ROB BAILEY: Welcome to today's AXA Investment Managers' webcast. I'm Rob Bailey. I'm Head of UK Wholesale Distribution at AXA Investment Managers. And today I'm joined by Lionel Pernias. Lionel is the Head of Buy and Maintain in London. Morning Lio. LIONEL PERNIAS: Morning Rob. ROB BAILEY: So today we're going to talk about buy and maintain strategies in general, set the foundation for what and maintain is, and perhaps go into a bit more detail about how you manage the sterling buy and maintain fund. First of all though, can you just in a nutshell give us a summary of what buy and maintain actually means? LIONEL PERNIAS: Buy and maintain is not, is definitely not buy and hold or a passive strategy. This is a credit strategy where we intend to hold every bond we buy to maturity. The fundamental objective of the strategy is to capture the beta of the asset class with less downside risk and more efficiently. So we are trying to minimise performance leakage by minimising transaction costs. A buy and maintain credit fund where we reinvest all the cashflows is trying to avoid all the pitfalls actually that you could have following an index. ROB BAILEY: So there's a lot of reasons, technical reasons which we'll go into later on, about why buy and maintain is particularly efficient in a market where the trading costs are particularly high, but let's talk a little bit about the team that you work with. Because clearly you're managing credits across a very broad spectrum, you need a lot of resource for that. LIONEL PERNIAS: That's correct. So actually we have the scale at AXA IM, we have a very large team. One of the largest buy and maintain teams in the market. And we have the local expertise, so that's a global platform of over 40 portfolio managers dedicated to long term, low turnover, fixed income strategies. So we use the best bits of our fixed income process to be able to populate the portfolio, and to maintain the portfolio over time to maximise the value of fixed income credit strategies. ROB BAILEY: So you mentioned it wasn't buy and hold, it's buy and maintain, so is there continuous ongoing review of the credits, is it specifically for this, or is this part of the general fixed income process within AXA IM? LIONEL PERNIAS: So I think the key differentiator that we have at AXA IM is the buy and maintain team is part actually of the same process that we have to manage active portfolios. So that's one unique process where we can leverage off from the long-term fundamental credit research that we have. But on top of that we leverage off the active process to populate the portfolio. So a buy and maintain portfolio is on day one very active, of course, because actually we are taking active, that's an active process to populate the portfolio at first. But then we maintain it using the relative value process that we have at AXA IM to maximise the value of the bonds we buy. So this is a very active process which is, buy and maintain is a bit misleading in its name, so I think that's important to highlight this. ROB BAILEY: Well let's talk a bit more specifically, because you mentioned part of the active process, and there's some names on here that people will be familiar with. People like Nic Trindade who's the Fund Manager of our Sterling Credit and Global Credit Short Duration Funds, Phil Roantree who manages our UK Corporate Bond Fund, Nick Hayes who manages our Global Strategic Bond Fund - they're all very active strategies - and of course Chris Iggo's on top, how do you dovetail within that team? LIONEL PERNIAS: So that's the UK team, so that's all the portfolio managers that we have to manage sterling investment grade portfolios. So you have two buy and maintain portfolio managers, myself and Fabien Collado, and we sit on the same desk, so that's part of all the interaction that we have. We communicate with each other, and we are only, I mean that's one team. But away from the names and the titles that you see on this page, I want to draw your attention to Christopher Iggo. That's basically the global CIO, he sits in London, and that's the man who is going to challenge my investment decisions and the investment decisions that we make on a day-to-day basis. So that's one team. You see some familiar faces as you just said, but we are part of a wider London-based team also. So there is the emerging market team who also sit in London, and the European high yield team. And that's very useful, helpful to make better informed investment decisions, especially when the markets are a bit more volatile. Because the EM, emerging market asset class and the high yield asset class are more risky and more volatile by nature. So we can have, make better investment decisions with

better entry points on the market for instance, or to manage downside risk better using the high yield expertise that we have in London when investment grade investment goes south for instance. ROB BAILEY: So clearly credit research is a fundamental part of the success there. Because if you're buying bonds seven or eight years to maturity you've got to monitor them throughout the next seven or eight years to make sure that your credit quality is still sufficient that you know you're going to get the full repayment of capital. Tell me about how you interact with the analysts then in the US and, obviously, there's a lot of analysts based in London and Paris, which makes life easier, but when you talk about analysts in the US or analysts in the Far East, how does that work? LIONEL PERNIAS: Of course buy and maintain is a fundamentally driven approach. So fundamentals are very important. And what we do is we buy robust names, very high quality names, which can go through the market cycle. And of course the long-term fundamental analysis is core to the process. And we have a wide team of analysts based across the globe, where we can leverage off their analysis to populate the portfolio. And actually that's away from investment grade. Again, we have other asset classes that we cover, like high yield or emerging markets, which again is helpful when we build global portfolios. The interaction with our analysts is on a day-to-day basis. So, if there is a new issue on the market for instance, we're going to have their view, plus on top we have relative value analysts to give more contextual views on the market, and that's the active team, but also the buy and maintain portfolio managers, and each of us, each portfolio manager at AXA IM covers one sector, myself included. I cover utilities and consumers. So if there is a new issue on the market, I add a contextual view, more contextual views like the concession that you have versus the secondary market levels. And I think the way we're organised helps to transmit ideas within AXA IM, and it improves the communication. And it feels like all these people that actually we talked about earlier are, we are all, it feels like we're all in the same room. ROB BAILEY: And I suppose thinking about it logically, once you actually have gone through the process of reviewing a credit, deciding it's something you want within the portfolio, how often would you expect - you don't tend to get too many nasty shocks that immediately make you doubt you're going to capital turn, presumably you're biggest concern is the deterioration of credit quality over time? LIONEL PERNIAS: So when we make investment of course, given that what I said earlier, we intend to hold every bond we buy to maturity, we invest into robust names, and when we invest that's for the long term. That's a low turnover strategy, but it doesn't mean that we hang on to our positions whatever happens. So if in the case of serious credit deterioration that our long-term analysts, long-term fundamental analysts as flagged, who are going to divest holdings. And that's something that we are going to try to divest proactively, and using our active expertise to sell the bonds at the best price possible. ROB BAILEY: We'll come back later on to what we do in the event of a downgrade, because I think that's quite interesting, just a quick summary really to have a look at the actual fund range that we have in place. You're responsible for the AXA Sterling Buy and Maintain Credit Fund, and there's some particular attractions I think to this kind of strategy within the UK market, but we also offer alternative fund ranges elsewhere as well, talk me through those. LIONEL PERNIAS: So what we have launched, I mean the first portfolio, I meanfund, open-ended fund that we launched was the UK OEIC. So it has been tailored to the UK market with its specificity. So that we have cyclicals, defensive, financials, but we have a fourth broad sector which is securitisations. And that's something which is different from other approaches that we launched at a later date. It's to broaden the investment opportunities, and to make sure that we can capture, to maximise the value of the sterling investment grade asset class. So it has been tailored to the global investment universe, but also to the euro investment grade universe. So we have three portfolios, three funds that actually we've launched. But actually we are going to launch a fourth one, the US buy and maintain credit fund, next year. So that's an approach which can be tailored to every single market. ROB BAILEY: And in reality the gem of this idea essentially was running assets for the Group. It then became very much more of a proposition that was tailored towards the institutional

market. And I guess this evolution of the pooled funds reflects the increased demand we're seeing in the wholesale and retail markets. Is that just a UK phenomenon or are we seeing that globally? LIONEL PERNIAS: So we started to launch the strategies, innovative strategies, buy and maintain credit strategies for the UK, but I mean for Continental Europe as well, to expand what we do for the Group to third parties for pension funds, but also for third party insurance companies. And it's quite attractive actually for them to invest in such strategies. So it can be tailored and bespoke as well to focus on some factors for some markets. It depends really on the objectives of the clients. But this approach, and we are seeing a lot of interest and now actually, our pooled vehicles are open to wholesalea lot of interest in the market for such strategies. ROB BAILEY: But one of the questions, and we're going to come onto this now, that we have had is around the costs of buy and maintain, and actually what are the real structural reasons for buy and maintain. So this slide here is perhaps delving a bit more in depth into it. So talk us through the three elements you've got on this slide here, starting with the construction of the buy and maintain funds. LIONEL PERNIAS: So really what you have here is basically all the flaws that you would have by investing in an index fund. Indices are poorly constructed, and I think we all know this, and by design there is performance leakage. The first pie chart shows that by construction investors would end up with unwanted concentrations. So that's something that you have on this pie chart at the region level for instance. That is a lot of local companies. For the sterling index there is a growing exposure to the UGA real estate subsector. ROB BAILEY: And historically there's been a big exposure to say the financial sector, so in many ways you're lending, by investing in an index you'd be lending to the most indebted companies or the most indebted sectors. LIONEL PERNIAS: Exactly, and that's what happens if you follow the behaviour of the index. But even, I'll talk at the region level, at subsector level, and at the name level, you might find that an index is quite concentrated after all at the name level, given that for the sterling investment grade market the top 10 issuers constitute 25% of the index. And if you follow the behaviour of the index you would end up with performance leakage due to systematic rules which actually are relatively, we can say stupid. That's what you see on the chart in the middle. You have downgrade, when you have a downgrade to high yield, that's when the name, the bonds drops out of the investment grade index. And usually that's the worst time to sell the bonds. And what you see on this chart is basically before the downgrade you would suffer from all the downside, and when downgrades happen it's not in the index anymore, and if you follow an index you would miss all the upside. And actually Barclays estimates that 25 basis points, the average annual cost over the past 30 years, of being forced to sell bonds downgraded to high yield. ROB BAILEY: So essentially you'd be selling at the same time that all the investment grade investors are forced to sell, so you're then part of the herd. And I guess your point is this is where the credit research comes in, in that just because something's been downgraded from investment grade to high yield, doesn't mean they're not money good. LIONEL PERNIAS: Exactly, so there is no quality control whatsoever if you're investing in an index. So you don't benefit from the credit selection. You don't benefit from this recovery for all the high yield bonds downgraded to high yield. If the bonds are still money good, if we think we're going to get our money back and par at maturity, why don't you still hold these bonds? So that's, to be able to retain these holdings, and add value over the long-term. And the last point actually I want to make is actually your point about costs. The corporate bond market has changed over the past 10 years since the financial crisis, and what we see is actually the liquidity, we've observed the liquidity diminishing across credit markets because of regulation. Now dealers have stepped back from making markets just in order to comply with Basel III. So there is less, and actually on this slide you see the evolution. And on the back of that we've seen the bid-offer spreads widening. So no matter how you look at it it's now more costly to trade. And sometimes it's even impossible. You can't find the bonds so you can't buy on dips, and sometimes you are stuck with your positions. So sometimes you can't even trade on the market. ROB BAILEY: So if you're running a normal actively managed bond fund, you're now coming

up against a much less liquid market where the cost of trading, I mean the round trip cost of buying and selling can be up to 1%, which if you're trading a big chunky portfolio over the course of the year is a pretty significant leakage on top of the stuff we've already spoken about. LIONEL PERNIAS: So it's much more, definitely it's much more challenging for active managers. And we talk about illiquid credits, but we are also in the lower yield environment. So it's a double whammy for active managers, because if they want to reach that alpha target you basically need more strategies or larger strategies. And some asset managers might be tempted to take more risks just to reach that alpha target. I'm not saying that actually it can't be done, but I'm saying that in these markets, and actually it's kind of structural, especially the liquidity in credit markets, it'shere to stay, in these markets it's more important to focus on the long-term. ROB BAILEY: Well let's move on then and perhaps have a look at that comparison before. Because from my experience from talking to clients I guess we're, when we're talking about buy and maintain it's a relatively poorly known concept in the broader market. And people are always comparing it to either passive funds or active funds. And on the side of costs the differences are quite stark. Explain to me where the advantages are in buy and maintain on this basis. LIONEL PERNIAS: Well I think if you look at this table you see that we have traditional approaches, which are active, passive, the alternative potentially that's buy and maintain. You have a stark contrast between the performance leakage an active manager can have, and the buy and maintain portfolio, but also in terms of direct cost. If I take the example of active, which is passive beta plus a bit of active alpha, transaction costs incurred can be between 20 and 60 basis points. That's an assumption of 20 to 60% of turnover on an annual basis. So basically an active manager every time actually he puts trades on and implemented trades he has to recoup these transaction costs. And the ongoing charge is around 39 bps on average is just actually the corporate bond peer group. ROB BAILEY: So essentially for an active fund you're talking about an overall cost leakage every year of between 60 and 100%, that sort of level on an active fund. LIONEL PERNIAS: Exactly, but of course I don't take into consideration the alpha that can be generated on top. And buy and maintain that's basically just because we only reinvest cashflows to maintain the characteristics of the portfolio, and to top up where we see value. We minimise transaction costs. So by just taking pragmatic decisions, focusing on the long-term, managing the portfolio with portfolio construction that is different from a traditional management style can add value over the long-term. ROB BAILEY: And looking at the passive funds and comparing the fund to passive, one of the things that strikes me is this point you made earlier on about the cost of forced selling when investment grade is downgraded to high yield and the costs that you incur there. So looking at that passive funds seem to have an inbuilt cost base of somewhere in the region of 35 to 40 basis points which they incur. LIONEL PERNIAS: Yes, definitely, so transaction costs of course, I mean that's part of the market, but the forced selling bit and these rules, that creates a real cost leakage. Now there is no credit selection, so of course for buy and maintain versus a passive approach we are trying to minimise downgrades to high yield. But over the long term this performance leakage is quite important, because every single basis point in this low yield environment, every basis point matters even more than before. So it's important to focus, to minimise this performance leakage over the long-term. And with what we talked about, the performance leakage we've talked about, it shows that passive investing is quite costly after all. ROB BAILEY: And it carries a higher risk because of that concentration you mentioned earlier. LIONEL PERNIAS: Exactly, so it's quite costly with performance leakage and with the fact that you could have unwanted concentration risk. So it's not the low cost option that some investors assume it is. ROB BAILEY: Let's move on and have more of an in-depth look at the Sterling Buy and Maintain Credit Fund. A couple of things here to pick out I think. First of all is the country allocation, it's a sterling fund, the risk is sterling. There's plenty of exposure to Europe and the US as well, how does that manifest itself? LIONEL PERNIAS: So what we are trying to do is to optimise the diversification of the portfolio. So we want to minimise drawdown risk. We have a top-down risk framework where we are trying to

allocate to different regions to benefit from global opportunities, and to add a bit of flexibility versus a typical index fund. So we diversify away from sterling bonds into dollars, into euros, of course fully hedged back to sterling, to diversify the portfolio, but also to pick up a bit more spread without adding risk. ROB BAILEY: And one of the questions I've been asked about is duration. I guess there's a lot of similarities in the way this fund is managed to the way we manage some of our short duration products. How does it differ in terms of duration? Are you flexing the duration, are you trying to match the benchmark, what's your philosophy on that? LIONEL PERNIAS: So that's a very good question. So there is, it's important to remind investors that that's an all-maturity approach. I talked about the fact that we want to diversify that portfolio, we want to benefit from the global opportunity set, so that's important. But we lend to companies for 20 years for instance, so that's not a short-dated approach. And if you compare that fund versus the universe, I said that we have less reliance on benchmarks, but we still have some anchor points, and duration is one of them. The average credit quality of the portfolio, the average rating is another one. ROB BAILEY: So this is rated A, the average credit quality. LIONEL PERNIAS: Exactly, so the average credit quality is single A because we want this portfolio, these funds to be solidly investment grade. So we don't buy high yield for instance at inception. We can retain holdings but we don't add high yield exposure in the portfolio over time. So that's, I mean you have here the key characteristics, and it's really to capture the yield in a conservative way as well. So it's diversified at the top down level, but also at the name level where we have a minimum of 200 names. It's also to minimise drawdown risk. ROB BAILEY: Yes, I mean your stock specific risk with 200 names is tiny compared to some of that benchmark risk you were talking about earlier on with 10%, or sorry the top 10% being 25% of the… LIONEL PERNIAS: Yes, top 10 issuers. Top 10 issuers makes 25% of the index. So you can end up with 2-3% of exposure to one single name. For us we have a maximum exposure of 50 bps. And we want to have 50 bps of exposure to one single name. Now it doesn't mean that every single name bears the same risks. So it's important that we apply global themes, investment themes within the portfolio, and to put maturity cap on more cyclical businesses. So really acknowledge the cyclicality of the names, the businesses that we lend money to. ROB BAILEY: And so if we move on to this slide here, looking at a little more depth in the construction of the portfolio. I think laddered cashflows is quite interesting. That suggests that you've got a fairly flat maturity profile on this fund. The bond selection graph, talk to me about that. LIONEL PERNIAS: So we talked about the top-down framework to mitigate market shocks. What we want is actually to mitigate really the risk of having a bubble. I mean you want this approach, a top-down framework, to have constant allocation to broad sectors over time, but with plenty of flexibility within these broad sectors to top up where we see value. So in the defensive bucket for instance we have utilities, consumers, transportation, and we top up where we see value. At the bond selection level, that's where we maximise the spread captured.One company, one issuer, for instance it could be a North American name, a company that can issue in different currencies. And we are going to pick the cheapest one on the curve without adding risk. LIONEL PERNIAS: And maybe you talked about laddering cashflows, I think that's an important point as well. We ladder cashflows to make sure that we have sufficient cashflows coming in from maturities and coupon payments to be able to top up where we see value, to refresh investment ideas within the portfolio to benefit from higher yields in a higher yield environment, rising yield environment sorry, without having to sell a bond, so without entering the punitive cost of transactions. So we have sufficient cashflow coming in every year, and that's one of the features of the portfolio structure that we have for all these portfolios, all these pooled vehicles. ROB BAILEY: So we're coming to the last few minutes. I mean this is a point you made earlier on that it's buy and maintain, it's not buy and hold. You're not sort of forced to hold on to, you don't put the bonds in a drawer and put them to one side. So that constant monitoring process comes on. What are the occasions when you will sell a bond, when do you actually say OK, this is no longer appropriate for the portfolio, what are those occasions? LIONEL PERNIAS:

So that's when our credit analyst is not comfortable with the name anymore. When actually there is concern about the liquidity of the company. And actually when there is a problem with one name there is a liquidity assessment. We do this liquidity assessment to see if actually there is sufficient cash on the balance sheet, or assets. That could be through asset disposals for instance, to be able to repay the debt to bond holders. And if actually we flag some serious credit deterioration we're going to sell the bonds. And there are other occasions where we could potentially sell holdings in the portfolio. For instance that happened with covered bonds on the back of the ECB buying covered bonds in the market, the technical support was extreme and the value of these bonds was not there anymore. So when a bond trade through swaps for instance, when there is no value in these bonds we're going to sell. So there is no holdings, legacy holdings that we have in the portfolio that could be a drag on performance over the long term, because what's important is to capture, to maximise the carry, to maximise the yield over time. So that's really an active process to manage the bonds over time, on top of just managing corporate actions or concentration risk. ROB BAILEY: I want to talk a little bit about performance, because again one of the questions I've had is around the occasions when you could expect this strategy to underperform, and I guess in the same respect the occasions when you'd expect this strategy to outperform, because clearly you're not exactly the same as a benchmark, even though you're aiming to deliver that sort of benchmark plus type return. So when is this kind of portfolio going to work, and when is it going to struggle? LIONEL PERNIAS: Through the fact that actually we are trying to mitigate risk and be more efficient over the long term, this portfolio should outperform a typical index over the long term. Of course if the markets rally hard over a short period of time, this portfolio will lag the index. ROB BAILEY: Is that because of the rally you'd expect to see in the larger stocks within the benchmark? LIONEL PERNIAS: It's because that's a cautious and conservative approach. So it means that we don't lend to cyclical companies for 30 years. We don't lend to BBB minus companies at the long end. We don't invest into hybrids. We don't invest in higher beta bonds, which are going to outperform over a short period of time. And that's something that we don't have in this portfolio, and sogiven that we don't, we're not going to chase the rally this portfolio will lag. ROB BAILEY: And looking at the performance here, the fund has delivered that performance just in excess of the benchmark over that three year time period, which I guess is what you're looking, you're not looking at a 12 month period, you're looking at a three to five year type rolling basis I assume. LIONEL PERNIAS: So as a portfolio manager we look at performance on a day-to-day basis, on a weekly basis, on a monthly basis, on a quarterly basis. It's like any active portfolios that we manage at AXA IM. But it's important to focus on the long-term performance, because that's what we aim at in the end. So the performance has been in line with expectations, and when there is a spike in volatility that's when the portfolio outperforms. For instance what happened last year with the Brexit referendum, with the election of Trump, we had a lot of volatility. At the beginning of last year we had the fear of recession in the US, and then expectations of 3 or 4% growth in the US, and markets were volatile. And this portfolio, these portfolios outperformed. ROB BAILEY: And just quickly on to the final slide here, which is the current market environment. I guess just to close give us an overview of how you see the market presently. LIONEL PERNIAS: So what we, our view is in this environment where spreads compressed quite a lot, and it has been driven by technicals, driven by, I mean fuelled by policies from central banks, we are seeing on this graph on the left that actually there is not much difference between a BBB company and BB company anymore in terms of value. Spreads compressed massively and basically you're not compensated to add risk in this environment. And we think that spreads are attractive on top of your government yield it can double your overall yield actually, but there are underlying risks. LBO risk at the name level, that's specific risk. And we think that's important to avoid the losers. And it's going to become even more important in the years to come where fundamentals will matter even more. And we are seeing on the right-hand side that QE is reaching its end. We're going to see the unwind of quantitative easing from central banks,

which could be synchronised, and it's going to be less supportive for credit markets. And potentially weaker companies might find it more difficult to refinance on the market. So it's important to have a conservative and cautious approach to the market, because in this environment where bonds have been, I mean the market has been one sided for quite a long time, it's important to have a conservative approach, and fundamentals will matter more in the coming years definitely. ROB BAILEY: So this is where the maintain part of the buy and maintain I guess comes into even more of an important spotlight, because that's where you're going to have to keep vigilant on the portfolio to make sure that you're not going to run into headwinds with individual stocks in that kind of an environment. LIONEL PERNIAS: Credit selection is important on day one, but then maintaining the credit quality of the portfolio is very important. Now I said earlier that we don't hang on to our positions whatever happens, and that's at a name level but also at the subsector level. If one subsector for some reason loses a bit of its defensiveness, or like a significant safeguard for utility companies to remain investment grade to operate, if actually it's not there anymore we might divest from the whole portfolio. But what's important for a buy and maintain portfolio manager is to add the narrative on top of economic performance, on top of other key performance indicators like downgrades to high yield, like the level of turnover. So add this narrative to explain performance, and the activity of the portfolio manager. ROB BAILEY: Brilliant, well Lio, thank you very much for that comprehensive overview of the buy and maintain strategies. I hope you found that useful, I hope it was informative. We of course would welcome any further questions you have, and do please contact us if you want further information on these strategies, which I think are particularly appropriate for where we are in the market today. But Lio, thank you very much for your time today, and thank you for watching. LIONEL PERNIAS: Thank you Rob. Important information This communication is for investment professionals only and must not be relied upon by retail clients. Circulation must be restricted accordingly. Any reproduction of this information, in whole or in part, is prohibited. The source of all information on this video and document is AXA Investment Managers as at This communication does not constitute an offer to buy or sell any AXA Investment Managers group of companies' ('the Group') product or service and should not be regarded as a solicitation, invitation or recommendation to enter into any investment transaction or any other form of planning. It is provided to you for information purposes only. The views expressed do not constitute investment advice, do not necessarily represent the views of any company within the Group and may be subject to change without notice. Whilst every care is taken, no representation or warranty (including liability towards third parties), express or implied, is made as to the accuracy, reliability or completeness of the information contained herein. Stocks are shown illustrative purposes only and should not be considered as investment advice or a recommendation. Past performance is not a guide to future performance. The value of investments, and the income from them, can fall as well as rise and investors may not get back the amount originally invested. Due to this and the initial charge that is usually made, an investment is not usually suitable as a short term holding. Before making an investment, investors should read the relevant Prospectus and the Key Investor Information Document / scheme documents, which provide full product details including investment charges and risks. The information contained herein is not a substitute for those documents or for independent advice. Some of the investment vehicles mentioned may not be available in certain jurisdictions. Please check the countries in which they are registered with the asset manager. Issued by AXA Investment Managers UK Limited, which is authorised and regulated by the Financial Conduct Authority in the UK. Registered in England and Wales No: 01431068. Registered Office: 7 Newgate Street, London EC1A 7NX. Telephone calls may be recorded for quality assurance purposes.