



LONG-TERM INVESTING: AN OPTIMAL STRATEGY IN SHORT-TERM ORIENTED MARKETS

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Panel Transcript

SOVEREIGN WEALTH FUND GOVERNANCE FOR A LONG-TERM INVESTMENT HORIZON*

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ANDREW ANG: Long-term investing is almost a misnomer. Successful long-term investing is actually not about being a long-term investor. It actually is about first being a successful short-term investor, and about being a successful counter-cyclical investor and staying the course. This idea is not new. Paul Samuelson and Robert C. Merton won Nobel Prizes in 1970 and 1997 respectively for their work on being counter-cyclical, rebalancing and staying the course.

This leads to two important long-term investing fallacies that permeate the industry and the profession. The first of those fallacies is that a long-term investor buys and holds. In fact, long-term investing is not about buying and holding, but constantly trading, going against the grain and staying the course. The second fallacy is that long-term investing is very different from short-term investing. Long-term investment is really first and foremost about being a good short-term investor and then secondly about taking advantage of all the opportunities that a long-term investment horizon can bring, in addition to being a good short-term investor. Merton would call that a long-term hedging demand.

* *Remarks have been edited for clarity.*

We have a great panel to address these ideas. I am going to start off by posing a question to each panelist about counter-cyclical investing, staying the course and the governance structures that facilitate these. Then we'll take questions.

Our first panelist is Pal Haugerud, Director General of the Asset Management Department of the Norwegian Ministry of Finance. The Ministry is responsible for the Norwegian Sovereign Wealth Fund of over \$600 billion. He has been with the Ministry of Finance since 2002 and has been Director General since 2011. Prior to joining the Ministry, he worked as a Senior Portfolio Manager at a Norwegian insurance company called Storebrand.

So Pal, the Norwegians were the biggest buyers of equity during the darkest periods of the financial crisis in 2008 and 2009. Right when prices were the lowest and expected returns were the highest, you bought equities. You guys were geniuses. How did you buy equities when all the other investors were shying away from them?

PAL HAUGERUD: It's my first time at Columbia University and I was not expecting to explain why I'm a genius. I'd like to talk about three things to answer your question: the government structure of our fund in Norway, the fund's characteristics and I'd also like to make some comments about one very relevant aspect of the rebalancing of the equity portion in our fund. I will start with the government structure.

The Ministry of Finance is responsible for the long-term investment strategy of our fund, including the fund's benchmark, the equity portion, the regional distribution and the rules for rebalancing. They have asked the Central Bank of Norway to carry out the day-to-day operational management of the fund, based on a mandate from the Ministry of Finance. That mandate then includes the strategic benchmark and some guidelines for deviations from the benchmark reporting requirements. The Central Bank has established this separate unit within itself called Norges Bank Investment Management (NBIM) that most of you probably know about. This is our governance structure. It gives a clear definition of responsibilities, which I think is important, then we carry out our strategy.

The Ministry of Finance built the investment strategy for the fund with the realization that to get a decent expected return, we need to accept risks. When we accept risks, we have to be able to hold onto the long-term strategy even when we lose money in the market. After all, volatility is part of the reason why we can expect risk premium in the long-term. Ensuring necessary support for a strategy that involves risk is a key challenge for us working in the Ministry. Success depends on the identification and communication of risks, which I will return to.

I think I can say that we are known for being transparent. We see transparency as a key to building trust and support. We have an annual white paper, a report, that we give to Parliament each year, which is an important part of the transparency surrounding the management of the fund. Over the last 14 years we have gradually

explained and changed the strategy, and we now think we have a strategy that fits with the fund's purpose, our investment beliefs and the special characteristics of the fund. This gradual change has contributed to a broad-based support for the strategy through identification and communication of risk. As an example, in the later part of 2007 the Ministry of Finance started changing the equity portion, by gradually increasing it from 40% to 60%. When we started that transition, we had already gone to Parliament and explained the probability distribution involved in changing the equity portion. That was the communication and identification of risks.

Now a few comments on the fund's special characteristics. This fund has characteristics that enable us to accept volatility. It is very unlikely that the Norwegian state will need to withdraw large sums of money from the fund in the short-term. We do not depend on short-term financing, and we are not subject to regulation which could force sales at undesirable points in time. The broad support for the important elements of the investment strategy enables us to maintain a strategy even in periods of great unrest, so the governance structure and the actual risk capacity of the fund has worked out quite well. We have experienced annual returns from -23% to +26%, and of course the losses were the greatest in 2008 and 2009. The reported losses were more than \$100 billion U.S. dollars and that compares to 25% of the Norwegian GDP. It was big numbers, but even though this caused some discussion about parts of the strategy, we were able to hold on to the strategy and continued to increase the equity portion. We bought about 1% of the European equity market during the 18 months, of 2008 and the first half of 2009.

Now a few words about rebalancing: we have rules for rebalancing the equity portion of the fund. This means that the equity portion of the fund and the benchmark is also maintained in periods when the equity prices have fallen a great deal. Maintaining the equity portion is important because the 60% allocation in the benchmark is a tradeoff between expected return and acceptance of risk, so we should maintain that. Rebalancing may also contribute to increasing the return of the fund through the exploitation of variations in equity risk premium. If price movements are due to variations in risk premium, then rebalancing tends to exploit it in a very simple and mechanical way. Over time rebalancing has served us well. We just reviewed our rebalancing rule, and calculation shows that it has added .4% to .5% of annual returns since 1998.

The rebalancing rules have a number of parameters—it has a lot of things that we can twist and turn on—but what is really important is to have a rebalancing rule and to stick to it, not the parameters of the rules.

ANG: Thank you very much, Pal. You emphasized transparency, and another fund that is very transparent is New Zealand. Adrian Orr is the Chief Executive Officer of the New Zealand Superannuation Fund, which he joined in 2007. Previously he was at the

Reserve Bank of New Zealand. He has also held positions at banks and has ably served in central banks as well as in industry.

Adrian, you once said that New Zealand was so transparent that you can see the underpants of the employees working there. I hope yours are clean today. New Zealand purposely separates investment beliefs from investment facts, and tries to have very clear governance and decision-making structures. But doesn't this promote rigidity and inflexibility? How does this make you a better long-term investor?

ADRIAN ORR: I threatened when I was here two years ago that next I turned up I would be nude to show my level of transparency and commitment to it, but you keep having these in winter time.

I will talk about how we are set up, the investment beliefs and investment facts, with the separation of those two as absolutely critical and at the core of being a long-term investor. Our mandate is simple, as we are told to maximize return without undue risk and to invest without prejudice to New Zealand's international reputation. We are left alone to go about our activities. We have complete operational independence and have our relevant checks and balances where politicians cannot interfere.

Now the separation of beliefs and facts is a way that we can basically engineer or hardwire the investing perspective that was discussed earlier today by Max von Bismarck. He had a nice slide of the different types of investing institutions, including head family offices setting their endowment funds and sovereign wealth funds.

Really, we try to think about what makes a long-term investor as simply this: a long-term investor is someone who can meet all the current liquidity requirements to a higher degree of confidence and can continue to repeat the investment game all the way through. That pulls in Andrew Ang's comment that a long-term investor does not just buy something and then sit and wait for a long time. A long-term investor has confidence about how to make liquidity and that they can repeat the investment game all way through. That means they can play a lot of short-term games for the long-term or they can play a few long-term games; it does not really matter—they are confident that they have the capital, the capital is captured, and within their investment control.

To engineer that perspective, you can get there first by accident. Where some family offices had a lot of capital for a long period of time, the actual owners' rate capital had become so separated or the liquidity needs were so small that the demands on the actual managers of that capital end up being quite few and far between, so the owners of that capital can keep investing long-term.

We did not have that benefit. You do not get that in a democracy, where every three years governments come and go, and you are trying to invest inter-generationally. What we did with our board is what I would call a governance dividend. We sat for a long period of time and talked really hard about what we need to believe in to be a long-term investor. I say 'believe' because in 20 years' time we could still be arguing,

theoretically or empirically, about whether asset prices mean revert back towards some fair value; or about whether skill exists at all; or whether, if it is real, you can even actually identify skill *ex ante*. These are all different types of things that you have to hold as a belief, very strongly, between the board, the owners of the capital and the management of the capital. You need to hold those beliefs together, because you need them most when you are faced with the hardest, greatest opportunities. You need them when you are feeling the most sick, yet the opportunities are enormous. That is where you have to fall back on your governance beliefs and that governance dividend in order to be able to make sensible investment decisions.

As a very simple example, during the 2007 and 2008, we were in a similar position to Norway's, though the numbers obviously are not in the billions as with the Norwegians so in fact it is different. Sitting at our board level, we had the first group who said they never believed that markets would mean revert, but this time it is different. Now we hear that during every crisis, don't we? When you have that discussion and you are sitting in management, there is nothing you can do about it. You have to say, well why didn't you tell us about those beliefs before, because then we would have had the strategy. Do you really believe that capitalism has finished, that prices will forever deviate from fair value? When you start putting it into that context, people back down quickly. The next group of people sitting around the board will say that they hold the belief that our strategy is stupid—you need to buy low and sell high and get a better strategy. That is good because, as management and board working together on common beliefs, you can revise your strategy and make it different. The last group is generally the one you hear from first. They say that they hold the belief the strategy is fine, but we are just idiots. You say that's good, because we can get different idiots.

These three different discussions, at a board level, are too often confused or conflated as one. If you can separate them out and say, these are the beliefs that we said we have to hold through good times and bad, in sickness and in health. You have probably heard these vows before, but this is how we will succeed as a long-term investor. That is why we have separated them. It has not made us more rigid; it has made us incredibly more flexible, because the strategies can be delegated completely to management, as long as they are ranking back to the core beliefs that we hold as an institution.

ANG: I would like to introduce Mats Andersson, who is the CEO of AP4, one of the Swedish National Pension Funds. He has been CEO since 2006, and previously has had positions at AP3 and Deutsche Bank.

At AP4, there is a large emphasis on active management. That plays a very important role in your governance and in staying the course, but some have said that active management is just a waste of money. If you can in fact just beat the average by going totally to an index, you would save a lot of those fees and you would be above

average. How does active management help AP4 be counter-cyclical and stay the course?

MATS ANDERSSON: These are very good questions, but first, a few words on what we are. In the competition over who is most transparent, we are also very transparent. We are an authority in Sweden, and that means that for example, if you want to know salaries of anybody at the fund we have to provide you that. If you want to know who I had lunch with Thursday, just come by the office and we have to report it. We are so transparent that we are evaluated on a yearly basis by the Parliament, even though they have a five year horizon when they do this.

The fund in size is about \$30 billion, so we are far smaller than the Norwegian fund. In terms of returns, we have an objective of 4.5% real return over 10 years. Knowing that we are very much into equities, 6% of our assets are in equities and about one third in bonds. The rest is in alternatives and real estate.

And a few words on rebalancing, which has served us extremely well. It is one way to be contrarian, and it is very hard to be contrarian. During the financial crisis in 2007-2008, we did buy equities for some \$3 billion francs and sold bonds against it. What is important with rebalancing routines is that you set them out in peacetime, because when it comes to war you should stick to the rules you have. It was never an issue for the board whether we should rebalance or not. If it had been, I am sure they would have said not to do it. We did, and it was extremely successful.

We are also believers in active management, and I must say we have returned over the past five years some 50 basis points per annum. We are trying to be active in whatever way we can, using the long mandate we have.

One way is to be an engaged owner. What I think has been lacking a bit at this conference today (when we discuss long-termism) is the need for owners to actually engage. One example is the Swedish model. This is the governance model of Sweden, where three to five of the biggest owners have to sit on the nomination committee and propose who is going to be on the board and board of directors, as well as the non-executive directors, who are then selected at the annual general meeting. I think that only the owners can give the management and the board the mandate to be the long-term operator of a business. I also believe that being a long-term operator and having a long-term view on your investments can actually produce better returns than if you have to meet the next quarterly report. That is one way to do it. I think you need, as an institution, to actually step up to the plate and be an active owner, be there at the annual general meeting and use your voting right.

I totally agree that this is a model that works in Sweden and it is different wherever you go. You have to customize this to the specific situation you are in elsewhere. But again, I would like to see more actual owners engaging in trying to find the best board they can. I must say it is rare that you come across an excellent chair

running a poor company. At least if you can sort of engage in trying to find a good chair, I think you've done a lot of good.

ANG: Our final panelist is Philippe Ithurbide. Philippe has worked both in research and in industry. He is currently Global Head of Research at Amundi. Prior to that he was at Caisse de Dépôt et Placement du Québec and at Société Générale. He has also worked at a variety of research positions.

We want to be contrarian, we want to stay the course, and right now that involves, in Europe, buying Europe. Europe might not even be around tomorrow—it's liable to fall apart. It's really scary. So how do we do that, when Europe, as an institution, might not even exist?

PHILIPPE ITHURBIDE: The question about the sustainability of Europe is the key question, not just for us, but for the community. If there is a place where we are to differentiate beliefs and facts, it is Europe. Nothing has occurred yet, as far as the worst expectations. Greece is still in the European Union and has not been pushed out. The Greek debt has been restructured, without any contagion. The banks are not short cash. The European Central Bank (ECB) has a balance sheet expansion which is similar to what we have at the Federal Reserve, and so on. This does not mean that there is no risk—of course we have risk—but if we are looking at the worst expectations, then we have to be honest that nothing has occurred.

Europe is still here. We paid for that. Lots of people say that we did not pay, because there is no federal budget and so on, but we do have transfers. Believe me, I paid for the Greeks. It is a long process. Of course, it's painful, but in the end it works.

Apart from the growth prospects and the governance we have plenty of programs developing to solve our situation. For example, we have European Union institutions, but how many new institutions do we have? How long will we accept a decision being blocked because of the Slovaks or the British? I know there are some British in the room, so excuse me. How long we will accept that is the key question. The coordination is the key issue.

If you look at the market in 2012, it is excellent, with between 10% and 25% returns and the credit market up 25% in this last year. We pray every day for this story to continue. We have a couple of issues—even France was supposed to be attacked massively in 2012—but bond yields are at their lowest. Of course we pray for the situation to continue.

If you look at risk at this moment, the major risk is currently not the need for countries to exit the European Union, for a simple reason. If you have a lot of countries ready to pay for you, what would you decide to do: to die alone or to accept the money these countries are sending you? The Greeks will never ask to exit—forget it—and neither will the Italians or Spanish. The risk is not of country saying they want to exit;

the risk is why not? We are afraid, because this can cost a lot of money. In two or three years' time, the Europeans say okay, the European Union is equal to recession, deflation, poverty, precarity and then unemployment. At that point they might say goodbye; this was a good idea, but it does not work. This is a risk, but we do not consider this as a likely scenario at this time. Everyone was expecting Germany to give up, but they did not give up and they will never give up. The problem is not that a country will exit, because it is too costly for the countries.

The risk for Europe is about growth. If growth further loses momentum, then we have a problem with employment and so on. If we had one critical thing to look at here in Europe, it is definitely growth.

A few words about opportunities: we are talking about long-term investors, but of course the question for Europe is short-term, of whether it will survive. We think so. We are talking about mean reversion, long-term investment, counter-cyclical investing, and fair value. If you love these things, then you have to love Europe on equities, on bonds and on spreads. Keep in mind as well that all the opportunities in the world are massively under way in Europe. That is the reason we had massive rebound.

I'll give you an example. Last July, the stock market in Europe was down because we had very poor economic indicators. Then Mario Draghi came and told us to do this and this and this, and said, believe me it will be sufficient. Then the stock market was up dramatically, but in August the economic indicators were even poorer. It's not that the investors started to be optimistic; they just realized that they were too much underweight. If you like counter-cyclical investment, long-term investment, fair value, and mean reverting, you have to love Europe. Please invest in Europe and you can be sure that we will continue to pray for you.

AUDIENCE QUESTION: Is transparency a necessary condition for being a good long-term investor?

ORR: I would answer 'no,' depending on the nature of the institution or the form of the capital it comes in. I would answer 'yes' for the vast proportion of public funds to become long-term investors. What gets measured, gets managed. When you are managing this capital, you want to be in charge of putting the correct measurements out there, saying that you want to be measured over relevant horizons, and that you want to be understood for the variety of investment strategies that you are taking on board. We want to make sure that our performance and activities are measured on things that we can influence, over the horizons that matter. If you do not do that, you will forever be nickel and dimed back to short-term behavior. That is where career risks, tracking error, fear of tracking error, fear of being different from the pack, and all of those types of drivers push you back into that myopic short-term behavior. From our perspective, transparency is probably the most single useful tool I can think of for providing control

in what's being measured and providing the levels of comfort around what you're doing, who your peer investors are, and who you should be compared to.

HAUGERUD: In Norway's case, this fund is currently 130% of annual GDP. I think it's unthinkable that we would be anything else than transparent. Also, as I said, transparency adds support for the strategy. That is important because there is risk involved, so it is important to identify and communicate about risk. And it adds support for the fund internationally, not only domestically.

ANDERSSON: The mission to look after the money for the Swedish pensioners definitely requires us to be very transparent. It is the only way to win the support for what we do.

AUDIENCE QUESTION: Mr. Haugerud, you mentioned going to Parliament and presenting a distribution of returns based on your asset allocation work. From what I understand of your governance structure, the benchmark is set by the Parliament or Minister of Finance, approved by Parliament and thereby effectively transferring risk from the manager to Parliament. That governance model presumes that Parliamentarians are capable of understanding those kinds of investment concepts around distributions and risks and that sort of things. Maybe you can elaborate on that a bit.

HAUGERUD: I think it is possible to communicate risk in a good way, but it's a challenge. We try to explain finance, which is technically complicated and uncertain about the future, so we try to describe the uncertainty and the probable and improbable outcomes with the different angles. We look at historical returns and risks, and we try to do simulations going forward. So yes, I think that it is possible. We have two observations where it worked out quite well. We could, in 2001-2003 and 2008-2009, go back to our previous white papers and say that this was not the most probable outcome, but it was within the probability distribution.

ITHURBIDE: Transparency on risk is essential for any kind of investment by a sovereign wealth fund. Because of the 2008 crisis, all the portfolios were forced to adopt some views on the difference between beliefs and facts, which are sometimes very tough to explain. It is the same for some funds over the world. In our company, we decided to increase the risk in the portfolios, because we have changed our structured portfolios compared to the benchmark. In fact, we wanted to reduce reputational risk. For example, if you exclude Spain from a portfolio, you have an active risk in your portfolio, but in fact you have reduced reputational risk. To explain that to the client is essential; if not, they will not understand. You have an *a priori* higher risk in the

portfolio, but in fact you will have reduced the risk because you do not want to expose your clients or your fund to this kind of risk.

The second point about transparency is internal; we had a comment about the difference between the board and the portfolio and the agents. When you decide with a top down view to eliminate a reputational risk, it is important to communicate. If you are Portuguese and you lose money on Portugal, it is not important, but if you are Japanese and you lose money on Portugal its different story. You have to explain it to be absolutely transparent on the deviation from the benchmark for benchmark portfolios.

ORR: An enormous amount of effort across all of our funds goes into trying to articulate and explain the *ex ante* risk that sits in these portfolios. There are many different ways to explain that. I would encourage people to have a look at our websites; actually there are some quite innovative ways of trying to explain what it feels like when fat tail events happen, what the 99th percentile feels like, or what it means in terms of dollar billions or percent losses on the way through. That's all very useful, but I always stop short of saying that we have transferred that risk to Parliament. It is specifically in our legislation that Parliament cannot direct us to invest. That is a very specific action point. It is up to us to say what is undue risk and to be able to manage that. You know I say that boldly, because there is always the absolute opposite nuclear bomb option, which is to just shut the fund down as a whole. There is always that fine line between where we are in the risk and what is undue risk. But you cannot let reputation risk dominate the investment risk, otherwise you are not behaving as a long-term investor; you have gone passive. Then you are just back amongst the pack with the rest of them, and should just forget about the fund and shut the fund down, because you cannot run it. So we are in the risk but we spend a lot time around the transparency.

AUDIENCE QUESTION: Mr. Orr, you mentioned an objective of your fund not prejudice New Zealand in the world community. What does that mean, and what does it causes you to do in terms of your investment activities, or not do?

ORR: On the New Zealand Superannuation Fund's legal ground to invest without prejudice to New Zealand's reputation internationally, I labored repeating what it was, because it is not saying invest to make New Zealanders to feel good about themselves. That would be impossible; too many British arrived there many years ago and they would feel uncomfortable being happy, despite the Polynesian influence there now. It is about making sure that we are following global best practice. We think about that with the environmental-social-governance (ESG) concepts of investing. We spend a lot of time not setting it up as a nice marketing department on the sideline, but trying to embed our ESG beliefs firmly into every single investment activity we do; that's a non-

trivial action. In practice it means that we do not invest in things that are illegal within New Zealand or under international law. We do not invest in things that the New Zealand government has signed up against on behalf of its citizens, for example in international declarations. We spend a lot of time thinking very hard and working with peer funds through the United Nation's Principles for Responsible Investment, the UN carbon disclosure projects and a couple of others, where we see that these outfits as setting global benchmarks on ESG behaviors.

We have to pick our battles, obviously. The simplest thing to do first of all is to comb your portfolio and ask which holdings are just illegal, so what should we exclude or divest from the portfolio? We have done that, and it is not a lot. There are a handful of types of activities, again all on our website, that you can go and have a look at, which just happened to be illegal or something New Zealanders feel passionate about. It's the gray zone that is difficult. We were calling it active investment earlier. We like to think about it as engaging as a responsible shareholder with companies to make sure that their ESG practices are sustainable in the long-term interest of the company, and of the shareholder on the way through. So as far as engagement, we pick our battles pretty clearly, because we have limited resources, and we like to work with a lot of other people who are engaging across these different issues. I'm sure you all know the PRI activities as well as working with peer funds on specific activities, from weak states through to environmental issues through to improved governance. It is a growing and active behavior.

We do not believe in positive investment for its own sake. We are talking about embedding ESG issues into our core investment behavior because returns will be better. That's one of our strong beliefs.

AUDIENCE QUESTION: We have had a day's discussion on short-term oriented markets with barely a mention of derivatives markets, which is many times larger than that of the underlying equities and bonds. I'd like to ask the panel as investors with a long horizon about their attitude towards the use of derivatives.

ANDERSSON: Again, we have a very long-term view on our investments. However to be able to handle the risk we have and to be able to get the positions we need, we now and then use overlays and derivatives. It's nothing strange, in my view. We use it and it's part of our strategy, and it does not make us short-term oriented.

ORR: We're the same. They are very useful instruments, which in certain situations are the first port of call if you are trying to get exposure to the underlying economic risks. We're a heavy user of derivatives as a total proportion of our book. The wall of regulation coming towards us is a topic in itself, but that is going to affect the price. It is going to be a tradeoff all of the time.

ITHURBIDE: In our company of course we use derivatives extensively for various purposes. In some mandates, it is forbidden, because the clients do not want to have them, but generally speaking we are not opposed to derivatives. We are not fans of sovereign credit default swaps.

ANG: I have something to add here that is not widely known. Rebalancing itself, just the act of buying low and selling high, which is what rebalancing is, is a short volatility strategy. Short volatility strategies also buy low and sell high. As soon as you move away from a market portfolio—which is entirely passive—any dynamic trading strategy which includes rebalancing—which is continuously trading—can be written as an option trading strategy. Any option trading strategy continuously rebalances, and rebalancing is just a special case of a continuously rebalanced dynamic trading strategy. There is a difference between a rebalancing strategy which operates in the underlying physical markets and a derivative strategy which operates in risk neutral derivatives markets. The derivatives strategy will reap, in addition, a volatility risk premium—which the rebalancing strategy operating in the underlying physical markets does not give you. Even the act of rebalancing itself is actually an option strategy. So option strategies are in the tool kit of long-term investors. Even though most long-term investors actually do not view it as derivative strategies, they are doing it already.

AUDIENCE QUESTION: It seems as though the conditions for an *ex ante* forecast of a bubble are rife in the market for government securities from governments that we would consider to be the most reliable, such as Germany and the U.S. We've seen now, what, 30 years of declining nominal interest rates? Today we see negative real rates even at the long end—so every trend points to too much comfort in this asset class. Perhaps all of our models that suggest we should be counter-cyclical would lead us to exit or even short this asset class. Now, that is not just a passive strategy of rebalancing; that is a much more activist view. Is anyone willing to take that position? Or is that a bridge too far for the governance requirements of your organizations and the burdens you face of having to defend whatever you do *ex post*?

ANDERSSON: By law, we need to hold 30% of our assets in liquid safe bonds. What that is is a good question, but for us it's a BBB investment grade and we cannot go away from that limit. But we're trying to have it as stable as we can. I am a strong believer that is the bubble we have today on our bonds.

ORR: In our perspective, it is not a bridge too far at all. That is exactly one of our core strategies, which we call strategic tilting, in our dynamic asset allocation. We call it strategic tilting because it gives it a longer term, since we have a one to three-year

horizon, at least on price value gaps that you see going on. With that we have a very large risk budget around which we can change up or down. We start from a growth-fixed income of about 80% growth and 20% fixed income, passive-listed reference portfolio. Two people and a dog could run it. Everything we do outside of that is an active investment strategy. In active investment, one of the keys is the strategic tilting.

I would have to agree with you that we have very strongly dialed up our exposure to growth and dialed down our exposure to poorly priced sovereign credit default swaps. We have had a lot more fun on the growth side to date than we have on the fixed income side, because we live in unusual times. With the U.S. ten-year bond at around 1.6%, I can't see any framework or model that explains that, other than desperation and pumping money.

We really do have that position out there. I say this very comfortably because you can log onto our website and see what the risk budget is and how we strategically tilt across these things based on median term price evaluation.

ITHURBIDE: On the sovereign bonds, we share this view, but the problem is when to escape and what to do. At Amundi we have done a lot of research to try to give value to the fair value on bonds and spreads. Let me give you some ideas we have in mind. In Germany, the bond yield is probably too low by 150 basis points, and in the U.S. by probably 250. We know that when we have a reversal to the fair value it can be very long if you look at models and calculations; it can be up to eight years. But of course when we escape the crisis, there's a huge chance to be very quick, quicker anyway than in the past. That's the first point.

The second point is that we are underweight of government bonds in our portfolios. The other flip of the coin is that we are overweight in the credit corporate bond markets. We had a 25% return yield this year, but as growth is losing momentum, the default rate is expected to rise so this position is probably risky. So if the situation is risky because of economic activity, the German government bond will probably not rise immediately. In fact, if any of our portfolios fall underweight in government bonds, we are overweight in corporate bonds, which is risky. It is not exactly a bubble, because we can explain very easily why we have such a low level of rates, but it is definitely abnormal.

AUDIENCE MEMBER: We heard this afternoon that if you are a rational investor you should be holding equities in pretty large multiples, depending on the lags you have in mind. My question is, given that it makes sense for a long-term investor to hold equities as a large fraction of the portfolio, how should you think about your equity investments within the equity class? How concentrated do you want to be, in terms of building large stakes, in what you perceive to be the most promising companies, based

on a due diligence analysis for example, and how widely dispersed do you want to be to hedge idiosyncratic risk?

ORR: We start with the global portfolio, to which the simplest access is through the MACI equity index. We hold a lot of equity relative to fixed interest. Very quickly, the way to get at what are we holding is through three different lenses. The first lens is the asset class lens, in our 80% equity, 20% fixed income, and so on. That has some advantages, but it is not that useful to me when I am trying to think about what economic risks we are holding in a portfolio. We also break our portfolio down as best we can by how much exposure we have to growth, to inflation and to principal agent risks. That is the economic lens, the second lens of the three. The third lens is something that Andrew has written about a lot: how to put it into practice, which is asking what the underlying risk factors that we hold in the portfolio are, because that is what we get rewarded for. We break down the portfolio by how much we are getting for risk-free, equity risk premium, credit, illiquidity, duration and so on. When you do that, asking how wide our distribution of asset classes is becomes almost irrelevant. You can get a lot of economic risks and a very wide dispersion without a very wide range of underlying equities.

To answer the question, it is a matter of really understanding your portfolio and what suits you, and then working backwards to the best access point. Think hard about the risk premiums and the economic exposure you want, and then come back to asking how you can get access through that. It could be through listed equity, other asset classes or external management. I know a lot of interesting work has been done in some of the Swedish or Dutch funds, as well, holding very few equities and getting the same economic exposure.

ANDERSSON: In our case, we have a lot of equities and our starting point is being passive. But again, we're not model-driven; rather we are individual driven. We're trying to see where there are possibilities to catch off from, and then we try to find individuals who can do that. In my experience in ten years in this industry, too many asset managers are trying to use the model, rather than trying to find the people who can do it. If they find somebody who says they can bring you alpha by investing another ten companies, I say prove it to me and I might do it. That is not the general attitude on this.

At AP4, we have a huge home bias, we have one third of our equity preferably in Sweden and that is voluntarily. The reason is that I believe that governance is better in Sweden than in many other places around the globe, and that governance is not about charity, but about catching returns. Looking back, Sweden has outperformed in the past 10 years by some 5-percentage points per annum. As long as that continues, we are going to hold our home bias.

ESG matters are always easier on your home turf. Even though we only own 1.5% of the Swedish market I think our voice is ten times louder when it comes to the ESG matters. It is frustrating when you go abroad—how can we make our voice heard? Governance is also poor, absolutely. So the way we address this is, in Japan for instance, we founded a corporation with Tokio Marine that actually speaks on our behalf. They share our views on independent directors, trying to get rid of poison pills and so on. I would like to see more trying to find partners around the globe who can actually use our shares to make their voices better heard.

HAUGERUD: In our case, when we look for a benchmark for equities, we are looking for global exposure, so we do not invest in Norway at all. We want to hold a small share of the world's productive capital represented by the global equity market. We have looked at various weighting regimes for regions and individual companies but we have ended up with the FTSE benchmark very close to the market-weighted global index, including large, medium and small cap. Then it is up to the manager at the Central Bank to compose the actual portfolio. So far, they have included more companies than the ones included in the benchmark, so we currently have between 7,000 and 8,000 companies in the benchmark. It is not very narrow.

ITHURBIDE: My three friends are very lucky because they can look at the rationale behind equities. Of course for the company's long-term investors, being regulated through solvency is simply impossible. One of the biggest insurance companies in Europe has 3% equities in its portfolio and it cannot have more because of its solvency ratio. So not being regulated in one sense can be a plus when investing in equities. At the end, they have plenty of credit in corporate bonds, which is easier to have but very risky in the underlying, when bond yields are supposed to rise.

AUDIENCE QUESTION: Do you deal with tail risk by the definition of your benchmark and diversification alone, or do you use additional tools?

HAUGERUD: Tail risk is very important in the analysis when we choose the benchmark. When we look at the equity portion, we look at diverse scenarios going back in history as a stress test. Part of the mandate to the manager is that they should do a stress test for the actual portfolio. When looking at alternative changes in the benchmark going forward, tail risk is a natural part of that.

ORR: We, like most investors, think about tail risk in as many different ways as we possibly can: through the traditional distribution, in the skewed distributions, through Monte Carlo-type stress testing, or through economic scenario development. I'm not a fan of the economic scenario type, because people get tricked into thinking about a long

debt-specific line, and we all know that by definition what shocks you is what you did not anticipate. Scenario work is easiest to translate and put into some kind of percentage, dollar billion or other mechanics to hold a discussion with the relevant stakeholders. We spend a lot of time thinking about those. Every time we add an instrument or an investment, we have to think very hard, not only about what it does to the mean and variance, but what it does to the shape of the distribution of our fund. Some of the more exciting returns that are available at the moment do have bigger twists in the tail. As a long-term investor we should be aware of it, but not necessarily scared of it. We need to be aware of it because it is about maintaining our liquidity, to be able to manage those portfolios. We want to be sellers of insurance, not buyers of insurance.

ANDERSSON: I think this has been on the agenda for every board since 2008. There is no investment you can make without checking what it means to tail risk and what it means to risk over all. I believe that if the black swan arrives, it will be like 2008. Look at the annual reports from 2008, and hopefully we can do a bit better, but the black swan is the black swan I'm afraid.

AUDIENCE QUESTION: Mr. Ithurbide seems to invite us to invest in Europe. I'm from China, so we have been interested in the US more than Europe. If Europe will continue to recover, in particular get back to a growth path, which is very important as you mention, that would be very good. But looking from outside of Europe, we are not sure that will happen. Looking at Japan over the last 20 years, growth did not return, despite Japanese growth being very strong from the 1950s to the 1990s.

To me, the panel is discussing very important issues; one is governance, the other is long-term investing. But when we talk about governance and long-term investing, I think the country risk is very important, in a way that the governance of the country, not just the governance of the company, might be another dimension. If the country does not grow, probably the governance of the company would only increase on the secondary order, not really the first order. Look at investors in Japan over the last 20 years. Some companies certainly are doing better than others, but overall the return equity in Japan in 20 years was actually quite disappointing. This is really something that outside investors are certainly concerned by in Europe, which is whether in Europe we actually are facing two risks. One is the governance of a country, where the outside investor could really improve the economic performance of a country, but would not have much say or interest in the government or the change of the economic policy, as in Japan. The second risk is how much really is outside investors' ability to make a difference. Could a large sovereign wealth fund from China really make any difference or get its voice heard? These are important questions to me.

ITHURBIDE: Thank you for mentioning only two risks. I appreciate that a lot, because we have plenty of other risks. There are two risks which are not necessarily mentioned very frequently, and to me they are crucial. First, other people, including the French, the German and the Italians, say that Europe is okay because we have a lot of savings. That is true, but we have French savings, Italian savings, Spanish savings, and so on. European savings are not moving from one country to another, but the savings are huge. So we have a renationalization of debt, which is positive—look at Japan—but we have the capacity to absorb the debt. There was a very interesting survey from the IMF recently that said the capacity of Japan to absorb the debt is limited, because the banks have balance sheets, the savings rate cannot explode, demographics cannot be changed in two days—you know, they need babies but babies need twenty years to contribute. So it takes time. They say probably the capacity to absorb debt in Japan is 15 to 20 years. It means that in 15 to 20 years, of course, before bond yields will have to surge and/or Japan will default and so on. We are not in this situation but this factor—the fact that we don't have European savings, we have national savings—is not frequently mentioned.

The second important factor is prices. The solution that has been adopted of course we cannot have—like Escudo, Pesetas, etc.—so instead of having external devaluation, or movement on the foreign exchange, we have internal devaluation, or austerity. If you are living in Spain or in Greece, you can be sure your pension and your wages have been cut, but what is needed is not to have a decline in real wages; it is to have a decline in export prices. Prices are rigid everywhere, but the difference is Europe is worse in terms of economic condition. We have plenty of other risks.

For the companies, it is a little bit different, because a lot of companies do their business outside Europe. In 2011, for example, we decided to increase the portion of equities positive on growth, so we have companies doing 60% to 70% of their profits outside Europe. In France, 75% to 80% of profits of the CAC 40 come from outside France. You can find plenty of companies doing the bulk of their business, sales and profits in the so-called emerging countries. These are the companies we prefer. So apart from the economic situation of the country, what is most important is the internationalization of the companies.

On the other hand, you also have to look at small and middle-sized companies—the mid-cap market. This is another matter of concern, because the credit to these companies is declining massively. One year ago, the rate of credit being refused to small and mid-size companies in France and Germany was roughly the same. In the past year it has been multiplied by five in France, but it has declined slightly in Germany. In U.K. the rate is the same. They have to address this. For companies, I would say to first look at the size of the company, if it is exporting or not, and if it is profitable outside Europe.

What does this mean? This means that absolute return, stock picking, and bond picking is probably what we have to do in the coming years. Remember, in Japan we

had a huge rally on the market of some 40%. Of course, it was being led by a few companies, but that doesn't mean that growth is poor. We have plenty of new opportunities, those companies exporting a lot have been killed because of certain debt crisis and they are very attractive, but what we need is a green light. If you are convinced that growth will be better and better, then risk aversion is going down and then the stock and bond picking is attractive.

ANDERSSON: A Japanese scenario for Europe is not my main scenario, even though it can happen. There are many different ways that Europe is addressing the problems compared to what Japan did 20 years ago, even 5 years ago.

ANG: For Japan, any rebalancing strategy would have actually underweighted Japan on the way up during the 1970s and 1980s; this is the opposite of rebalancing, always buying low and selling high.

AUDIENCE QUESTION: The moderator and Mr. Ithurbide have made reference to the beliefs that the Euro and the EU may not be there in short-term. Mr. Ithurbide's reply is that this is out of the question, that the political commitment and economic consequences of dismantling the EU are too high to consider this tail risk. You also mentioned that many sovereign wealth funds or investors are underweight. What will it take to change the belief that is very widespread in this country that the EU will not make it? What decisions from the EU will change this belief, given that you refer to a number of measures that have already been taken? You refer to exports, that the unit labor costs are declining in the countries in distress, and structural reform to improve the business environment are taking place in most, if not all, of the countries concerned. The condition for investment and therefore for growth will be that investment takes place. Part of it can be public, but much can be private. So what political decisions will be required for investment to flow back into Europe?

ITHURBIDE: Are you Spanish?

AUDIENCE MEMBER: I am. But I'm European.

ITHURBIDE: Part of the answer is in your country. I'm very lucky because I travel all over the world, meeting all kinds of investors corporate, sovereign wealth funds, central banks, co-interest companies, and so on. There is a common factor that they understand nothing about the way we solved the crisis, but they say okay, step by step, the process is going on, but it is very complex and very long.

Spain is another example. Everybody will be very pleased the day when Spain does not exactly give up, but says they want to stay in the EU, because they cannot survive by themselves. That day, you can be sure that the ECB will buy Spanish bonds. Then rates and yields in Spain will go down, exactly the result that Prime Minister Rajoy wants to have. We cannot have this result without purchases from ECB and without Spain saying okay guys, I need to be helped. This first short-term risk factor is about solvency and about Spain.

The second factor is that we have to change the rationale behind the way we manage growth. Austerity is not the solution; we have known that for a long time, for 20 years. As I mentioned, as long as we don't have a huge drop in export prices, internal devaluation is useless. Export prices are rigid in Spain, they are rigid in France, they are rigid everywhere including U.S. and U.K. The key issue is of prices going down, but nobody believes that in the long term. But prices are not particularly going down, so this is another question.

At the end of the day, we need to have growth. The key question is how long we will take to exit the crisis and to switch to a situation where we have to manage debt. There are debt programs in Japan, in U.S., in U.K., everywhere, but in Europe we have a crisis. We need to be able to exit from the crisis and have time to manage the debt and deficit and to manage the social reforms; in France, that is the case. So Spain has to ask for aid, ECB has to buy the bonds and France has to start having real structural reform. That day, there is a good chance for growth to come back.

I would like to conclude with one point. If you look at the financial stress in the market at the moment, it is the same level of stress we had before the huge crisis of July and August 2011. The market already said, okay guys, it's not that bad. At the same time, we have the Spanish and Italian bond yield spreads going down. We had the high yield market doing 25%. So we are not that far off, but we need some other arguments on Spain, France and austerity.