

Walking the tightrope

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This report explores institutional investors' attitudes toward equity market risk and look at the downside protection strategies they are using to insure their portfolios against volatility. To carry out the research, State Street Global Advisors commissioned Longitude Research, a UK-based agency specializing in global financial sector research, to survey 420 senior executives with the authority to make investment decisions on behalf of private and public pension funds, endowments and foundations, and sovereign wealth funds. To provide a global picture of equity risk, the survey covered Asia Pacific, Europe and the US. The findings provide valuable insight into the challenges that investors face when attempting to balance ownership reward with downside risk. The research is seeking to understand the myriad factors that influence investors' decisions – from extreme self-confidence to perceived career risk – and outline why a greater emphasis on communication and education is crucial in today's market.

KEY FINDINGS

- In today's low interest rate environment, equities remain a vital asset class for investors. Investors in this survey say they are increasing their exposure to equities. Almost two-thirds (63%) have increased their holdings of developed market equities over the last six months and nearly half (48%) have increased their allocation to emerging market equities.
- Investors feel obliged to hold equities, yet many feel more exposed to equity risk than they would like. Despite increasing their exposure to equities, the majority of investors believe that both developed and emerging equity markets will see a correction within the next 12 months. More than half (53%) would like to reduce their allocations to equities but do not feel that there is an attractive alternative given low yields in other asset classes.
- Investors are highly confident that they can cope with market drawdowns. A remarkable nine-out-of-ten say they are confident in their portfolio's ability to weather a major market correction, with two-fifths (41%) making no change to their downside protection despite recent volatility. For some, this may be a sign of overconfidence in their ability to use a drawdown to their advantage. Many will have been rewarded in recent years for "buying the dip" purchasing equities when prices were low but about to recover and may believe their portfolios will perform well despite future volatility.

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- At present, investors largely rely on a small number of downside protection strategies. More than four-in-five (86%) have implemented downside protection strategies of some kind, with 53% choosing dynamic asset allocation. At the same time, almost two-thirds (62%) believe their portfolio is suitably diversified to withstand drawdown. The same proportion (65%) of investors believes that diversification alone is enough to protect their portfolios. This faith in a relatively limited range of strategies could be taken as another sign of overconfidence. It may also suggest that investors are unaware of the true concentration of equity risk in their portfolios. While dynamic asset allocation and diversification have their place, a more reliable approach would rely on multiple lines of defense.
- Strong market performance may explain investors' negative view of downside protection. Just over a quarter of investors say they have been happy with the strategies they have adopted in the past, with these solutions giving them a good balance of return and protection. Yet, a significant minority almost two–in–five said they had been disappointed with the ability of these strategies to strike the right balance. After a period of strong market performance, it may be that they consider their purchase of downside protection to have been unnecessary and, in fact, to have limited their upside. But this should not undermine the value of taking out the right level of insurance.
- Investors have a limited understanding of new downside protection and risk measurement approaches. In general, investors have a good understanding of some strategies, particularly dynamic asset allocation, hedge funds (excluding managed futures) and multi-asset class absolute return. But only a minority say they fully understand newer approaches, such as volatility targeting and low volatility portfolios. Similarly, a mere 16% of investors are strongly convinced that they are using the right mix of tools to measure and predict market risk. Investors seem unsure about which performance measurements and benchmarks to use. They should consider taking advantage of benchmarks specifically designed to evaluate the efficacy of downside protection strategies.
- Investors should overcome pressure to match peers' short-term performance. Senior executives need to ensure that stakeholders fully understand the rationale and trade-offs associated with downside protection and the consequences of failing to take action. A lot is at stake which should outweigh investors' concerns about underperforming their peers in the shorter term. While no one is expecting a crash on the scale of the global financial crisis in the near future, even small market corrections can exacerbate funding difficulties and it can take years to recover lost ground. Many investors are in a very delicate position and are already beyond their risk comfort zone. Others, quite simply, do not have the capacity to absorb significant portfolio losses.
- Education and communication are key if investors are to balance ownership reward with downside risk. The research indicates that the investment community needs



greater education around downside protection. Education will take time and needs to take place across different levels of the organization. Many investors are unaware of innovative risk management approaches that offer attractive balances of return and protection. Investors would benefit from fully understanding their options, partnering with asset managers, and adopting better measurement tools.

Self-assured or overconfident?

The survey shows that many investors are highly confident in their ability to withstand market drawdown. For example, nine-out-of-10 say they are confident in their portfolio's ability to weather a major market correction. To a certain extent, investors' confidence in their expertise should be expected. "Optimism and belief are a large part of what fund management is about," says Professor Brian Scott Quinn of Henley Business School. "So it shouldn't be a surprise that respondents would say that they are confident in their ability to withstand a falling market."

Yet, in certain circumstances, investors may be prone to overconfidence. Investor overconfidence, according to Dan Ariely, author of Predictably Irrational, stems from people's short memories. "Research shows that, after just three times having results go one way, people already think that that will continue." And professional investors are not immune.^{1,2}

Strong recent performance in the equity markets may have lulled some investors into a false sense of security. Meir Statman, Professor of Finance at Santa Clara University, explains how this can happen. "Many investors now think of the GFC as a blip, like the crash of '87, because the recovery was relatively fast. When we look back, we say 'that was a small thing'. And that, of course, can be dangerous."

Moreover, recent volatility, although now rising, has been at historically low levels for an extended period of time, and spikes have been short-lived as markets continue to rise. In addition, some experts worry that investors may have learned the wrong lessons from the GFC. In the words of Harry Markowitz, pioneer of portfolio theory, investors are "always fighting the last war," when in fact "all crises are different". Professor Andrew Clare, Cass Business School, believes that this may help to explain why investors feel so confident. "One of the problems is that people tend to focus risk management on the last crisis and what caused the last problem. So investors may feel confident that they are well protected for the last crisis. Invariably, the next crisis or major drawdown will be due to some unforeseen issue."

Interestingly, despite having confidence in their own resilience and ability to withstand a drawdown, a significant proportion (45%) of investors believe that most other institutional investors and pension funds are underprepared for volatility. This could be taken as another sign of investors' high confidence in their own expertise, believing it to be more advanced than that of their peers.



1. THE LURE OF EQUITIES

Although 2014 did not see the great rotation into equities that many had expected, the asset class remains a vital one for investors. With yields on other asset classes falling to all-time lows, equities continue to look attractive by comparison.

"We're in an environment where people are recognizing that expected returns are likely to be lower than in the past," says Dan Farley, Chief Investment Officer of Investment Solutions at State Street Global Advisors. "If investors are going to have any chance of meeting their long-term returns, they need to keep equities in their portfolio."

Indeed, investors may feel that they have little choice. More than half say they would reduce their allocation to equities but feel there is no alternative asset class that provides similar performance potential. The prolonged period of low interest rates – unprecedented in recent history – has forced many to increase their risk appetite as they aim to increase returns.

Moreover, equities have, for the most part, provided excellent returns in recent times. For example, the bull market in American equities is now in its seventh year. In early 2015, the Dow Jones Industrial Average and the S&P 500 both hit record highs fuelled by extraordinary corporate earnings growth. The FTSE Developed Europe index shows a five-year total return (to 27 February 2015) of approximately 87%.⁴ As a whole, emerging markets have also done reasonably well. The FTSE Emerging Markets index, for example, shows a total return of almost 23% over the same five-year period, with individual markets performing better.⁵

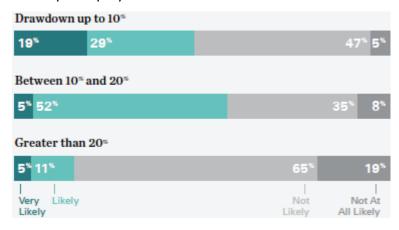
1.1 Volatility ahead

Looking ahead, investors expect increasing volatility and stock market drawdowns in both developed and emerging markets. The majority expect a drawdown over the next 12 months, particularly in emerging markets, with most thinking that a negative market correction exceeding 10% is likely in this timeframe. Furthermore, more than half think a downturn of 10% to 20% is likely. And almost half of investors (44%) believe the equity market is overvalued and a correction is already overdue. This sentiment is felt most strongly in the US, where 57% believe that a correction should already have happened. In Asia Pacific, 42% feel the same and, in Europe, just 37% believe that a correction is overdue.

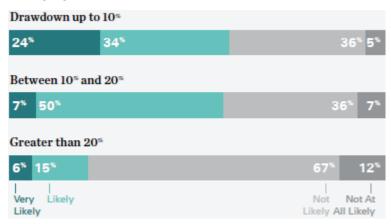


How likely do you think it is that equity markets will see a drawdown in the following ranges?

Developed equity markets



Emerging equity markets



As markets in the US, UK and Germany reach all-time highs, many experts and commentators are concerned about market prospects. There is also rising investor uncertainty. After years of accommodative monetary policy, the US Federal Reserve is poised to raise rates. Recent oil price falls are at once fuelling economic growth and creating turmoil and fears of possible recession in Russia and other oil-producing countries. And there are rising concerns about an economic slowdown in China. "I think there are a few problems ahead," says one senior investment and risk executive who we interviewed for this report. "I would expect a flat year for equity returns."



Which factors do you think are most likely to cause a market drawdown

Factor	
Rising geopolitical risk	43%
Slowing growth in emerging markets	41%
Global economy slips back in recession	38%
Significant fall in oil prices	33%
Disappointing corporate earnings	33%
Deflationary pressures in the eurozone	27%
Ongoing concerns about high unemployment	21%
Tightening by central banks	20%
Spread of ebola or other pandemic risk	9%
Other	6%

Rising geopolitical risk and slowing growth in emerging markets are seen by investors as the most likely cause for a drawdown. "At the moment, there is a lot of geopolitical uncertainty with Russia, Ukraine, Greece and the Levant," explains Professor Brian Scott Quinn, Henley Business School. "If we were to see further deterioration in these areas at the same time, then investors in equities would be in big trouble."

All these geopolitical flashpoints are located in or near Europe, which helps explain why European investors in our survey are the most likely to expect rising political risks to drive future volatility. Half (51%) of European investors see geopolitical risk as a principal cause of drawdown, compared with 36% in the US and 36% in Asia. Conversely, Asian investors are more likely to see slowing growth in emerging markets as the main cause (57%), which is much higher than the 31% and 40% in the US and Europe that consider this to be a driver.

1.2 Equities remain attractive

Despite concerns about increasing downside risks and the likelihood of a correction, investors have, for the most part, been expanding equity holdings over the past six months.

Hideki Takayama, Chief Investment Officer at State Street Global Advisors (Japan), believes investor interest in equities forms part of a worldwide trend. "The challenges that investors face are very common on a global basis," he explains. "Low interest rates mean that keeping



a fixed income is not enough for investors to target a minimal rate of return. They are forced to take some equityrelated risk."

Almost two-thirds (63%) have increased their holdings of developed market equities and almost half (48%) have increased their allocation to emerging market equities. Of those that have increased their investments in equities, nearly three-quarters (74%) have seen their investments perform ahead of the benchmark during the past year.

If you have increased your allocation to equities over the past six months, what were the reasons for this?

Factor	
Pressure to meet funding requirements	64%
Pressure to meet objectives	58%
Equity markets continue to offer good value	55%
Lack of opportunities to earn a return with other asset classes	47%
Market movements have increased allocation without action on our part	23%
Other	3%

As the charts above show, pressure to meet funding requirements has been a major driver behind investors' decisions to increase their allocation to equities, with almost two–thirds (64%) giving this as a reason. In the UK, the shortfall in private sector pension plans rose to a record £367.5 billion at the end of January.⁶ More than 5,100 pension schemes were in deficit out of the almost 6,100 tracked by the Pension Protection Fund. There is a similar story in many other markets: in the US, for example, the 25 largest US public pensions face around \$2 trillion in unfunded liabilities.⁷ And, in Japan, the country's \$1.1 trillion Government Pension Investment Fund is radically overhauling its investments in an effort to improve returns.⁸

1.3 Opinions vary on market resilience

Although the majority of investors believe that a drawdown in equity markets is likely, our survey suggests that there is a divergence of opinion about its probable scale. Similarly, investors are split about the extent to which asset valuations could withstand a systemic shock. Around half (53%) of investors believe that asset valuations could withstand an event on the scale of a material slowdown in China or a re-emergence of the eurozone crisis.



Investors in the US are most likely to feel this way, with 69% agreeing that they believe the market to be resilient. Of investors in Europe and Asia, the view is shared by only 45% and 49%, respectively.

2. DOWNSIDE PROTECTION: THE TOOLBOX

Investors who are worried about possible drawdowns in equity markets could, of course, simply reduce their level of equity holdings. But they would also be missing out on the upside potential – which they need – and reducing their expected portfolio returns.

Many clearly see downside protection strategies – which protect against negative returns while enabling unchanged asset allocation – as a key aspect of risk management, with more than four-out-of-five (85%) saying they have implemented such strategies in the past. Although investors have many downside protection strategies to choose from, most are sticking to strategies they understand the best. Dynamic asset allocation, hedge funds (excluding managed futures) and multi-asset class absolute return are the most popular strategies, the best understood, and are also rated as the most effective.

Dynamic asset allocation – through which allocation is changed depending on risk appetite, market environment, momentum and other factors – is the most popular approach to downside protection. More than half of investors (53%) use this strategy, followed by hedge funds excluding managed futures (40%) and multi-asset class absolute return (39%).

While dynamic asset allocation can offer protection, some worry that it is over-reliant on investor forecasting skills. This is particularly true for tactical asset allocation, which attempts to predict future asset class returns across a specific multi-asset class benchmark. In the words of Professor Andrew Clare, Cass Business School: "Underlying the whole idea of tactical asset management is the idea that we can forecast the world. What has been demonstrated over and over again is that humans are very bad at forecasting, particularly financial markets and economic trends."

As asset class returns are notoriously difficult to predict, downside risk management approaches that rely primarily on risk forecasts will often deliver a better outcome.

Many investors are also looking at newer downside protection approaches — such as low volatility equities and volatility targeting — that offer attractive tradeoffs. Some two-out-of-five investors are currently investigating these approaches. Professor Clare is optimistic about the potential of some of these new strategies. "At Cass, we've been researching downside protection from investment strategies which don't involve paying a premium to an option writer," he says. "In the long term, those strategies work much better. On the whole,



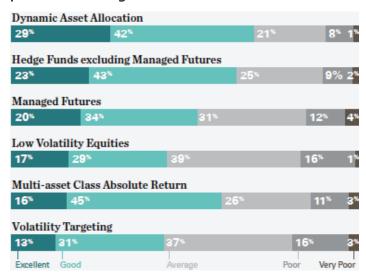
they don't diminish the long-term returns from your equity portfolio, and they give you the downside protection you need."

Rick Lacaille, Global CIO at State Street Global Advisors, has found that low volatility strategies are generating interest from investors who want to try different approaches. "They're asking, 'Is there a different way of thinking about equities other than the capital asset pricing model view of the world?'" explains Mr. Lacaille. "We've had spikes in volatility and we can see that those low volatility strategies did de-risk or deliver lower beta."

Which of the following downside protection strategies are you using, and which are you planning to use in the future?



How would you rate your knowledge and understanding of the following downside protection strategies?





2.1 A question of risk management

More generally, the survey raises questions about firms' abilities to measure risk. Less than a fifth of investors (16%) agree strongly that they have the right mix of tools in place to measure and predict market risk. They also seem unclear about which performance measurements to use. Sixty-eight percent are still measuring portfolio performance against 'recognized market benchmarks' compared with 58% against more 'bespoke portfolio objectives.'

High levels of confidence may help explain why, despite recent volatility and investors' own expectations of a correction, many are not seeking increased downside protection. More than two-out-of-five investors (41%) have made no change to their protection, believing volatility to be the 'new normal'. This opinion is most pronounced in Asia, where it is shared by 68% of investors.

A lower proportion of investors in the US and Europe believe that volatility is the new normal – at 39% and 29% respectively. Asian investors are also the most likely to profess confidence in their portfolio's ability to weather a correction, with 96% agreeing with this sentiment (compared to 89% in both the US and Europe).

For many, the belief that market volatility is the new normal may give them confidence that they can live with short, sharp shocks followed by rapid recoveries. At worst, this confidence may dissuade them from exploring the full range of options available, which could make them vulnerable to a prolonged bear market or to a significant market shock. In preparation for future volatility, investors should first ask themselves what level of drawdown their portfolios could reasonably withstand.

What impact has recent volatility had on your approach to increasing your level of downside protection?

Impact		
A slight impact – we are reviewing our need for downside protection	36%	
A significant impact - we are currently implementing increased downside protection	8%	
None - short-term volatility is now the norm	41%	
None - we have already planned for volatility	15%	



To what extent do you agree with the following statements?

	Agree strongly	Agree slightly	Neither agree nor disagree	Disagree slightly	Disagree strongly
We have the right mix of tools to measure and predict market risk	16%	44%	30%	10%	-
We have changed our investment strategy to be prepared for market volatility	13%	47%	28%	9%	3%
Our assets are adequately diversified and could withstand drawdown in one or more asset classes	19%	43%	29%	8%	1%
The right level of diversification is sufficient to protect an investment portfolio from potential drawdowns	22%	43%	28%	6%	2%
We find it difficult to make the right choices about downside protection strategies	16%	40%	28%	11%	5%

2.2 Downside protection evaluated

Just over a quarter say their strategies have provided an optimum level of protection, with a good balance of return and protection. However, 39% say that their strategies have either led to more negative performance against portfolio objectives or have limited the upside they could otherwise have gained. Timing is certainly a factor. "Some investors who have implemented asset allocation decisions over the past couple of years have been rueful because they feel like they've lost money," says Lori Heinel, Chief Portfolio Strategist at State Street Global Advisors. "As the market strikes a new high, there's a sense they've missed the boat."

Indeed, not only have some investors let their protection lapse – after paying for downside protection for a crisis that never actually took place – they have also decided to sell volatility protection themselves. Speaking in the Financial Times, Ramon Verastegui of Société Générale said: "Those investors who had been looking to hedge their portfolios in the past,



now looking for yield, switched their hedges for speculative short positions... They decided to be on the other side of the trade, and moved from being long to being short vol."10

Investors also need to understand that protecting their portfolio against downside risk involves costs, either explicit or through giving up upside potential. "We understand that if you're reducing risk then you're likely to be reducing return," says a senior investment and risk executive interviewed for this report. "So, if the equity market rises by 20 or 25%, you're not going to participate in all of that. The real payback comes in the tail risk years when you have a very negative equity return outcome."

As this survey was undertaken during a period when markets were buoyant, investors may have paid out money to insure themselves only to feel in retrospect that they paid for something that was unnecessary. Professor Meir Statman believes that this is a mistaken view. "Investors should expect to have periods of time where they look back and find that they've paid for protection without using it," he explains. "The analogy is to look back at the fire insurance on your home – you are not going to think that, after a lifetime, it was a waste of money if there was no fire. The real question is: are you making the right decision in terms of your desired risk parameters?"

More generally, Professor Andrew Clare believes that, in many cases, investors leave it too late to think about protecting their portfolio.

2.3 Investors' ongoing faith in diversification

Despite the lessons of the GFC, in which portfolio diversification did little to protect investors' holdings, respondents continue to have a strong belief in that approach. For example, more than three-fifths (62%) are confident that their assets are adequately diversified to withstand drawdown in one or more asset classes. Almost two-thirds (65%) believe that diversification is sufficient to protect their portfolio from drawdowns.

Professor Statman believes that diversification has an important role to play. "Diversification is certainly a useful downside protection method," he says. "When you divide your portfolio among many assets you know that your return is going to be somewhere in the middle. The benefit of diversification is risk reduction. But it's not a perfect downside protection in the sense that it does not have an absolute floor below which we cannot fall."

According to State Street Global Advisors' Asia Pacific Investment Solutions Group, diversification only offers a limited amount of protection and is successful approximately just 65% of the time. As a result, it does not protect a portfolio from drawdown during major market ev ents and is successful primarily in normal and low-risk periods.

Professor Geczy, Adjunct Professor of Finance at Wharton, worries that investors may feel they are more diversified than they actually are. "A typical diversified portfolio is heavily driven by equity risk," he says. "The problem with a 60/40 portfolio is that, when it comes to equity risk, it's not 60/40; it's more like 94/6. Because a US 60/40 portfolio has done so



well in the past three or four years, they're feeling diversified on paper. I don't think many of them are, and they've made bets or allocations to growth, and the sensitivity of a downside is they feel diversified, but may not be."

And Richard Brandweiner, CIO of First State Super, an Australian superannuation fund, points out that correlations between asset classes have been changing. "The traditional way to smooth returns was to diversify the portfolio across equities and bonds. The challenge now is we've had a 30-year bull market in bonds. The correlation between equities and bonds is unstable at best particularly because it's prone to breaking down when bond yields reach the levels that they're currently at, where yields are at low levels.

3. GETTING IT DONE - IMPLEMENTATION CHALLENGES

3.1 Finding the right strategy

With such a wide range of solutions available, the majority of investors (56%) say they find it difficult to make the right choices about downside protection strategies. This is most pronounced in the US, where 70% agree with this statement, followed by Asia (60%) and then Europe (43%). For one-third of investors overall, a key implementation challenge is in getting the knowledge and confidence to feel comfortable with the tools. Again, this sentiment is most pronounced in the US, followed by Asia and then Europe.

"It's straightforward to have the client understand the benefits, risks and trade-offs," says Lori Heinel of State Street Global Advisors. "What's harder is for them to grasp the underlying mechanics. These can be very sophisticated strategies, involving derivatives and complicated models, so it can be tough for an investor to understand what's going on."

This is compounded in some cases by trustees' lack of expertise. "In the UK, for example, the main barrier is the way that UK pension schemes are managed and run by a board of trustees," explains Rory Tobin, Head of European Distribution at State Street Global Advisors. "They don't necessarily have both the time and the day-to-day familiarity with some of the more complex arrangements."

Richard Brandweiner believes that pension funds need to spend their governance budgets more wisely. "Clearly, the worst outcome is an organization that doesn't have the right skills, resources and technology entering into transactions they don't understand. But there are many organizations that do have the capability of being able to deal with it as well." And Richard Brandweiner, CIO of First State Super, an Australian superannuation fund, points out that correlations between asset classes have been changing.



3.2 What are the main challenges

- **Timing** is seen as the biggest challenge when implementing downside protection, as indicated by more than half (54%) of respondents. Investors also consider timing considerations to be the largest barrier preventing their institution from using strategies. During a market rally, for example, investors will often be less willing to forego returns. Yet the cost of protection goes up in line with volatility.
- **Cost** is the second largest barrier to using downside protection, identified by 18% of investors. "The client's own fiduciary responsibilities mean they have to make sure they fully appreciate and understand the cost, and they may feel it may not be worth it, or they don't understand completely the costs that are involved," says Lori Heinel of State Street Global Advisors.
- **Education** may also have a role to play here. While there can be significant deadweight costs associated with particular strategies, in particular option-related strategies, not all approaches have the same costs.
- **Regulation** is another concern. Some strategies, such as derivatives, and some markets, like Japan and Asia, face significant levels of regulation. "Some of these strategies may employ instrumentation like swaps or futures," says Kristi Mitchem, Head of the Americas Institutional Client Group at State Street Global Advisors. "So, to the extent that there's regulation that actually prohibits or decreases liquidity in the marketplace, it could have an impact on the efficacy of these strategies."

What is biggest barrier to you using downside protection strategies?

Barrier	
Sense that the timing is wrong	18%
High perceived cost	18%
Regulatory restrictions	16%
Complexity of strategies available	10%
Past disatisfaction with downside	6%

3.3 Peer group pressure and herding

"Investment success requires sticking with positions made uncomfortable by their variance with popular opinion." So says David Swensen, Yale's chief investment officer. With significant pressure on investors to achieve investment performance in line with peers, many



are reluctant to implement downside strategies that would lead them to underperform their peers.

"In the short term, there is no doubt that some of these downside strategies look and behave differently," says State Street Global Advisors' Dan Farley. "When you start to see diversions from benchmarks, or diversions from peers, that is often something that causes angst amongst investors and I think that creates a challenge for individuals who recommend them."

This view was echoed by a number of CIOs interviewed. Said one: "Human nature is that people can understand the value of downside protection strategies in rational times, but when markets are running hard – and you're lagging behind on your return targets, liabilities or peers — it can put enormous pressure on an organization and a team. That requires discipline, a lack of emotion, and conviction in the strategy." In a recent article in the Financial Times, John Authers makes the connection between asset managers' assets under management and unwillingness to risk underperforming the benchmark. "To hold on to assets, therefore, it is vital [for fund managers] not to underperform their peers. Make a big contrarian bet and you may be separated from the herd." 12

A recent study, The market for lemmings: Is the investment behavior of pension funds stabilizing or destabilizing?, also found that pension funds herd in and out of different asset classes in what it calls "reputational herding." ¹³

What are the biggest challenges implementing downside protection strategies?

Challenge		
Timing the implementation	54%	
Adjusting the strategies in response to the changing market environment	35%	
Gaining the knowledge and confidence to feel comfortable with the tools	33%	
Choosing the right provider for the tools	32%	
Getting the balance right between paying for protection and sacrificing the upside	29%	
Choosing the right tools to meet our needs	25%	
Communicating with stakeholders about their benefits	23%	



3.4 Regional use of strategies

The chart below illustrates the proportion of investors in different regions that are using different approaches to downside protection.

Investors in Europe are the most likely to use dynamic asset allocation strategies, as well as new approaches such as low volatility equities and volatility targeting.

In Asia, as in the US, multi-asset class absolute return, dynamic asset allocation and hedge funds (excluding managed futures) are the most popular strategies.

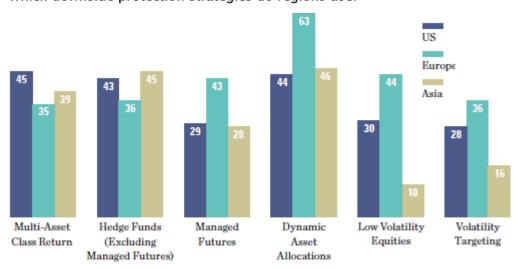
European investors appear more risk-averse than their US counterparts, which is reflected in their choice of asset allocations (particularly in Germany, France and Italy, where investors have significantly more bonds than equities in their portfolios).

European investors looking to increase their equity allocations might therefore be more likely to use downside risk protection and would find dynamic asset allocation, low volatility and managed volatility to be the most suitable approaches.

It appears that Asian investors may also be slightly more risk averse than US-based investors, which would also have an impact on their respective attitudes and preferences towards solutions.

On the role of hedge funds, a greater number of US investors may use them because – for institutional and regulatory reasons – it is more difficult (and costly) for many European investors to invest in these vehicles.

Which downside protection strategies do regions use?





4. DOWNSIDE PROTECTION STRATEGIES COMPARED

Diversification

- Main features Aims to smooth returns by diversifying the portfolio across equities, bonds and cash.
- Upside participation? Y
- Explicit cost? N
- Uses Derivatives? N
- Strength Simplest and most cost-effective approach of limiting exposure to equity volatility. Traditional, well-understood approach.
- Drawback Portfolios tend to have more equity risk than simple asset breakdowns suggest. Correlations between asset change over time. Bond yields too low to offer diversification.

Managed Volatility

- Main features Targets the purchase of low-volatility equities. These strategies offer similar returns to the equity market with significantly less drawdown risk.
- Upside participation? Y
- Explicit cost? –N
- Uses Derivatives? N
- Strength Equity-like-returns over time with less volatility.
- Drawback Lags in high beta rallies; does not protect in extreme cases.

Dynamic Asset Allocation

- Main features Asset-allocation mix is dynamically adjusted to match expectations about market conditions — allocating less risky assets in higher-risk market regimes and more risky assets in safer times.
- Upside participation? Y
- Explicit cost? -N
- Uses Derivatives? Could be implemented with derivatives if desired.
- Strength Absolute return outcome; lower volatility than a traditional multi-asset class portfolio.



• Drawback – Risk of mistiming market regimes; tends to lag in equity returns in bull markets.

Target Volatility Triggers

- Main features Rules-based strategy that dynamically adjusts the exposure of assets
 within a portfolio to target a consistent level of portfolio risk. When volatility is high,
 exposure to equity is reduced.
- Upside participation? Dependent on client's selected volatility target.
- Explicit cost? Higher trading costs.
- Uses Derivatives? Could be implemented with derivatives if desired.
- Strength Client can set a targeted volatility level.
- Drawback Will not protect against "gap downs", where stocks open lower than they closed the previous day.

Hedge Funds

- Main features Unconstrained investment strategy using discretionary, judgmentbased approach to investing to deliver absolute returns. Portfolios can include equities, fixed income, commodities, currencies, and private equity. Uses hedging and derivatives.
- Upside participation? -Y
- Explicit cost? Y
- Uses Derivatives? Y
- Strength -Uncorrelated absolute return.
- Drawback –Declining average performance; beta embedded in many hedge fund strategies; high costs.

Multi-Asset Absolute Return

- Main features Funds that aim for absolute return by investing in multi-asset portfolios such as equities, fixed income, commodities, currencies, and private equity. Uses hedging and derivatives.
- Upside participation? Returns may be capped on the upside.
- Explicit cost? Y
- Uses Derivatives Y
- Strength Absolute return outcome; lower volatility than a traditional multi-asset portfolio.



 Drawback - Risk of mistiming market regimes; tends to lag in equity returns in bull markets.

Managed Futures

- Main features Managed futures target absolute returns by trading futures contracts on a wide variety of assets including equities, fixed income, commodities and currencies. Primarily trendfollowing strategies.
- Upside participation? Y
- Explicit cost? Y
- Uses Derivatives Y
- Strength Positive performance during equity bear markets. Adds divergence to portfolio of funds.
- Drawback Can be expensive.

5. THE WAY FORWARD

The survey indicates that investors today are not yet exploring the full range of downside protection strategies available to them. While the majority of investors are aware of the need for downside protection, many appear over–reliant on diversification and tactical asset allocation. Investors are also largely unfamiliar with newer, more sophisticated strategies and do not have the right tools to measure risk.

Yet many investors find themselves in a complex position, which can make it difficult for them to find the right strategy for their portfolio. Most are aware that a significant drawdown is a possibility in the near future, but they also need the upside potential that equities should provide. At the same time, many are concerned that the high cost of volatility management strategies increases their career risk. For some, overconfidence in their own abilities – informed by strong market performance in recent years – is dissuading them from exploring all the solutions available.

To ensure they are using the protection strategies best suited to their portfolios, investors should focus on three key areas: enhancing communication around potential costs; exploring a wider range of benchmarks; and improving education around the different solutions available.

5.1 Communication

Recognizing the pressure that investors are under, senior executives need to communicate to stakeholders and manage expectations as to the likely costs, particularly in terms of



potential upside foregone. Executives also need to be able to explain the reasons behind underperformance, should it materialize, to other stakeholders and board members.

"The most important thing for most pension funds is really a governance question between the board of trustees and management, to ensure that there's an appropriately clear understanding of time horizons over which performance is to be assessed," says one of the CIOs interviewed.

"Communication can be challenging," says another executive interviewed for this report. "There isn't always an incentive for the chief investment officer or CEO to keep the board informed. Downside protection is the kind of thing where that can be very difficult for the board to understand. There is a danger of giving them too much information where they either can't make any decisions or feel that they have to make decisions which really are better left to the organization."

5.2 New benchmarks

It could be beneficial for investors to reconsider their investment benchmarks and their approach to risk measurement. The authors believe investors should explore new benchmarks like the managed volatility indices across a range of providers (such as Russell or MSCI), which are specifically designed to evaluate the efficacy of downside protection strategies. Investors could also consider objective–based investing, which measures the portfolio against a desired result rather than a traditional index.

5.3 Essential education

Investors recognize the need for more education around the range of strategies available. When asked what could help them understand more about solutions that provide upside participation while protecting the downside, 56% ask for more straightforward strategies. If simpler strategies aren't available, over half see better education (53%) and transparency (51%) as key tools to aid their understanding.

While investors generally feel that they have a good understanding of strategies like dynamic asset allocation and multi-asset class absolute return, only a minority feel they have a good understanding of volatility targeting and low volatility equity portfolios.



What could the investment industry do to help you understand more about downside protection strategies?

More straightforward strategies	56%
Better education	53%
Transparency	51%
Ease of access	48%
Strong reporting capabilities	48%
None of these/ not applicable	3%
Other	2%

Yet, volatility targeting and low volatility equity portfolios may offer investors the most attractive balance of cost and return. As standalone strategies that can be implemented within the equity component of a broader portfolio, they can be relatively simple to implement and are not necessarily expensive from a management fee perspective.

Professor Andrew Clare believes that many investors have a limited understanding of many downside protection techniques. "Generally, if investors think about downside protection, they have only in mind option-like strategies, which will drag on performance over time. I think there's a very limited understanding of the potential of non-optioned strategies."

Thomas Poullaouec, Regional Head of the Strategy and Research Group at State Street Global Advisors, says investors should drive a broad-based approach to education across different levels of the organization. "Typically," he says, "the investment experts know what they want to do after discussion. What is difficult is to get their investment committee brought to the same level of education."

But investors should also accept that education can take time. For example, they may find it challenging to educate the various trustees to an extent that they are informed enough to make decisions.



ENDNOTES

- 1. Overconfidence Among Professional Investors: Evidence from Mutual Fund Managers
- 2. http://cass.city.ac.uk/_data/assets/pdf_file/0019/126730/Eshraghi.pdf
- 3. Ziggy Stardust fears still haunting stocks, Financial Times
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- 6. PPF 7800 Index Update, Pension Protection Fund
- 7. U.S. public pension gap at least \$2 trillion, Moody's
- 8. Japan pension fund commits to big switch to stocks, Financial Times
- 9. Caught on the wrong side of the 'vol' trade, Financial Times
- 10. Caught on the wrong side of the 'vol' trade, Financial Times
- 11. Pioneering Portfolio Management
- 12. Pull Closet Indexing out of the closet, Financial Times, Financial Times
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This report explores institutional investors' attitudes toward equity market risk and looks at the downside protection strategies they are using to insure their portfolios against volatility. State Street Global Advisors commissioned Longitude Research, a UK-based agency specialising in global financial sector research, to survey 420 senior executives with the authority to make investment decisions on behalf of private and public pension funds, endowments and foundations, and sovereign wealth funds. To provide a global picture of equity risk, the survey covered Asia Pacific, Europe and the US.