally Americas which saw £0.7 billion out, £2.6 billion for Institutional but £3.3 billion out of Intermediary and again, that refers to that mandate.

The underlying dynamic there I think was very pleasing because if you have a £5.8 billion mandate out at the beginning of the year, actually to end up £0.7 billion down was pleasing. Hartford has delivered well, our retail Intermediary partnership, but also the Institutional business delivered well. So we were pleased with progress that we're making in the US.

That's a snapshot on flows. I will be back to talk a bit later. What I'm going to do now is hand over to Richard to take you through the detail of the financials.

Richard Keers, Chief Financial Officer

Thank you, Peter and good morning, everyone. As you just heard, 2017 has been a strong year for Schroders. Peter has covered growth and longer-term strategy. I will now explain how this translates into the 24% increase in profits that we have reported today and in headlines how I see this unfolding in 2018.

So let's begin with how the results break down and where the growth has come from.

Net income increased by £276 million, or 15% to £2.1 billion driven by the growth in our AUMA which closed this year up 13% at £447 billion and also as a result of good performance fees.

We have a total comp ratio of 43%. That's one percentage point down due to changes to our compensation policy for material risk takers. The effect is to reduce the accounting charge in 2017 and I will explain how you should think about this in a moment.

Our total cost ratio has reduced to 61%. That's 1 percentage point down due to comp costs and a further 2 percentage points down due to other costs. These other costs are in line with the guidance I gave you allowing for acquisitions.

So, as you can see, this is strong revenue growth driven by AUM and performance fees combined with good cost discipline that has driven the 24% growth in profits to £800.3 million before tax and exceptional items.

We have a full-year tax rate of 21.4% which is higher than the 20.5% we had last year. The increase is mainly due to the reduction in the expected benefit of our US deferred tax asset. This is a one-off adjustment and comes from the US government's decision to lower the corporation tax rate from 2018. It means our deferred tax asset is worth less and we have taken a charge now. However, we will see the benefit of a lower US tax rate in the future.

Our forecast is for a lower headline rate in 2018, possibly between 20% and 20.5%. But as you know, this does depend on the mix of profits between the various tax jurisdictions.

The tax charge for 2017 of £172 million takes profit after tax but before exceptionals to £629 million. With exceptional items of £34 million, which mainly relates to the amortisation of intangibles, that brings us to profit after tax of £594 million, an increase of 21%.

Right, let's start by looking at what has driven the increase in net income. As I have already mentioned, AUMA was up 13%, but the driver of most of our net income is average AUM and that was up a little more at 19%. That is driven by the impact of four things - acquisitions, investment returns, FX and net new business. So let's see how each of these four factors has affected income, starting with acquisitions.

These increased our average AUM by £10 billion. That's the acquisitions this year and a full-year impact of the 2016 acquisitions which together increased net operating revenue by £57 million.

The next two factors, investment returns and FX, increased average AUM by £53 billion, increasing operating revenues by £193 million.

Looking at the two components, investment returns have brought strong growth with related increases in revenues being only partly offset by changes to fee structures. The net effect is higher revenues of £125 million.

This year, on average, sterling has been weak compared with the whole of 2016 and as a result, we saw an increase in our revenues of around £68 million.

Finally, we generated £9.6 billion of net new business in 2017. The revenue from this and the full year effect of 2016 flows has increased this year's revenues by £10 million. As you've just heard me say, for new business, we focus on annualised revenues and the flows this year have generated £63 million of annualised revenue, of which £24 million is in these numbers. That's a little higher than the revenue number I just quoted which is because the impact of 2016 flows has partly offset the growth in this year's revenue.

In 2017 we also generated strong alpha performance resulting in performance fees of £78 million, an increase of £37 million on 2016. As you know, performance fees are difficult to predict, but at this early stage of the year we are budgeting £40 million for 2018.

Bringing this all-together means a £297 million increase in net operating revenue. That's 17% up.

Lastly, other income decreased by £21 million. This is due to one-off gains in 2016 partly offset by £6 million of income from assets under administration. The overall outcome is a 15% increase in net income to £2.1 billion.

Let's now look at this by segment and channel starting with Institutional. Net operating revenues were up £122 million to £814 million with closing AUM at £256 billion, up 13%.

£30 million of the revenue increase is due to performance fees which were £58 million. The remainder was driven by higher average AUM which was up £37 billion with revenues up £91 million, or 14%.

Net operating revenue margins, excluding performance fees, were down a little from 32 basis points to 31.5 basis points. That's a bit better than the guidance I gave you and let me explain what has happened.

We are seeing continued Institutional demand for lower margin Fixed Income and Multi-Asset products. Although these flows were at lower margins, they still generated £12 million of annualised revenue growth of which around £2 million is included in these results, so that's good for revenues.

They have, however, pulled down our revenue margins a little. The decline has been partly offset by the acquisition of Adveq which has added £6 billion to our AUM at the end of July and as you would expect of a private equity business, it is at a higher revenue margin.

So there are a number of factors impacting margins, but at this stage we still see less than a basis point decline in 2018, so still around 31 basis points. As always, this will be highly dependent on markets.

Now let's turn to Intermediary. Net operating revenues were up 17% to £929 million with AUM of £134 billion at the year-end which is up 12%. The increase in revenue was mainly driven by an £18 billion rise in average AUM with revenues up £124 million, or 16%.

We also earned £20 million in performance fees in 2017 which is a year-on-year increase of £8 million.

As we have heard from Peter, we had net new business of £3.4 billion with demand for high margin products. What is important for us is that those net sales have increased our annualised revenue by around £44 million. Of this, about £19 million is included in the 2017 revenues with the rest coming through in 2018. So unlike Institutional, net new business has increased our margins and importantly it is bringing strong annualised revenues which is a key focus for us.

To help with your modelling let's look at net operating revenue margins which were 72 basis points for the year excluding performance fees. That's a 1 basis point decline over the year and is 2 basis points better than I expected at the half year.

The reason is that higher margin net new business combined with strong equity markets pushed up the higher margin business as a proportion of AUM. The effect was to offset the declines that I set out a year ago. Despite margins holding up this year, we still see longer terms pricing pressures and as a result, our margins may fall a little in 2018 by perhaps a bit. But again, this will depend on how our business mix changes from net sales and markets.

Moving to Wealth Management. Net operating revenues were up 20% to £267 million. That was mainly driven by a £42 million increase in management fees which were up 26% to £204 million.

Benchmark capital contributed £10 million to that increase and you can see on the slide other income was also up a little.

Revenues margins, excluding performance fees, were 61 basis points. That's down 4 basis points consistent with the guidance I gave you and is due to benchmark.

Annualised revenues are also a key focus here. The Wealth Management business has generated around £7 million on £2 billion of net sales with around £3 million included in these results.

For your models, we expect margins to be around the same level in 2018, but here the business mix, the level of transactional fees and interest income will all have an effect. At this stage, we see no reason for you to change the revenue margins for your models.

With that I am concluding my comments on revenue. The rest of my presentation is focused on operating costs and Group capital and I will start with operating costs.

As you know, comp costs are the biggest component of our cost base and make up around 70% of our costs. This year we have made changes to our remuneration structure for employees who are deemed to be material risk takers under new regulatory requirements. This required us to increase the proportion of their pay that is deferred. The increase in amounts deferred this year has reduced our total comp ratio by 1 percentage point. This is an accounting benefit and it will disappear over two years as we build up performance years with greater deferral.

The outcome is a total compensation ratio of 43%. We are expecting this to increase to around 43.5% in 2018 as this accounting benefit unwinds.

Non-comp costs have increased by £31 million in 2017 to £387 million. That's slightly higher than guidance due to Adveq operating costs.

Managing a successful balance of controlling costs whilst investing in growth opportunities is vital for our long-term success. As a result, we have been able to reduce our total cost ratio by 3 percentage points to 61% in 2017.

As you've heard from me before, our focus is on investing for future growth in technology, in accommodation, in our people and in selective acquisitions. In 2018, we will see some important changes being realised with further investment for the future. This will be reflected in some growth in our cost base and it is worth taking a moment to give you some more colour to help you understand this, starting with acquisitions.

We will see an increase of around £10 million as the full-year impact of the transactions we completed in 2017 comes through. Both Peter and I have previously talked about the investments we're making in technology and key to our long-term success is our new front office investment platform which will go live later this year.

This is an exciting time for Schroders and we expect to see longer term benefits both to the way we operate and to our overall cost base. For now, in 2018, we are anticipating increased technology costs of around £25 million, including dual running costs until legacy systems are decommissioned.

As you know, the Group has grown significantly in recent years. Profits have more than doubled in the last five years from £360 million in 2012 to over £800 million this year. This growth is underpinned by our people and headcount has increased by around 50% over the same period.

With more people comes a need for more space. In 2017, we moved into new offices in New York, aligned with our growth strategy. In 2018, we will be moving into our new headquarters in London, along with changes in other locations around the world. As a result, costs are going up by around £20 million. But this just reflects the growth we have seen and expect to see going forward.

Similarly, other costs such as marketing, VAT, and people-related costs are moving in line with our increased operational scale.

Finally, as we all know, regulatory demands continue to be significant. This includes paying for research, but this will not be material.

Bringing this all together, we expect to see non-comp costs to be £450 million in 2018.

Finally, we're reporting £35 million of exceptional operating expenses. These are primarily acquisition-related costs and they include the amortisation of acquired intangibles. We're budgeting around £30 million of exceptional items in 2018.

Now let's turn to the last section on capital. We continued to maintain a strong capital position, but equally, we remain focused on making our capital work harder to support our future growth. Total capital increased by £318 million to £3.5 billion at year-end.

You can see on the slide the two views of our capital that I took you through at the half year. I will now take you through the more significant movements.

Other items increased by £0.3 billion to £1.1 billion. The increase is mainly driven by the growth in our pension scheme surplus and due to acquisitions.

Looking at our pension surplus first, we've seen this grow from £67 million five years ago to £163 million at the end of 2017. That's driven by the outperformance of our asset portfolio relative to changes in the value of liabilities. As you know, we manage these assets.

During that same five-year period we've seen investment returns of £457 million on opening assets of £777 million despite also investing in LDI assets to derisk the portfolio. At the same time, we have paid benefits of £242 million.

The other reason that other items has grown is due to acquisitions which increased goodwill and other intangibles by £230 million. It's the combination of acquisitions, increases to our seed and co-investment and strategic spend on our property estate and technology assets that has reduced our liquid investment capital which you can see on the right-hand side of the slide.

As you would expect, our regulatory requirements have also increased as the business has grown. That means our capital surplus after deductions is £1.2 billion. That is slightly lower than the figure for 2016 and is due to the investments we have made. You can see that both our capital surplus and our liquidity are managed carefully with an eye to enabling and sustaining our growth agenda. Overall, we continue to maintain a strong position and I see this as a positive.

So, in summary, this hasn't been a bad year. Net income is up 15% to £2.1 billion. Our good cost discipline has delivered a total cost ratio of 61% and when you put these two factors together it means a profit before tax and exceptional items of just over £800 million, which represents a 24% increase.

That in turn equates to a 22% increase in basic EPS before exceptional items to 226.9 pence. Reflecting this performance, and in line with our progressive dividend policy and a payout ratio of around 50%, we've increased our final dividend by 23% to 79 pence per share which brings the total dividend for the year to 113 pence.

Thank you. That's enough from me. I will hand you back to Peter.

Peter Harrison, Group Chief Executive

Thank you, Richard. Those of you who attended our Capital Markets Day will be familiar with the seven areas of growth that we outlined which I talked about a bit at the interim stage. I just wanted to revisit our progress on that because I think to my mind, getting investment for the future right is absolutely mission critical to being able to deliver consistent growth and these seven areas of expansion and investment are really important to our future growth.

Just moving on the chart from left to right, products and solutions, we made some changes in the management team here during the year. Charles Prideaux is now leading that group.

But more importantly, we've launched our strategic capabilities. We've launched about 40 new products across a whole range of areas, particularly high alpha solution areas and multi-asset. We've completed our rebranding. We've got a lot more digital presence and I think what we're seeing from these results is a number of those new areas starting to deliver good growth. I think for me, getting the right products on the shelf is mission critical.

I also talked at the Capital Markets Day about the importance of longevity and you will have seen in the acquisitions we've made and the development of our private assets strategy that growing longevity is starting to have a real impact on our long-term growth rate. I think that's definitely something that we will return to again.

Fixed income and multi-asset remains a key part of the market. We saw £5 billion of growth in this area despite that one-off outflow.

Although in North America we saw marginal outflows, actually, the underlying progress in that business was really very strong, both on the Institutional and on the Intermediary side.

Asia Pacific for me is about how we develop some of the more peripheral markets. Malaysia, for example, was an important contributor this time, but also those big markets of Asia. China standing out and Japan where we see the changes in regulation really favouring those managers who have taken the high road and that again has contributed positively to these results.

Technology is now a terribly fashionable thing to talk about, but I do think it's transformational in an industry which is about data processing. Richard has mentioned we've made a big investment. Whether it be in cloud computing or whether it be in front office systems, whether it be in data centres, whether it be in CRM systems, but ensuring that we're match fit here is absolutely critical.

Whilst we've made a lot of progress, particularly around data insights, it will remain an area of high investment going forward because I think it's the area where we can really differentiate ourselves from the competition.

The two areas we didn't talk about in detail at the Capital Markets Day were private assets Wealth Management, so I just want to spend a moment longer on those now.

We decided this time to strip out private assets for you because it's going to be an important part of our strategy going forward. On this chart there is some more granularity of the areas that we're including in this.

The top bit of the pie are absolute return funds around emerging market debt and our open architecture GAIA fund range. Then you get into alternative forms. Sorry, more private asset forms, the first two being more alternatives whether it be securitised credit, infrastructure finance, insurance-linked securities, private equity.

What's interesting about this chart, with the exception of commodities, all these areas contributed to our growth in private assets this time.

Adveq performed well. We reported in our results £0.3 billion of net new business. Actually for the year they posted £1.1 billion, but we didn't consolidate the other £0.8 billion because it was prior to the closing of the acquisition.

We also saw some important growth in our real estate business.

I think that the weight of money flowing into these markets remains a really big opportunity for us. We've launched this year what we call our alternative salesforce which is a growing group of people who are dedicated to selling alternatives beyond our traditional salesforce and it will remain an important area of growth.

Finally, Wealth Management, and I probably put myself on the hook a little bit last time we met saying we will turn round our Wealth Management business. I think I'm pleased with these results. There is more to go. But we saw £2 billion of net inflows of which £0.9 billion was from the Benchmark business and £1.1 billion was from our traditional Schroder Cazenove Wealth Management business. Within that, the UK Wealth Management business of Cazenove performed particularly well with £1.7 billion of flows and that for me is the engine of growth.

We partnered out our Italian Wealth Management business which meant there was some flows out of that business just whilst the partnership was going through, so underlying £2 billion of inflows.

We completed the Hoare acquisition of their Wealth Management business which went well with staff retention and client retention.

The Benchmark acquisition has also performed well. We saw growth of 30% plus in their EBIT contribution and their revenue growth.

So across the piece for me, the Wealth Management businesses is really starting to fire and we've got some really important bits of the jigsaw in terms of the way the Wealth Management landscape is changing. So, again, an important part of our strategic future growth.

That was all I was going to say on slides. What I intend to do now is to do some Q&A and what we will do firstly, we will do the people in the room. There may well be some people online who have got questions in which case I would ask them to press the button and their questions will be relayed into the room. If you can say your name and organisation, that would be great.

Q&A Session

Hubert Lam - Bank of America Merrill Lynch

Good morning. Three questions. Firstly on costs. You had an exceptional year in cost to income at 61% in 2017. It obviously seems like costs are creeping up. I'm just wondering is 65% still your objective for the medium term for cost to income?

My second question is on M&A opportunities. You had that colourful slide, slide 17, which show your diversification across the alternative platform. I'm just wondering where within that pie chart you think you would like to grow further in given that it feels like you're diversified already. Where do you think the greatest growth opportunity is?

Maybe around that, talk a little bit about valuation in terms of what you're seeing in terms of M&A opportunities out there.

And lastly on just recent market sentiment. Obviously markets have been a little bit more challenging year to date. I'm just wondering, in terms of your conversations with Institutional and retail clients, if there has been any big change in market feeling. Thanks.

Peter Harrison

Thank you. We are retaining a target of 65%. We are working really hard on simplification of the business and that's what a lot of this technology spend is going on. Whether or not we will end up cutting that target as we really get down into it.

I'm conscious that markets are at good levels at the moment and there is an element of fixed costs in our business. We don't let costs rise to 65% to hit the target. That's certainly the case. But we are very, very focused. This is a competitive market. Passive is growing. Ensuring that we fix the roof and making sure our costs are low is an important part of the strategy.

Richard Keers

Perhaps I could add. If we're sitting here in 10 years' time and we've seen significant growth in the business and we're delivering 35% profit margin, I think shareholders have done really well.

In the short term I would hope we're going to beat that, but in the longer term, if we're growing the business and we deliver 35% profit margins, I think we will all be very satisfied.

Peter Harrison

I think it's a really important point. Richard and I spend our time saying to people this is a revenue business. If you've got a 35% operating margin, £1 of revenue is a valuable thing and I get slightly frustrated by a commentary which is all about cost when actually, if we can grow revenues and grow longevity we're in a really good position and that's about partnerships and good client proposition.

Your second question about acquisitions, you're absolutely right in valuations are high and that's a real impediment. I think we've got to look at the intrinsic value of businesses and the fact that money is cheap and prices are high is a deterrent to doing the wrong thing. Certainly I would say again we are not looking to do transformational transactions.

You can see the way we've rifle shot individual product opportunities or regional opportunities is much, much interesting, much lower risk, much more culturally accretive and doesn't give any tail risks. So, to my mind, that strategy is very much in place.

The second part of your question was where. The private asset space is vast and that's one of the attractions of it. For me, we will look across that space. The two areas that stand out are the easy opportunity for us are incrementally adding to our real estate business - I think that makes good sense - and private debt, which is a huge space where I think there is more to do.

That's not to preclude that we won't do things in other areas, but they're the two areas. But I would put the rider on the valuations strongly.

Finally on market sentiment. I think it's a very good point that we had a ridiculous period of very low volatility last year. No more than 3% move in any one month and every month one of increase. That now has changed. I think that what has been remarkable has been the resilience of the marketplace. I think it's settled down very quickly.

I think it's fair to say we would expect to see more volatility in markets in 2018 than we saw in '17. That's not a particularly brave assumption because I don't think they can get much lower.

What we haven't seen is an underlying tone and tenure change. I think there is still a sense that the economies are in good shape, markets are functioning well and that underlying confidence hasn't been dented.

Are there any more questions?

Charles Bendit - Berenberg Bank

Hi. A couple of questions. Just in light of your comments on markets, what portion of your fixed income held by Institutional clients by nature needs to be invested be it insurance clients or pension clients and what portion do you think is susceptible to some higher aversion towards the asset class?

Second question, Lloyds Banking Group is withdrawing a sizeable Scottish Widows mandate. Is that a tender process that you're looking at, or is that a capability you don't currently have?

Peter Harrison

On the first, you're absolutely right, the fixed income market is very polarised between two groups of investors. One is those who need to hold the asset class and they're matching their liabilities - that's particularly true in the insurance space - and those who are opportunistically looking to invest in fixed income.

We were fortunate in building our Fixed Income business over the last five years. We built it in the knowledge that rates were very low. So we have got very little exposure to products which are not more total return orientated or opportunistic with the exception of a credit franchise which would be damaged by rising rates insofar as if spreads were to widen out and underlying rates would increase, then the appetite for credit will decline. It's an area where we've got very strong performance and it delivered very well.

We watch it but I think the reality there is two pressures there. One is underlying rates going up and the other one is this huge thirst for income which doesn't go away. If you were to see a bit of a back-up in rates, the income buyers will come back in. So I'm not overly concerned there and we don't have a large book of traditional sovereign mainstream index like money. I think that's a very difficult market in which to make money in.

On Standard Life, I'm afraid I'm not going to comment on individual client things. We participated in, successful with the Friends Life acquisition. But in terms of Standard Life, whether we do something or not I'm not going to drawn on I'm afraid.

Gurjit Kambo - Morgan Stanley

Hi - good morning. Just two questions. Firstly, in terms of multi-asset, I think your flagship fund has done very well last well versus some of its peers. But I know your multi-asset offering is a lot more diversified than just one fund. Just get some thoughts on where demand is coming in multi-asset.

Second, just in terms of your technology spend, how should we think about technology spend to be ahead of the pack in terms of revenue opportunities versus cost rationalisation or efficiency?

Peter Harrison

Multi-asset you're right is a very broad church. It's got things like income products in there, so multi-asset income products, which will remain good, risk mitigation products which again were particularly strong last year and DGF, growth biased DGF funds, diversified growth funds. All of those areas are performing well.

We've increased the range of products in terms of variability of risk. So from lower risk to higher risk rather than just mid-risk which are some of the areas of product development. But I think what we've seen is across the piece those areas have been important.

The area which I think for the long term where we can really differentiate is around the solutions space. What was pleasing to me this time was a reasonable portion of new business coming in in bespoke solutions for clients where they come to us with their problem and we answer it. Some of the really big regions of the world go through derisking. They're looking at it and saying how can we find something which is bespoke to us? I think in a world of mass personalisation that trend will get ever larger. So the big investment we're making in solutions is in advance of that business continuing to grow.

Technology spend, you're absolutely right, there is a cost and efficiency point and there is a revenue piece. There is also a third one which is the alpha. I think we've spent a lot on trying to ensure that our portfolio managers get good information in front of them in order to make better decisions.

So a big investment in their desktop applications, in our data insights team and building the ability to handle very large datasets on the cloud with new coding language et cetera is one part of the investment.

The other is around moving data centres, becoming more secure, but also around creating simplicity and a big chunk was a move to going agile which enables you to have many, many more smaller projects and incrementally improving.

The big windfall on costs will come, as Richard alluded to, once we've implemented a single accounting book of record and a new front office system. I think we're targeting taking down 170 applications which is a really big simplification of our estate. I think what we're looking to do is to maintain high spend to really drive home this sort of extra opportunity that we've got in terms of being on the front foot.

So, most of it is being aimed at costs and simplification. Something like robotics is all aimed at costs. But increasingly AI helping us on trading algos et cetera, on decision support, that will move more into the revenue space.

Then there is some bits of technology which aren't really technology. Rebranding, getting websites more automated so that they are much more responsive to consumer engagement there is a technology component to that. Pretty small, but that does drive revenue.

Shall we go online? No. If there are no questions online, which I'm being told there aren't. Any more for any more?

Well thank you. Thank you for making the effort to come in through the snow and thank you for your attention.

We will also be holding a Capital Markets Day probably in early October, similar to the one we held last year. We will circulate the date shortly.

[End]