Economist Intelligence Unit

The Economist

Managing investments in volatile markets

How institutional investors are guarding against tail risk events

A report from the Economist Intelligence Unit

COMMISSIONED BY:

STATE STREET GLOBAL ADVISORS.

Contents

Executive summary

The concept of managing tail risk as part of investors' overall risk-management objectives is not new, but it has gained a considerable profile as a result of the major tail risk events that characterised the 2008-09 global financial crisis and subsequent market volatility. Both recent history and uncertainty about the future are reflected in changing attitudes to mitigating the impact of tail risk events, including raising levels of protection and reassessing the products and strategies used to protect portfolios.

In order to determine how changing perceptions of tail risk have affected the investment strategies of institutional investors, the Economist Intelligence Unit, on behalf of State Street Global Advisors, conducted a survey of over 300 investors from the US and Europe, including institutions, pension funds, family offices, consultants, asset managers, private banks and insurance funds.

Key findings of the survey include:

- **Tail risk events are always underestimated**

Over one-half (51%) of survey respondents agree that even those investors who believe that they have a deep understanding of the notion of tail risk almost always underestimate its frequency and severity. Few respondents (14%) believe that most institutional investors have a very good grasp of the frequency and severity of tail risk events.

- **The next tail risk event is expected imminently, stemming from Europe**

Although tail risk events are by definition unpredictable, investors are very sensitive to their possibility. Almost three-quarters (71%) of respondents believe that it is highly likely or likely that a significant tail risk event will occur in the next 12 months, with the cause expected to be related to ongoing European instability.

- **The benefits of diversification are not clear—but most investors continue to diversify**

Almost one-half (47%) of respondents agree that the long-held belief that diversification of a portfolio across traditional asset classes of equities and bonds would provide some form of insulation against tail risk events has been disproved. There also has been a slight decline since the global financial crisis in the number of respondents who use diversification as protection against a future shock. Yet, despite evidence of increasing correlations, it is still selected as the most effective mitigation technique compared with other strategies.

- **Investors weigh both effectiveness and value when choosing strategies**

Given that the rating for fund of hedge fund allocation was the lowest among selected strategies in terms of value, it is not surprising that allocation to this strategy has dropped significantly since the global financial crisis. But respondents have increased their use of "other alternative allocation" (such as commodities and infrastructure), managed futures/CTA allocation and managed volatility equity strategies (or 'minimum variance equity'), which have higher ratings in terms of value.

- **Investors are not entirely confident that they are protected from the next tail risk event**

Only 20% of respondents were very confident, with 21% less than "somewhat confident" that they have some form of downside protection in place for the next significant market event. But the situation is better than before the crisis—almost three-quarters (73%) of respondents believe that, as a result of changing their strategic asset allocation, they are better prepared for the next major tail risk event.

WHAT'S KEEPING INSTITUTIONAL INVESTORS UP AT NIGHT?

71% believe it is likely or highly likely a SIGNIFICANT TAIL RISK EVENT will occur in the next 12 months

WHAT WILL BE THE CAUSE?

Macro worries dominate investors' sleepless nights

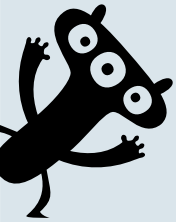
36% The global economy falls into recession

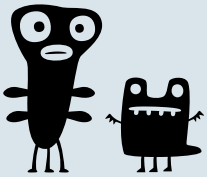
35% Europe slips back into recession

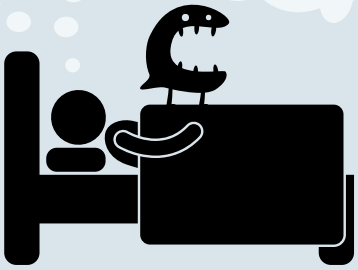
29% Greece exits the Euro

21% US slips back into recession

33% The Eurozone breaks up







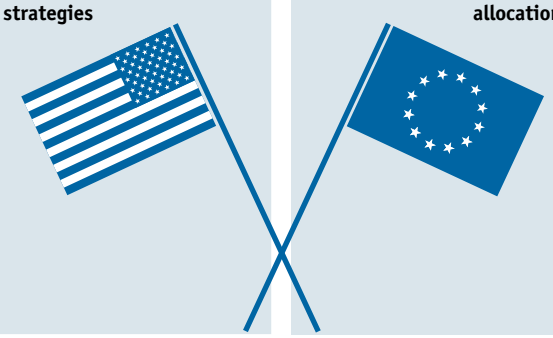
THEIR STRATEGIES FOR PROTECTING AGAINST TAIL RISK VARY

USA vs EUROPE

(Figures are the percentage point change from before the crisis to now)

US investors have changed their strategies by:

- **+8** Other alternative allocation
- **+4** Managed volatility equity strategies
- **-6** Single strategy hedge fund allocation
- **-7** Fund of hedge fund allocation
- **-11** Direct hedging



European investors have changed their strategies by:

- Managed volatility equity strategies **+8**
- Other alternative allocation **+7**
- **+7** Managed futures/ CTA allocation
- Diversification across traditional asset classes **-9**
- Fund of hedge fund allocation **-11**

Source: Economist Intelligence Unit survey of US and European institutional investors

About this report

In June and July 2012 the Economist Intelligence Unit, commissioned by State Street Global Advisors, surveyed 310 institutional investors in the US and Western Europe to investigate their views surrounding tail risk: what specific risks they are concerned about and why, what strategies they have in place to mitigate the impact of tail risk, what they believe other investors know about tail risk and whether tail risk events will happen more frequently and be more severe than in the past.

Respondents were drawn from the UK, France, Germany, Italy, Switzerland, Benelux (Belgium, the Netherlands and Luxembourg) and the US. Investors were grouped by type—institutional investors (such as asset managers and pension funds), family offices, consultants and private banks—and size (assets under management of less than US$1bn and greater than US$1bn).

In addition, in-depth interviews were conducted with six experts from asset-management firms, private banks, consultancies, pension funds and academia. Our thanks are due to the following for their time and insight (listed alphabetically):

- Vineer Bhansali, managing director and portfolio manager at Pimco
- Mouhammed Choukeir, chief investment officer at Kleinwort Benson
- Tim Hodgson, senior investment consultant at Towers Watson
- Bryan Kelly, assistant professor of finance and Neubauer Family Faculty Fellow at the University of Chicago's Booth School of Business
- Sunil Krishnan, head of market strategy at BT Pension Scheme Management
- Norman Villamin, chief investment officer at Coutts

The report was written by Kristina West and edited by Monica Woodley of the Economist Intelligence Unit.

Introduction

Market perception of tail risk since the financial crisis

"Tail risk" is a term that has been used broadly for extreme shocks to financial markets, although it is technically defined as an investment moving more than three standard deviations from the mean of a normal distribution of investment returns. Since the 2008-09 global financial crisis, the occurrence of a number of both large and smaller tail risk events, including the eurozone sovereign debt crisis, the March 2011 tsunami in Japan and unrest in the Middle East, have shocked many investors into the realisation that protecting portfolios against such events must become a more integral part of their investment strategy.

At the time of writing, a US-based credit-ratings agency, Moody's, is predicting that Greece is likely to leave the euro zone and that Spain may seek a full bail-out, which "would set off a chain of financial sector shocks", and that policymakers could only contain these shocks at a very high cost. However, Europe is not the sole cause of concern for global markets. Although tail risk events are by definition unpredictable and unquantifiable, questions need to be asked about what is being done to educate investors about the historical frequency and severity of these risks and how investors can best guard against them while allowing room for performance gains.

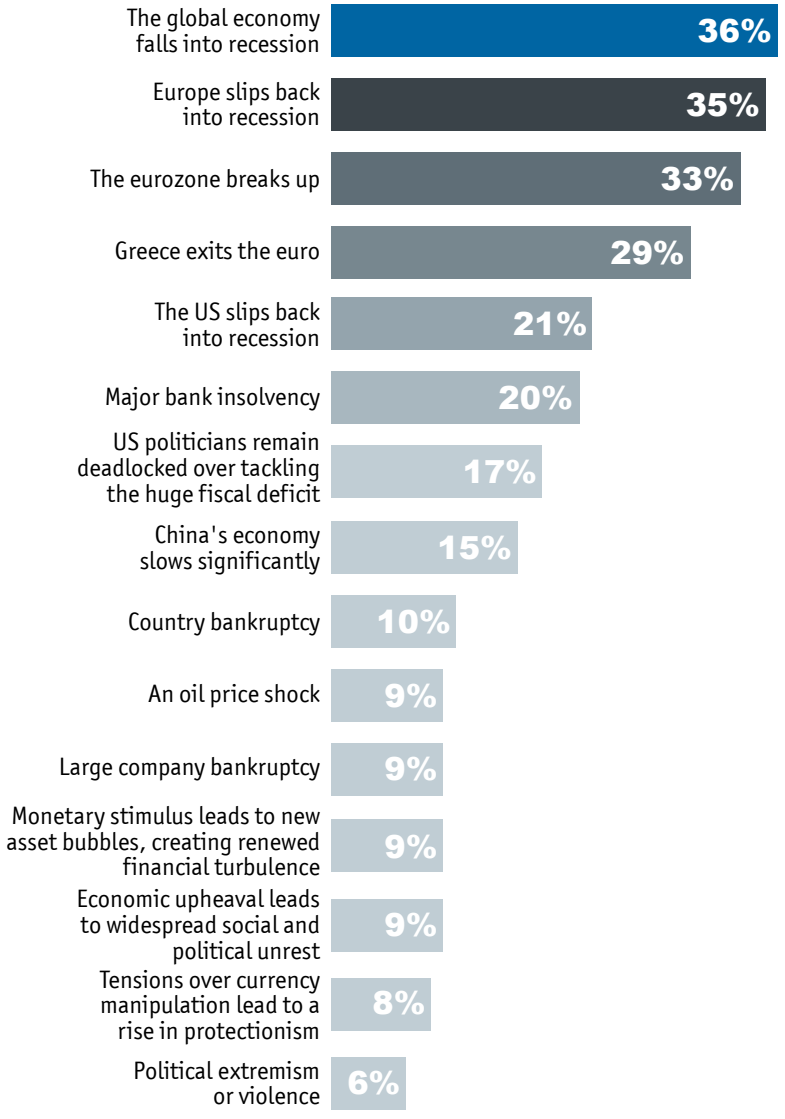
There is a concern among the institutional investors surveyed that even those who are familiar with the notion of tail risk almost always underestimate its frequency and severity. Despite this concern, investors have clearly been sufficiently hurt by recent tail risk events that they are reconsidering their traditional methods of protection.

In this report, we explore the expectations of tail risk events over the next 12 months, look at how investors have already changed their portfolios to reflect this, and consider the trade-off between the cost and effectiveness of strategies used to protect a portfolio.

1 Current expectations of tail risk events

Chart 1

Q What do you feel will be the most likely cause of a tail risk event occurring in the markets in the next 12 months?
Select up to three
(% respondents)



Source: Economist Intelligence Unit.

As the markets remain volatile, it is not surprising that investors are asking themselves and each other: what next? Considering that, in the space of two years, Greece's credit rating has slipped from A1 to C (in effect junk) by Moody's, there is a real concern over what might happen in the next two years and what effect it could have on financial markets. With almost three-quarters (71%) of survey participants believing that it is highly likely or likely that a significant tail risk event will occur in the next 12 months, and only 12% considering it unlikely or highly unlikely, managing tail risk has become a major factor in portfolio management.

The problem with trying to devise a strategy for managing tail risk is that it is always those risks that are not forecast that have the potential to cause the most damage; in one sense, widespread acceptance of a risk event potentially dampens its impact, or even means that it ceases to be a tail risk event, depending on one's definition. Risks such as Greece defaulting and/or exiting the eurozone, for example, although still holding the possibility of causing a significant shock, are now largely expected by the investment community, and most will have factored this into their investment decisions as and where necessary.

As Mouhammed Choukeir, chief investment officer at Kleinwort Benson, comments: "Europe is the current eye of the storm, but it is not really a tail risk now as it is known. The US or Japan defaulting would be, and Japan has a huge burden of debt."

Concerns over Europe are still looming large on the minds of investors, with worries over the

global economy and the possibility of the US returning to recession coming further behind, albeit still with a significant percentage of votes (see Chart 1). The implications of these expectations are potentially twofold: the investment community is aware and preparing for major risks, and, although Europe remains at the centre, other concerns are also being taken extremely seriously.

However, looking at the responses by geographical location uncovers some interesting variations. It might be expected that US respondents would be more concerned than respondents in Europe about a return to recession in the US, and that is true, but not by a wide margin: 23% of respondents in the US versus 19% in Europe. But 28% of Italian respondents also flagged this as a major concern, which may be a result of Italy being more levered to US growth than other European countries, and so a recession in the US would hit them harder, especially as they are on the cusp of a bond market credit event. In addition, UK respondents bucked the trend with their concern about tensions over currency manipulation leading to a rise in protectionism, at 17%, compared with 9% for Europe overall. According to Mr Choukeir, this is likely due to concerns that a weak euro would make the pound stronger and less competitive.

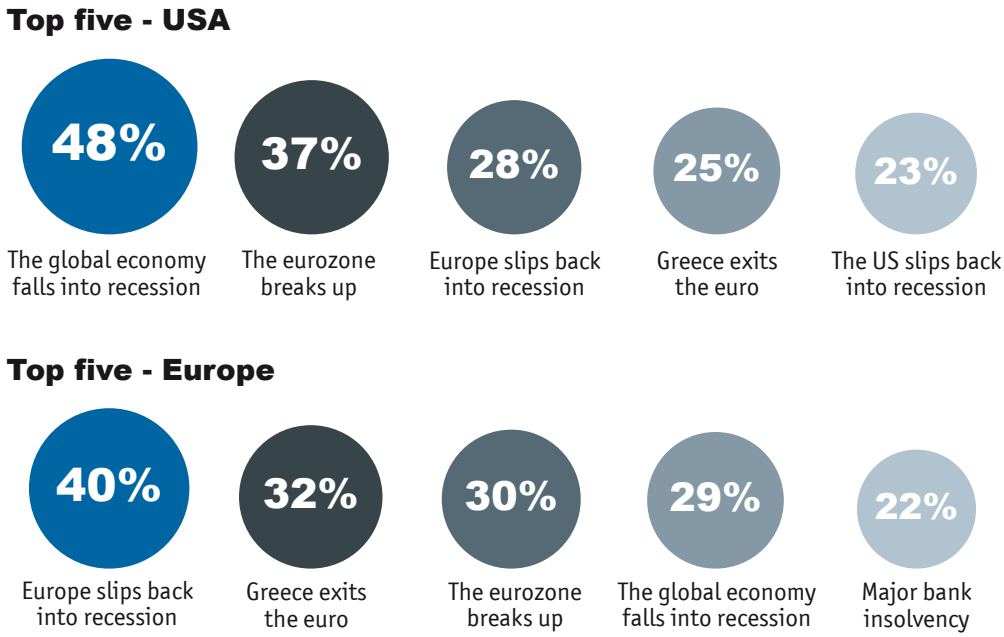
Similarly, in percentage terms family offices were more than twice as worried as private banks over the global economy falling into recession, while consultants were by far the most concerned about a potential economic slowdown in China.

However, these concerns are clearly interconnected. "We believe that stability in Europe's economy is key," says Norman Villamin, chief investment officer at Coutts. "[We need] to avoid a US$15trn economy presenting a drag on the rest of the global economy. With

Chart 2

Q What do you feel will be the most likely cause of a tail risk event occurring in the markets in the next 12 months?

(% respondents)

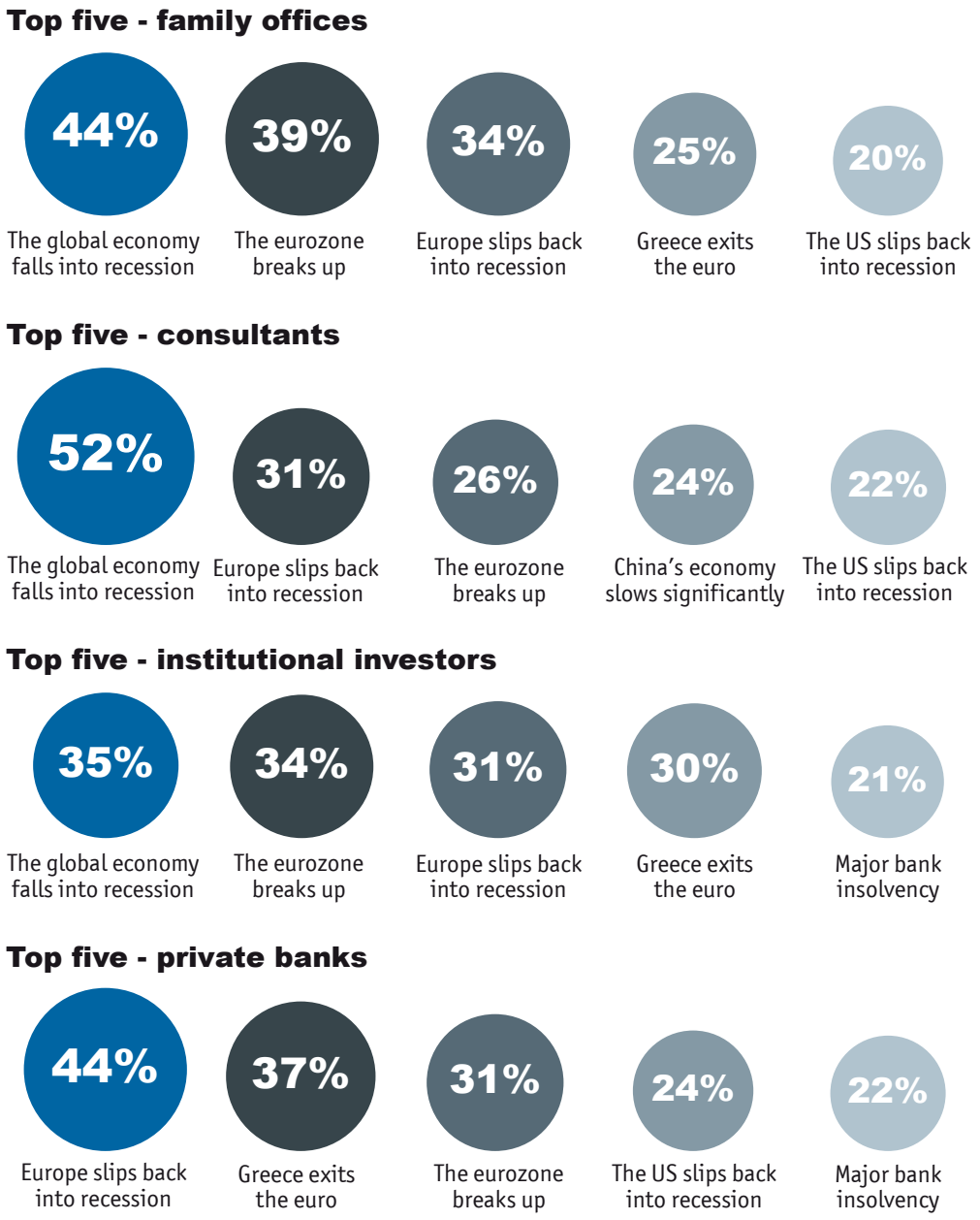


Source: Economist Intelligence Unit.

Chart 3

Q What do you feel will be the most likely cause of a tail risk event occurring in the markets in the next 12 months?

(% respondents)



Source: Economist Intelligence Unit.

Europe as a key trading partner to emerging economies, including China, a relapse back into recession by not only the euro zone's periphery but also Europe's core, like Germany, would have immediate knock-on effects to an already fragile Chinese growth outlook."

It is certainly evident that not everyone is reacting to the threat in the same way. Sunil Krishnan, head of market strategy at BT Pension Scheme Management, says: "We try not to focus too much on very severe or unlikely events which are out of our risk distribution. It is more

appropriate to watch the markets on a regular basis, to keep contact with our trustee board and to focus on events that could hurt us rather than major, unlikely events. We form views on the probabilities priced into the financial markets."

In anticipating the likelihood of a tail risk event, investors need to be aware of which asset class will be hit hardest by such an event. According to Vineer Bhansali, managing director and portfolio manager at Pimco: "The currency markets are currently most exposed, then the debt and equities markets. Governments are trying to protect their own equity markets, so the stock downside risk will be more controlled. If all countries are working for themselves, the shock will come in the inter-country space." Many governments are stimulating their economies by printing money, causing their currencies to depreciate and creating protectionist tensions over exchange rates.

To manage both the expected and the unexpected, over 80% of survey respondents believe that managing tail risk should be an integral part of any comprehensive investment plan. This view is most strongly held by respondents from the US and Italy (83% in each country), while the Germans seem less convinced (60%). Of different investor types, institutional investors and consultants are the strongest believers (87% and 86% respectively), while just 63% of respondents from private banks believe that managing tail risk is integral to an investment plan.

2 What is driving changes in risk strategy?

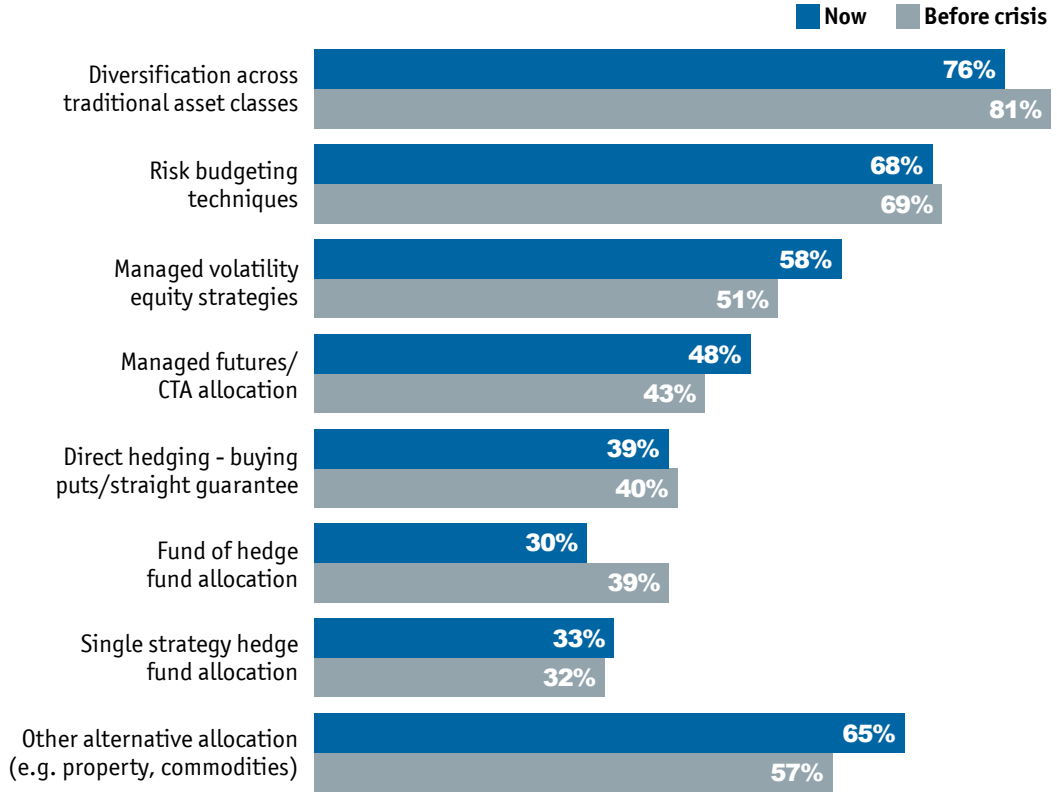
The widespread impact of tail risk events to date has resulted in a large proportion of investors reconsidering the products that are available to mitigate the impact of these events, beyond traditional diversification techniques. These include option-based strategies, alternatives or managed volatility equity approaches.

The survey found a significant decline in fund of hedge fund allocation, with a 9-percentage-point drop from pre-crisis figures, and a clear reduction in diversification across traditional asset classes (of 5 percentage points). Gains were seen in "other alternative" allocation, which includes commodities and infrastructure (7 percentage

Chart 4

Q What strategy(ies) did you have in place before the global financial crisis to protect against tail risk events? What strategy(ies) do you have in place now?

(% respondents)



Source: Economist Intelligence Unit.

points), managed volatility equity strategies (7 percentage points) and managed futures/CTA allocation (5 percentage points).

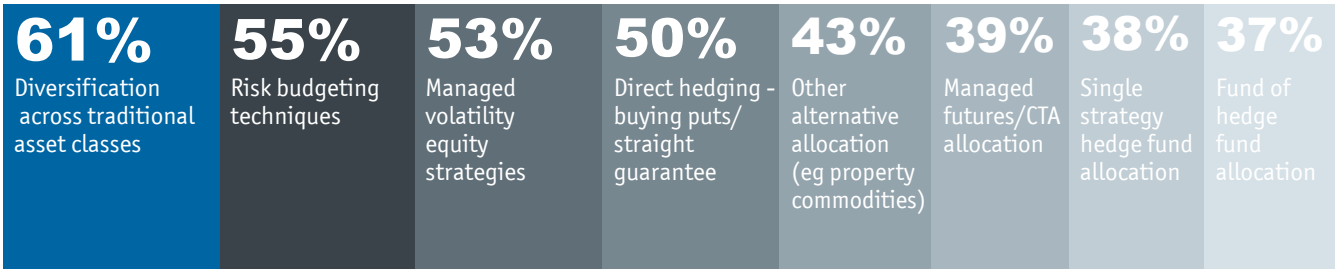
The poor performance of fund of hedge funds in 2008, when they generally failed to provide the downside protection expected, led to a greater focus on the value of the strategy as a tail-risk-mitigation approach. During good times, the two layers of charges (one for management of the overall fund and another for the individual funds held) could be easily overcome with investment returns, but in a low-return environment, management costs tend to be more heavily scrutinised. Indeed, out of the eight mitigation strategies covered in the survey, fund of hedge funds was seventh on the list of best value.

The overall figures that show a decline in the use of diversification across traditional asset classes are misleading. Use of diversification has actually increased for all investor types except for institutional investors, with the decline in use for that group so severe (from 89% to 67% of respondents) that it dragged down the overall average.

Institutional investors may be just the first to recognise—and act on the fact—that traditional diversification is no longer effective for managing tail risk. The increased use of diversification across traditional asset classes by most investor types is puzzling, considering that just 14% of respondents disagree with the statement that the long-held belief that diversification

Chart 5

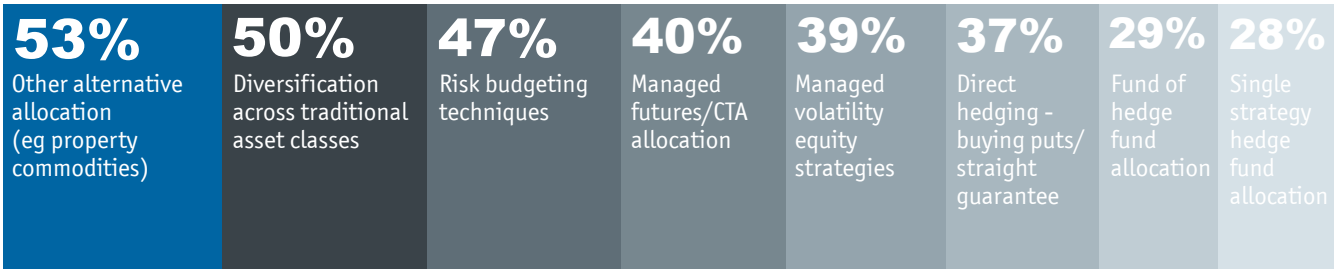
Q What strategies do you feel provide the most effective hedge against tail risk?
(% respondents)



Source: Economist Intelligence Unit.

Chart 6

Q Which strategies do you feel provide the best value hedge against tail risk?
(% respondents)



Source: Economist Intelligence Unit.

would provide some form of insulation against tail risk events has been disproved. Compared to the other strategies covered by this survey, diversification is still seen as the most effective and the second best for value. (Unsurprisingly, institutional investors rated diversification as less effective than the other investor groups, although they did have the highest levels of use of diversification before the global crisis, at 89%, compared with 80% of family offices, 77% of private banks and 76% of consultants.)

Other strategies that have seen an overall increase in use also rate highly for value or effectiveness. Other alternative allocation is considered the best value strategy, while managed volatility equity strategies are the third most effective. The rise in use for managed futures/CTA allocation is surprising, given its lower ratings for effectiveness and value in the survey. CTAs did, generally, bear up well in terms of performance in 2008, and so the survey data may indicate some ongoing uncertainty or wariness around the black-box approach of these types of strategies.

Different strategies for different investors

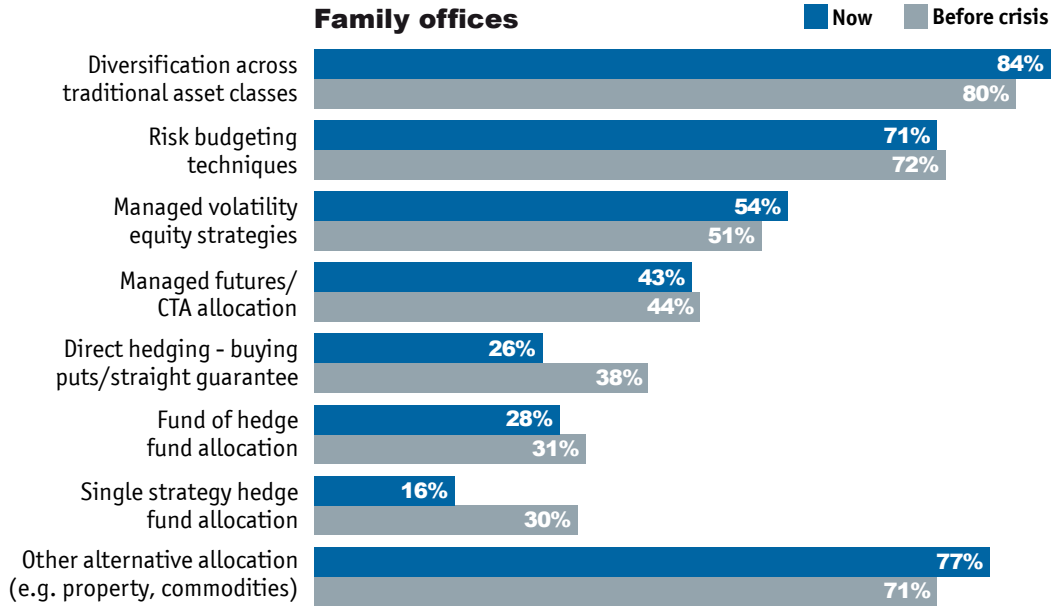
Looking at the survey results by investor type, the overall figures mask a few significant differences and shifts in strategy by some investors. Private banks have been the most active in changing their approach to managing tail event risk—shifts were seen in seven of the eight strategies covered by the survey, with only their use of diversification holding steady. The biggest increase was of other alternative allocation and use of managed volatility equity strategies (up by 14 and 13 percentage points respectively) and the biggest decrease was in fund of hedge funds, down by 11 percentage points.

Institutional investors also made substantial changes, with only their use of other alternatives holding steady. The largest increase was use

Chart 7

Q What strategy(ies) did you have in place before the global financial crisis to protect against tail risk events? What strategy(ies) do you have in place now?

(% respondents)

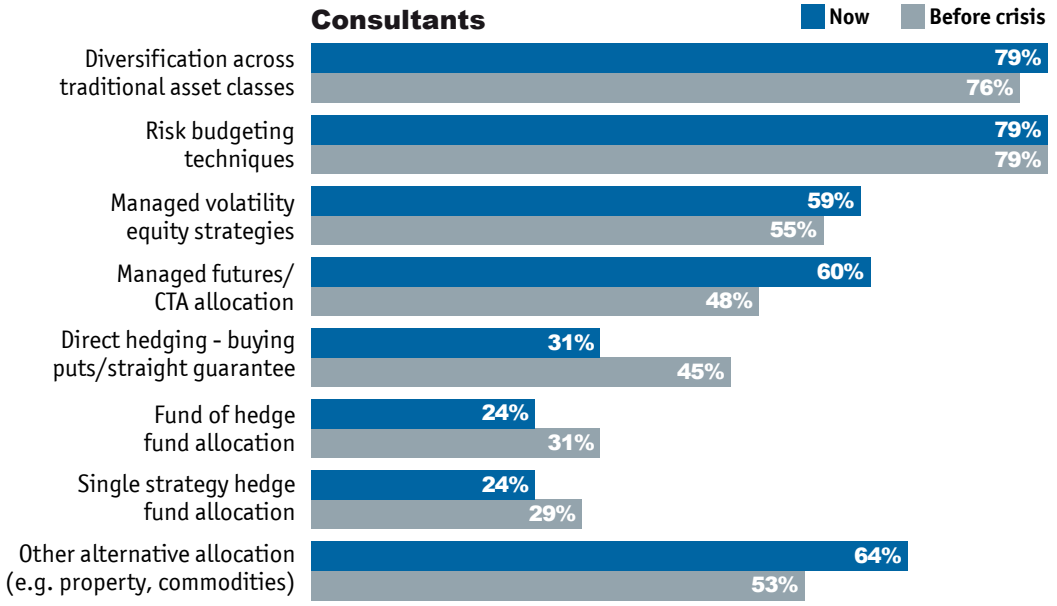


Source: Economist Intelligence Unit.

Chart 8

What strategy(ies) did you have in place before the global financial crisis to protect against tail risk events? What strategy(ies) do you have in place now?

(% respondents)

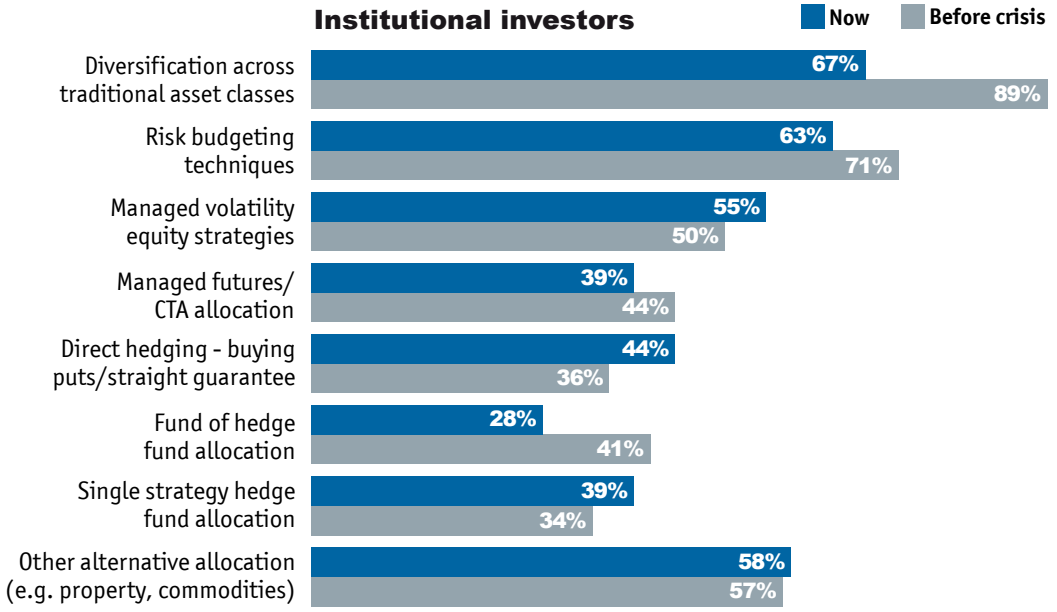


Source: Economist Intelligence Unit.

Chart 9

What strategy(ies) did you have in place before the global financial crisis to protect against tail risk events? What strategy(ies) do you have in place now?

(% respondents)

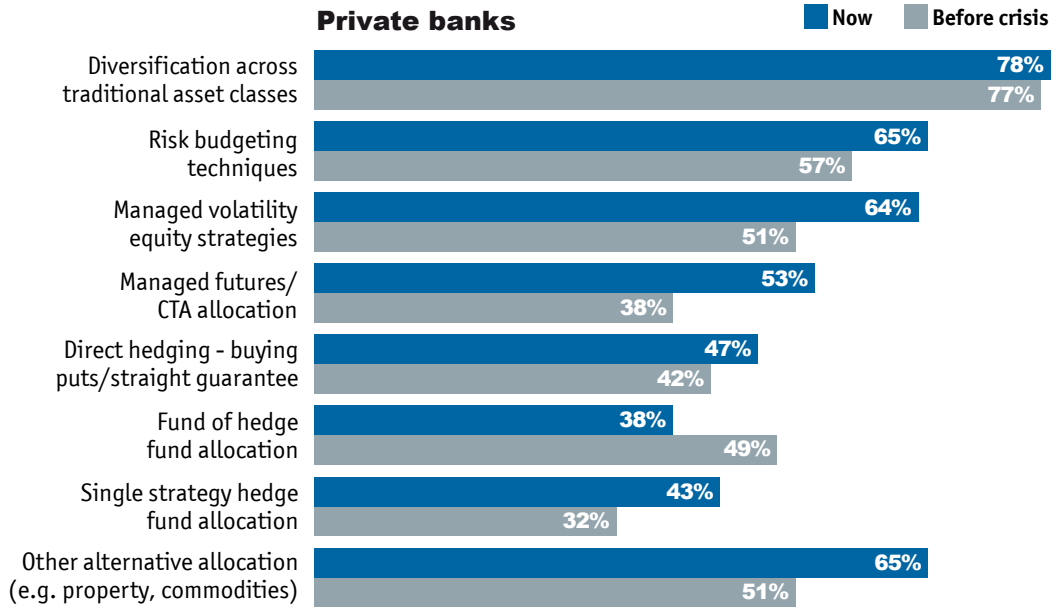


Source: Economist Intelligence Unit.

Chart 10

What strategy(ies) did you have in place before the global financial crisis to protect against tail risk events? What strategy(ies) do you have in place now?

(% respondents)



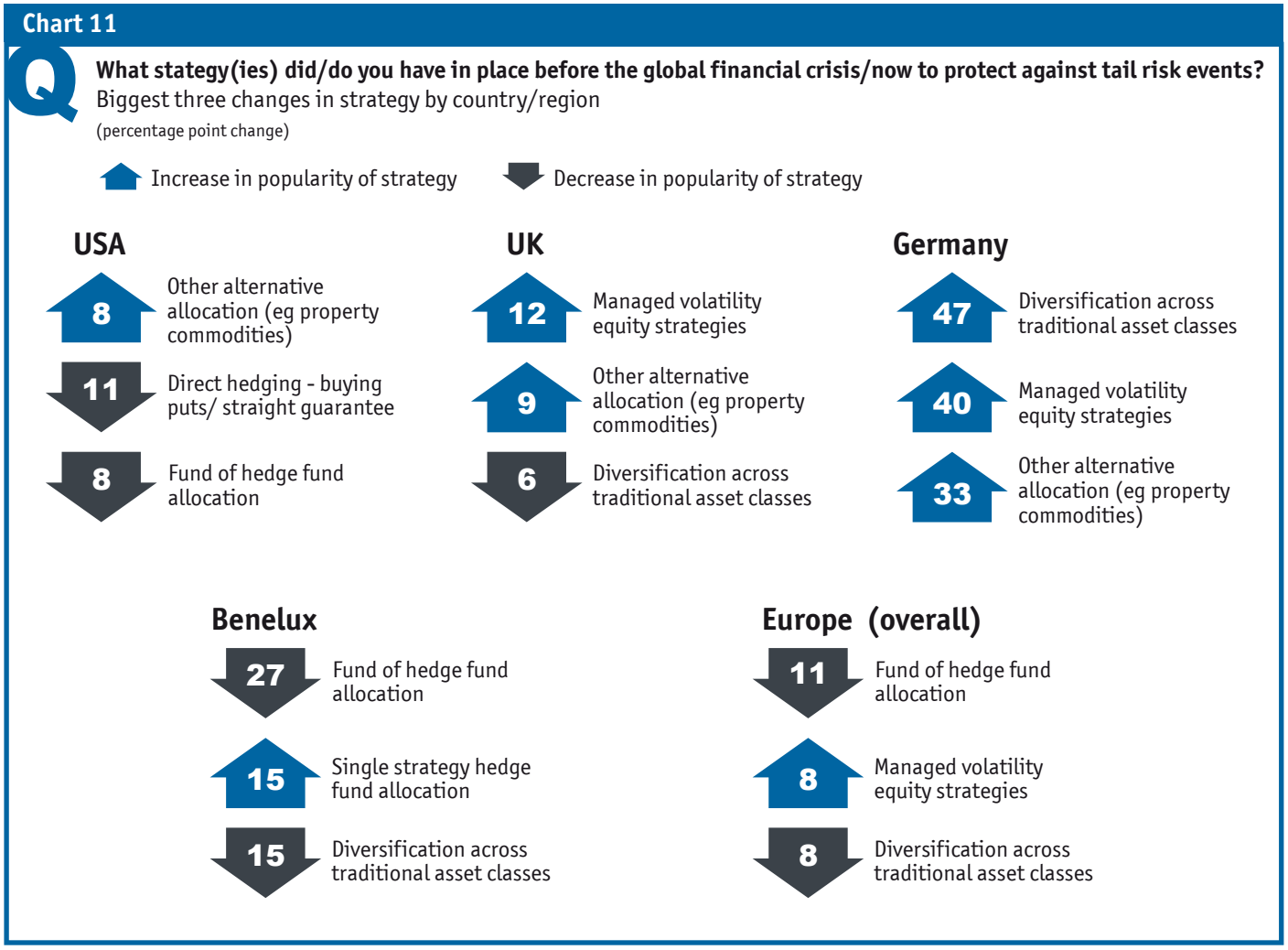
Source: Economist Intelligence Unit.

of direct hedging, up by 8 percentage points, while the largest decrease—besides the use of diversification, as previously mentioned—was of fund of hedge fund allocation, which was down by 13 percentage points. Consultants, despite displaying less appetite for change, showed significant drops in the use of direct hedging, by 14 percentage points, while increasing their use of managed futures/CTA allocation and other alternative allocation (by 12 and 11 percentage points respectively).

Family offices also showed significant drops in the use of direct hedging (12 percentage points) and single-strategy hedge fund allocation (14 percentage points), as well as a small increase (6 percentage points) of other alternative allocation.

Filtering investors by geographical location, the US showed only small losses and gains in the popularity of different strategies, as did the UK. However, Germany showed a huge swing towards diversification across traditional assets (up by 47 percentage points) and other alternative allocation (up by 33 percentage points), while Benelux swung towards single-strategy hedge fund allocation (up by 15 percentage points). But changes by European investors must be viewed in terms of the number of respondents, in addition to percentage terms. The most significant swing in Europe as a whole was an 11-percentage-point drop (23% change) in fund of hedge fund allocation.

Some of these trends can be attributed to cultural differences. For example, German firms showed a preference for traditional asset allocation, particularly over strategies involving hedge funds and CTAs, where regulation may be an issue. German companies also have a higher fixed-income allocation than some other markets, and are therefore impacted less by drawdowns. They still see diversification of traditional assets as the best way to deal with tail risk.



Factors influencing strategy selection—regulation and risk

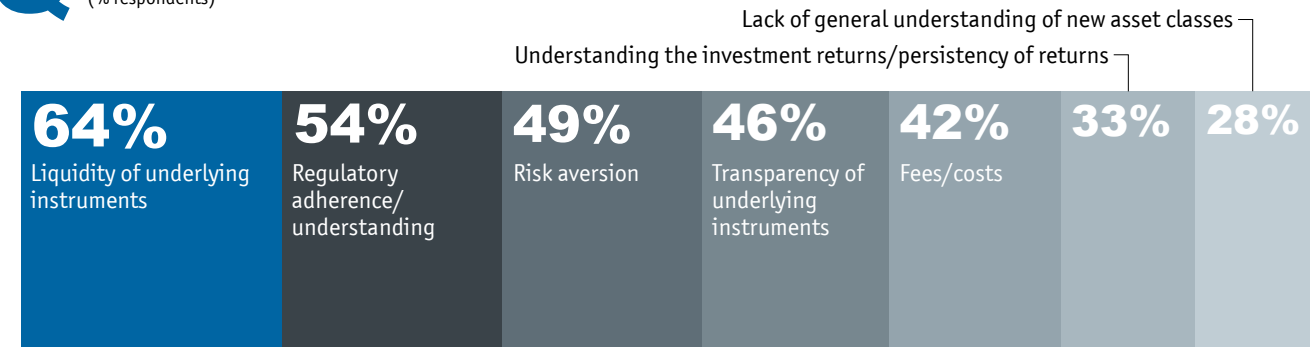
Although the effectiveness and value of individual tail-risk-mitigation strategies evidently play a part in their selection (or avoidance) by investors, their use is also influenced by regulatory factors, the perceived safety of the instruments used to hedge (including their liquidity) and their availability.

Almost two-thirds (64%) of survey respondents highlight the liquidity of the underlying investment as the top barrier to allocating to their tail-risk-protection strategies, and almost one-half (46%) point to the transparency of the underlying instruments. Liquidity is of particular importance to family offices (selected by three-quarters of respondents), while private banks are the most concerned with transparency (cited by 54%).

The natural hedge, according to Bryan Kelly, assistant professor of finance and Neubauer Family Faculty Fellow at the University of Chicago's Booth School of Business, is often complex derivatives, but this approach does come with its share of problems. "There is a fear of debt derivatives and mistrust of the CDS [credit default swap] market," Dr Kelly says. "People are trading some instruments—they have to lay off downside risks. Equity options remain liquid and stayed up in the crisis, so people can still function in the exchange-traded markets."

Chart 12

What barriers do you see or did you have to overcome in allocating to your tail risk protection strategy?
(% respondents)



Source: Economist Intelligence Unit.

Regulations such as the European Markets Infrastructure Regulation (EMIR) in the EU and Dodd-Frank in the US are pushing "standardised" over-the-counter (OTC) derivatives onto exchange. However, not all will be deemed suitable for central clearing, and so it remains to be seen how much regulation will improve the transparency and liquidity of direct hedges.

Risk aversion was also a major barrier for survey respondents, selected by almost one-half (49%), with private banks most concerned (54%) and family offices least worried (44%). As there has been a move to safety in overall asset allocation, so has there been in hedging instruments. In constructing a small portion of a portfolio to act as a tail-hedging component, Tim Hodgson, a senior investment consultant at Towers Watson, also balances options and derivatives (for more sophisticated clients) with assets perceived as safe havens, such as AAA sovereign bonds and gold.

Mr Hodgson adds: "We push the idea that cash is a valuable tail hedge, although there is negative real yield in many Western markets. It gives the option value that may rise with uncertainty, and in a non-linear way. The worse the event, the more important cash is, because it allows the investor to step in and buy distressed assets."

Kleinwort Benson's Mr Choukeir adds: "The good thing with tail risk is that it provides golden opportunities to invest. Having cash as ammunition is very helpful when these opportunities arise."

Regulation was the second-largest barrier in allocating to a tail-risk-protection strategy, cited by over one-half (54%) of survey respondents, and was noted as a major concern of a number of interviewees. Family offices are most worried about regulation (63%), while institutional investors are less bothered (44%).

Pimco's Mr Bhansali said: "Regulation means that people are looking for more exotic ways to protect themselves, as regulation can result in more volatility and fat tails—we try to figure out what the unintended consequences of regulation might be. In some cases, longer-dated equity options and CDS will be priced out, but currency options still have a lot of value, as will some OTC instruments that are moving on-exchange." He is referring to ongoing moves in the US and Europe to move the majority of vanilla derivatives currently traded OTC onto exchanges in order to improve transparency and lower the industry's risk profile.

However, UoC's Dr Kelly sounds a note of caution: "There is some dimension of having trading on-exchange for derivatives that will be fantastic, because it improves counterparty considerations and will make the market function better, but too

rigid regulation could take away people's ability to hedge."

Factors influencing strategy selection—cost and short-termism

With many strategies scoring poorly for value—just one, "other alternative" allocation, was considered good value by more than one-half of respondents—it is unsurprising that cost was a barrier in allocating to a tail-risk-protection strategy for 42% of respondents. Consultants are particularly focused on cost (57%), while institutional investors and private banks are less bothered (35% and 36% respectively).

Towers Watson's Mr Hodgson comments: "Cost is the inherent problem with tail hedging. It is like having fire insurance on your house. Logically, it is a stupid waste of money—the chance of your house burning down is negligible. It is the same with a tail hedge—you should expect it to cost you money, because if it happens, you can't financially recover without insurance."

A number of interviewees described tail-risk hedging as the cost of staying in the game under current market conditions. Pimco's Mr Bhansali notes that a long-term approach means that tail hedges will eventually pay for themselves in a multi-year asset allocation strategy: "There is a short-term cost impact on the expected return, but it is the cost of being safe. It more than pays for itself—it means clients can stay in the game, and the hedges provide liquidity when they need it most. With a multi-year asset allocation strategy, it more than pays for itself."

There are several factors influencing cost. The availability of products clearly has an impact. There has been some recent concern that the crisis has led to an imbalance in the products available to hedge against tail risk, with certain products being priced out of the market, notably long-dated put options. Sellers such as the US-based Berkshire Hathaway have withdrawn from the market owing to regulatory changes that require higher amounts of collateral for these trades. The increased demand coupled with the decline in sellers has resulted in higher volatility and higher prices. And with other risk-mitigation strategies, such as use of other alternatives (like infrastructure or commodities) or fund of hedge funds, the cost for holding these assets is usually higher than for other traditional asset classes like equities or bonds.

Even holding traditional asset classes as part of a diversification strategy is getting more expensive, not because of the cost of holding the assets but on account of their low returns. "If investors are willing to sacrifice 10bp a year, and they are getting 150bp at best on UK and German government bonds, this is very different to 50-100bp with an 8-9% return," according to Mr Villamin at Coutts. "Because the return profile has changed, the appetite to use a portion to hedge has changed."

The short-term nature of many hedges is also responsible for the current issues with cost and availability for some products. Among the interviewees, opinion is fairly firmly split between those who believe that short-termism is an inherent aspect of tail risk, although not necessarily an attractive one, and those who are convinced that only a long-term strategy will bear any fruit at all.

On the short-term side, UoC's Dr Kelly says: "In general, when people are hedging against tail risk, they have the short term in mind. With the Europe situation, we feel that if we get over the hump, things will be good in the long term, so we hedge against the hump. People are not looking at, say, global warming—they are looking at the holding period of their investments. There is a possibility that it is a fad."

Kleinwort Benson's Mr Choukeir agrees that short-termism is the current trend, but believes that this approach needs to change: "Everyone is worried about Europe and wants to protect against it and, as a result, the view of tail risk is very short term now. Tail risks always need to be

considered. It is in the positive times, when there is euphoria in the market, that you really need to worry."

At BT Pension Scheme Management, Mr Krishnan believes that another issue with cost is its lack of predictability, and it is this, rather than just escalated costs, which is causing potential problems for some investors. "The cost of some tail-risk strategies is higher than it used to be," he explains. "We think about a longer-term, multi-decade profile, and it is harder to know at what cost you can transact, and what types of hedging will still exist in the future. You can't know what terms you will get on, say, inflation protection in five years. We keep in regular contact with banks and regulators on this, so that we can respond quickly if we need to."

3 Are we protected?

With investors worried about a range of barriers to allocating their tail-risk protection, as well as the value and effectiveness of different strategies, it should be no surprise that many are not entirely confident that they are protected from the next tail risk event. Only 20% of respondents are very confident, with 21% less than "somewhat confident" that they have some form of downside protection in place for the next significant market event. However, the situation is better than before the 2008-09 global crisis: almost three-quarters (73%) of respondents believe that, owing to changes in their strategic asset allocation, they are better prepared for the next major tail risk event than they were before the crisis.

So what are those respondents who say that they are very confident doing differently from the rest? These respondents are more likely to believe that the management of tail risk is an integral part of a comprehensive investment plan and the events around the global financial crisis were more likely to have influenced them to reconsider their strategic asset allocation in order to provide more tail-risk protection.

They show higher levels of use of managed futures/CTA allocation, although—surprisingly—they are slightly less likely to use the other seven strategies covered by this survey. This may be because they are tougher critics, giving lower ratings on the value of the strategies on all but two out of eight.

Perhaps most tellingly, confident respondents are more likely to say that they are prepared to sacrifice some upside potential in order to provide tail-risk protection in their portfolios. They clearly ascribe to the motto currently that is doing the rounds in the markets: "people are putting their capital where they think it will get returned, not where they think they will make returns."

The interviewees agree: the consensus appears to be that investors should be grateful enough to be protected, rather than worrying about missing out on a possible upside that, for the moment, seems unlikely to occur. As Mr Choukeir notes, "Investors need to try to avoid losses in the first place, not focus on making money."

Conclusion

The market is still very much focused on the possibility of downside events and how to protect against them effectively without too much financial pain, in terms of costs and impact on returns. This is only natural: with constant speculation over where the next tail risk event will come from and unrelenting daily bulletins on the latest woes, be that below-expected earnings from banks or critical unemployment problems from Spain, it would be difficult to find investors who are worried about anything else.

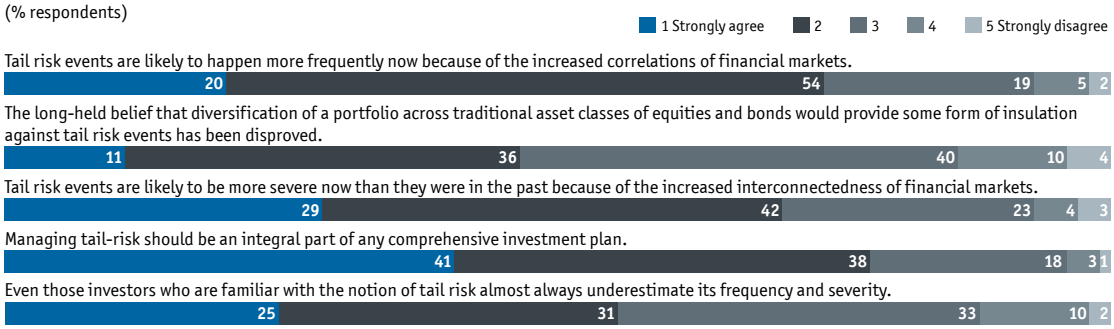
This survey supports the idea that investors are taking the threat of tail risk seriously, with 71% of respondents believing that a tail risk event is likely or highly likely to occur in the next 12 months, 73% agreeing that tail risk events are likely to be more severe than in the past and 80% concurring that managing tail risk should be an integral part of any comprehensive investment plan. Even 79% of those surveyed say that they are willing to sacrifice some upside potential in order to provide tail-risk protection in their portfolios.

But despite this, the pace of adoption of tail-risk strategies has been slow. Of the eight strategies covered by the survey, just three (managed-volatility equity strategies, managed futures/CTA allocation and "other alternative" allocation) have seen an increase in use since the global financial crisis. Two strategies (diversification across traditional asset classes and fund of hedge fund allocation) have actually declined in popularity, perhaps as confidence over their value or effectiveness as tail-risk-mitigation techniques has wavered.

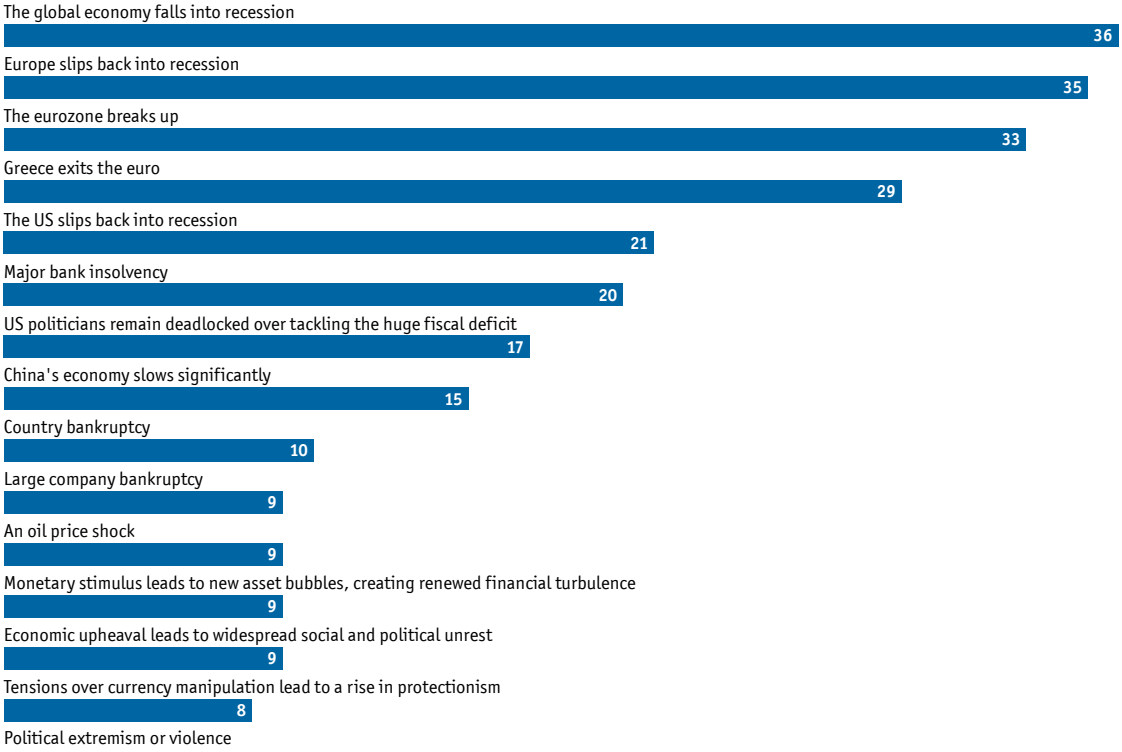
Investors are still trying to decide which method is best. But there is also a question of whether the tools that are currently available to investors are adequate. Survey respondents rated diversification as the most effective strategy (selected by 60%), but they are clearly still sceptical. Just 14% disagreed with the the idea that the long-held belief that diversification of a portfolio across traditional asset classes of equities and bonds would provide some form of insulation against tail risk events has been disproved. This indicates that there may be an appetite for new strategies, too.

Appendix: Survey results

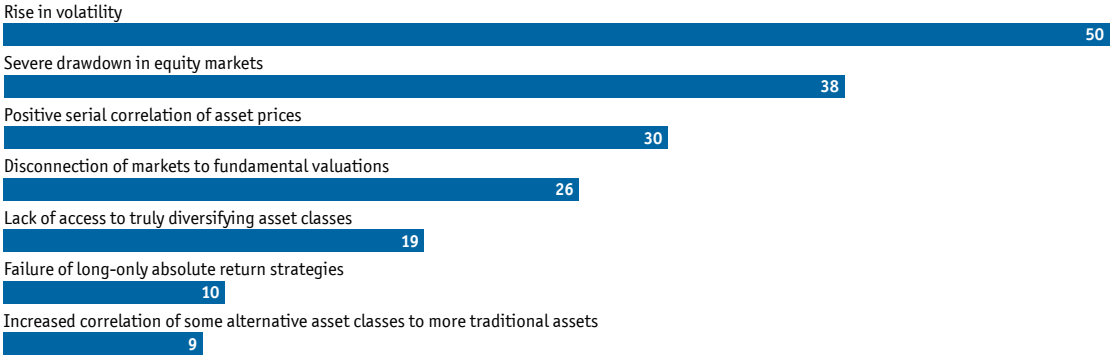
Do you agree or disagree? Rate on a scale of 1 to 5 where 1 is strongly agree and 5 is strongly disagree.
(% respondents)



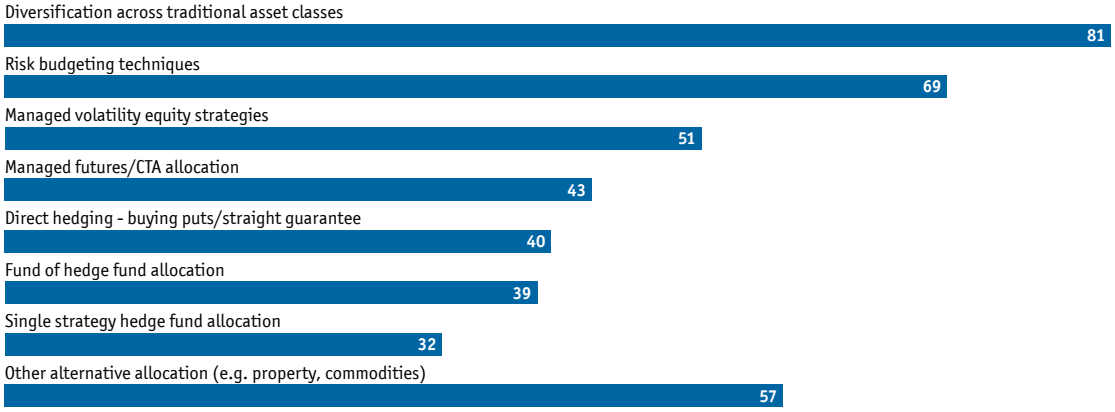
What do you feel will be the most likely cause of a tail risk event occurring in the markets in the next 12 months? Select up to three.
(% respondents)



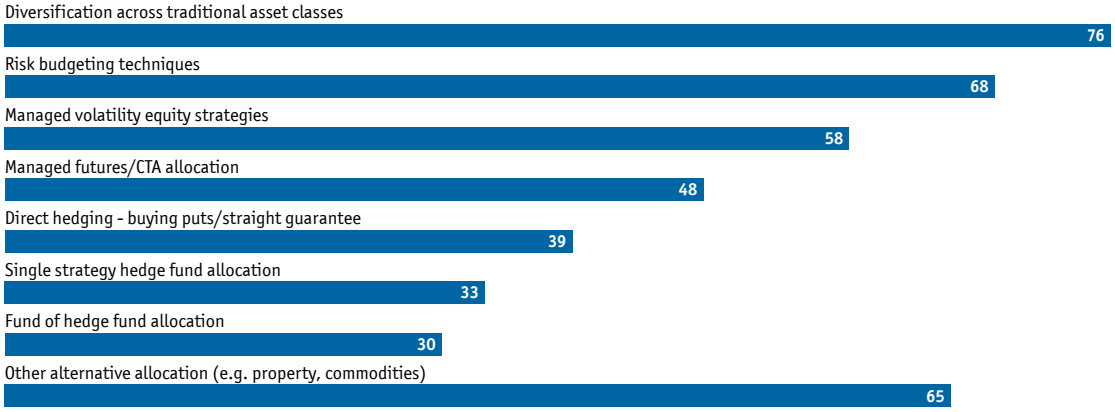
What do you consider to be the most damaging factors in recent market crises? Select up to two.
(% respondents)



What strategy(ies) did you have in place before the global financial crisis to protect against tail risk events?
Select all that apply.
(% respondents)

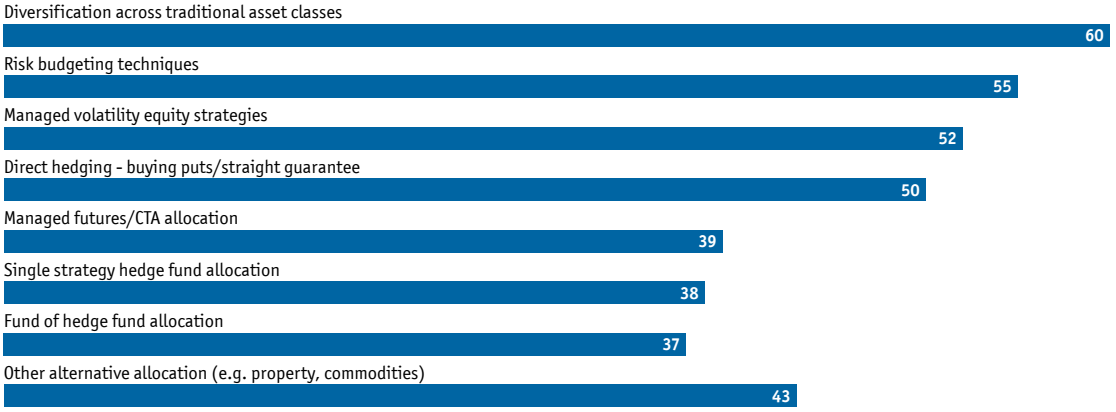


What strategy(ies) do you currently have in place to provide some protection against a future financial shock?
Select all that apply.
(% respondents)

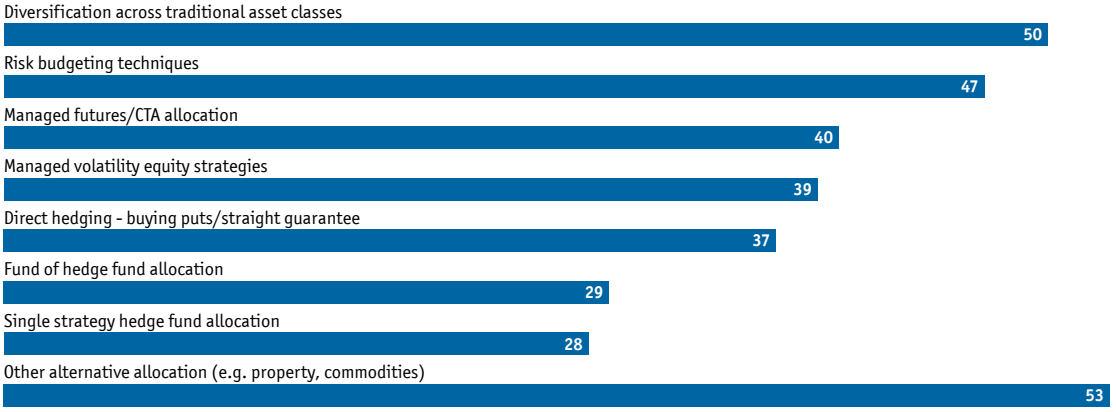


What do you think is the likelihood of a tail risk event occuring in the next 12 months (leading to a 25%+ peak to trough drawdown in equities)?
(% respondents)

Which strategies do you feel provide the most effective hedge against tail risk?
(% respondents)

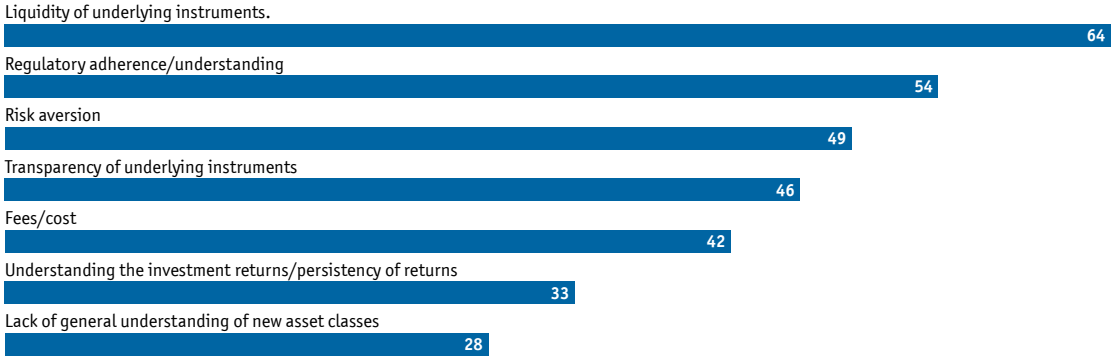


Which strategies do you feel provide the best value hedge against tail risk?
(% respondents)



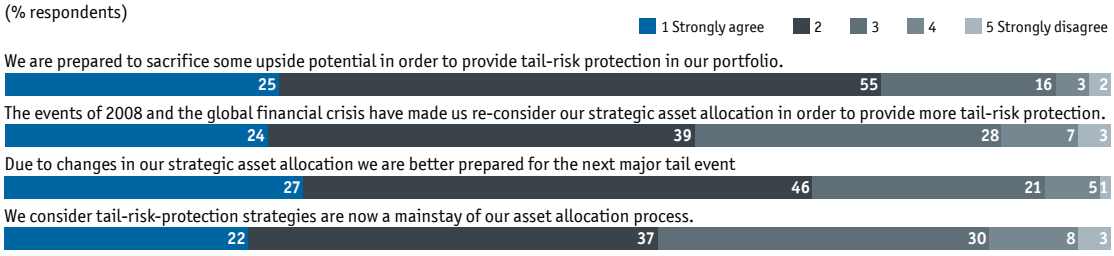
How confident are you that you have some form of downside protection in place for the next significant market event?
(% respondents)

What barriers do you see or did you have to overcome in allocating to your tail-risk protection strategy?
(% respondents)

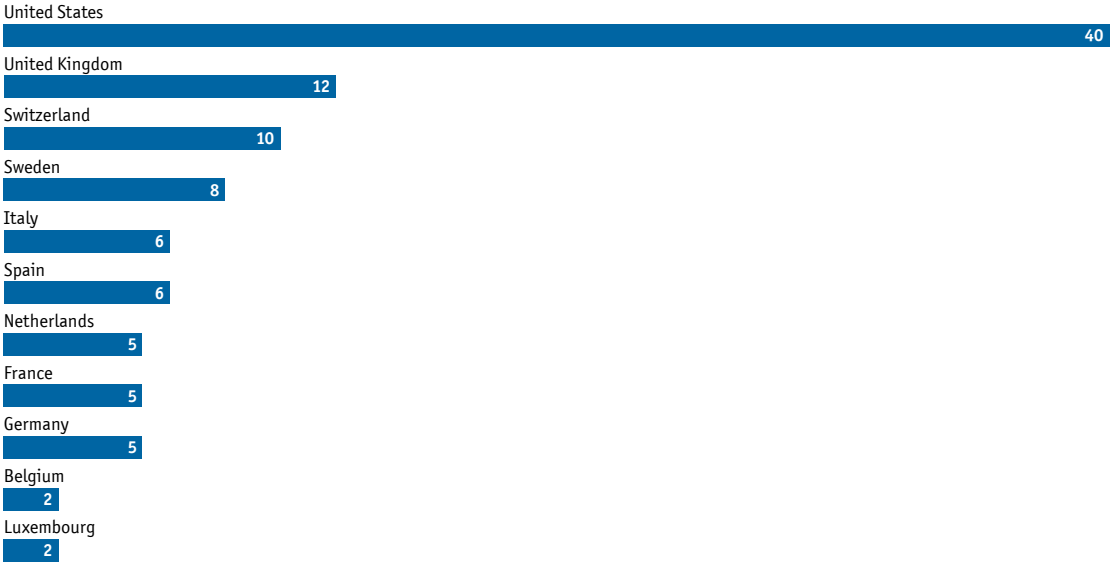


Do you believe that most institutional investors have an accurate understanding of the frequency and severity of tail risk events?
(% respondents)

Do you agree or disagree? Rate on a scale of 1 to 5 where 1 is strongly agree and 5 is strongly disagree.
(% respondents)

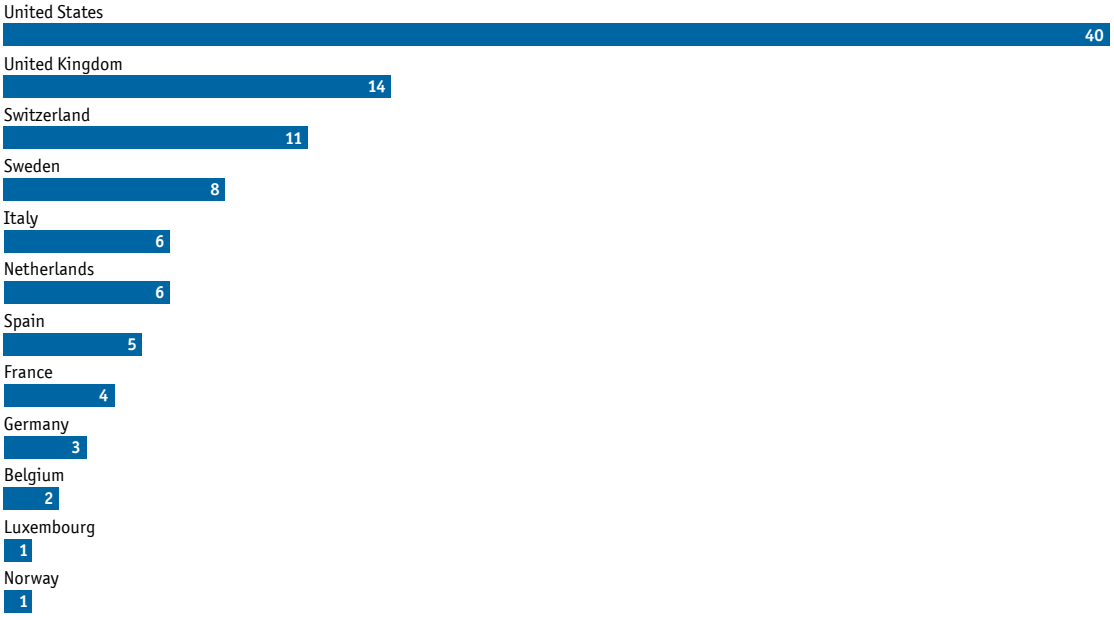


In which of the following countries are you personally located?
(% respondents)

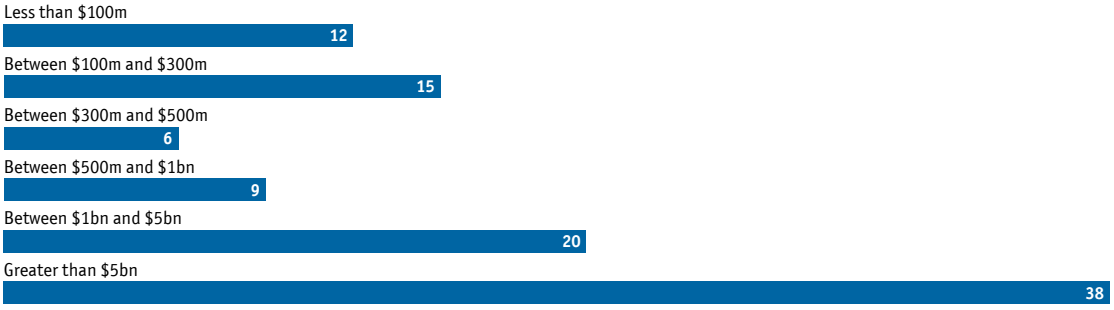


In which region are you personally located?
(% respondents)

In which one of the following countries is your company headquartered?
(% respondents)

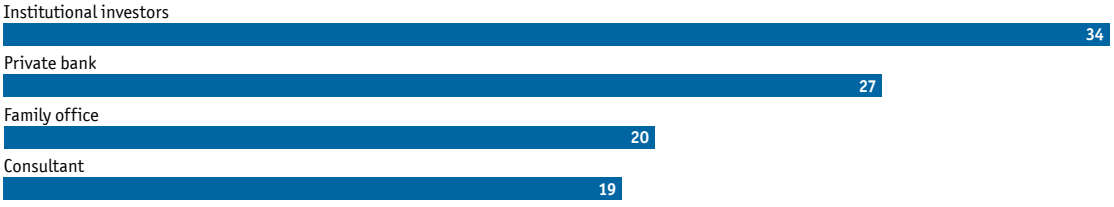


What is your organisation's assets under management (AUM)?
(% respondents)



What is your job title?
(% respondents)

How do you describe your company's function?
(% respondents)



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