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Preparing for the next market meltdown:

**The strategies professional investment managers employ to
avert significant financial losses in their investment portfolios**

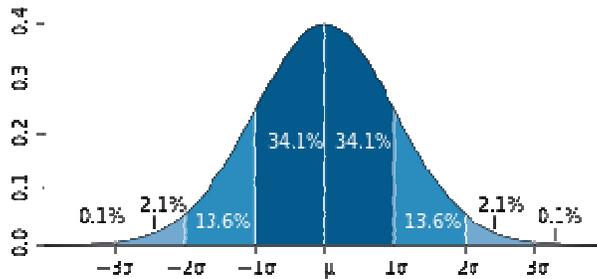
Compiled by Daniel R Wessels

No, it is not one of those doomsday reports in which commentators are making bold predictions about a looming financial market crisis somewhere in the nearby future. To be sure, with or without those predictions such crises or “tail risk” events will occur from time to time. That is the inevitable nature (ebb and flows) of financial markets, but more importantly, periods of prolong market upswings will also occur and the latter is much more prevalent and significant than bear market episodes stemming from unexpected “tail risk” events.

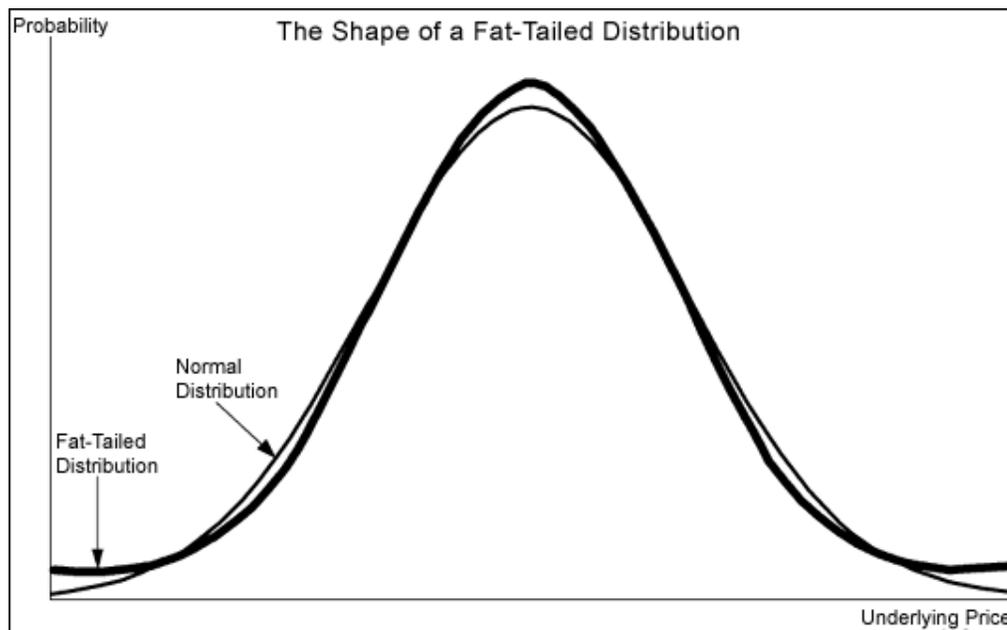
Nonetheless, it is much easier and, if you like, popular to speculate about the “why”, “how” and “where” of the next crisis. Also, while the experiences of the latest crisis (2007-2009) are still fresh in the minds of investors one can expect that the custodians of investors’ wealth will have strategies in place to withstand the onslaught of the next possible crisis. Then again, and perhaps a more cynical view, is that while the going is good and markets continue on their merry paths the same custodians will over time place less emphasis on such protective strategies while everyone is then focussed on maximising their wealth from the flourishing financial markets. That is until the next crisis will strike “unexpectedly”.

But first, some explanation of statistical concepts: “Tail risk” refers to situations where the outcome of investment markets deviate more than three standard deviations from the mean or expected return as predicted by the normal distribution of investment returns. “Standard deviation” refers to the dispersion (variation) of outcomes around the mean. For example, consider an investment with an expected (mean) return of 15% and 10% standard deviation. When a normal distribution applies, one would expect that 68% of all outcomes would fall within one standard deviation (left and right) of the mean, i.e. between 5% (15% - 10%) and 25% (15% + 10%). Two standard deviations imply that 95% of all investment returns would be between -5% and 35%, while three standard deviations will result in 99.7% of all investment returns ranging between -15% and 45%.

Thus, when a normal distribution applies the outcome of all events will occur 99.7% of the time within three times standard deviation, i.e. one basically “never” expects or need to plan for outcomes outside these parameters.



Investment returns, however, do not follow a perfect normal distribution curve and exhibit a “fat-tailed” distribution, meaning that extreme outcomes—positive (right tail) and negative (left tail)—occur somewhat more frequently than expected by assuming a normal distribution curve. Thus, investors should be concerned about extreme negative returns, but would welcome extreme positive returns.



Thus, ideally investors would like to maximise the opportunities to gain from right-tail events but at the same time minimise the occurrence of left-tail events. Obviously, such noble ideas are wishful thinking—it is highly unlikely one will make always the right calls to benefit from “unexpected” strong market surges without being exposed to the severity of market meltdowns at times. One can obviously decide to avert the possibilities of severe downside risks, but then one cannot expect to benefit from “unexpected” strong market returns. Such is life!

[Side note 1: When considered over any long-term investment cycle there are much more extreme positive returns than extreme negative returns, hence the sage advice: “Invest for the long term”. When one, however, is following high-risk investment strategies such as “gearing” or “leveraging” the short-term outcome matters a great deal. The occurrence of an extreme negative event will often result in the failure of particular investment strategies or the demise of businesses that build their strategies upon such high-risk strategies – the rise and spectacular fall of many “investment celebrities” in the past attest to the dangers of “building sand castles on the shores of perceived calm seas”].

The Economist Intelligence Unit Survey

In June and July 2012 the *Economist Intelligence Unit* surveyed more than 300 institutional investors in the US and Western Europe to investigate their views surrounding the next possible “tail risk” event (left-tail outcomes). The report surveyed the 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.

The When and Why

The survey was done against the backdrop of financial instability in Europe. 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 among investors over what might happen in the next two years and what effect it could have on financial markets. At the time Moody's was predicting that Greece was likely to leave the eurozone and that Spain may seek a full bailout, which would set off a chain of events that policymakers only could contain at very high costs.

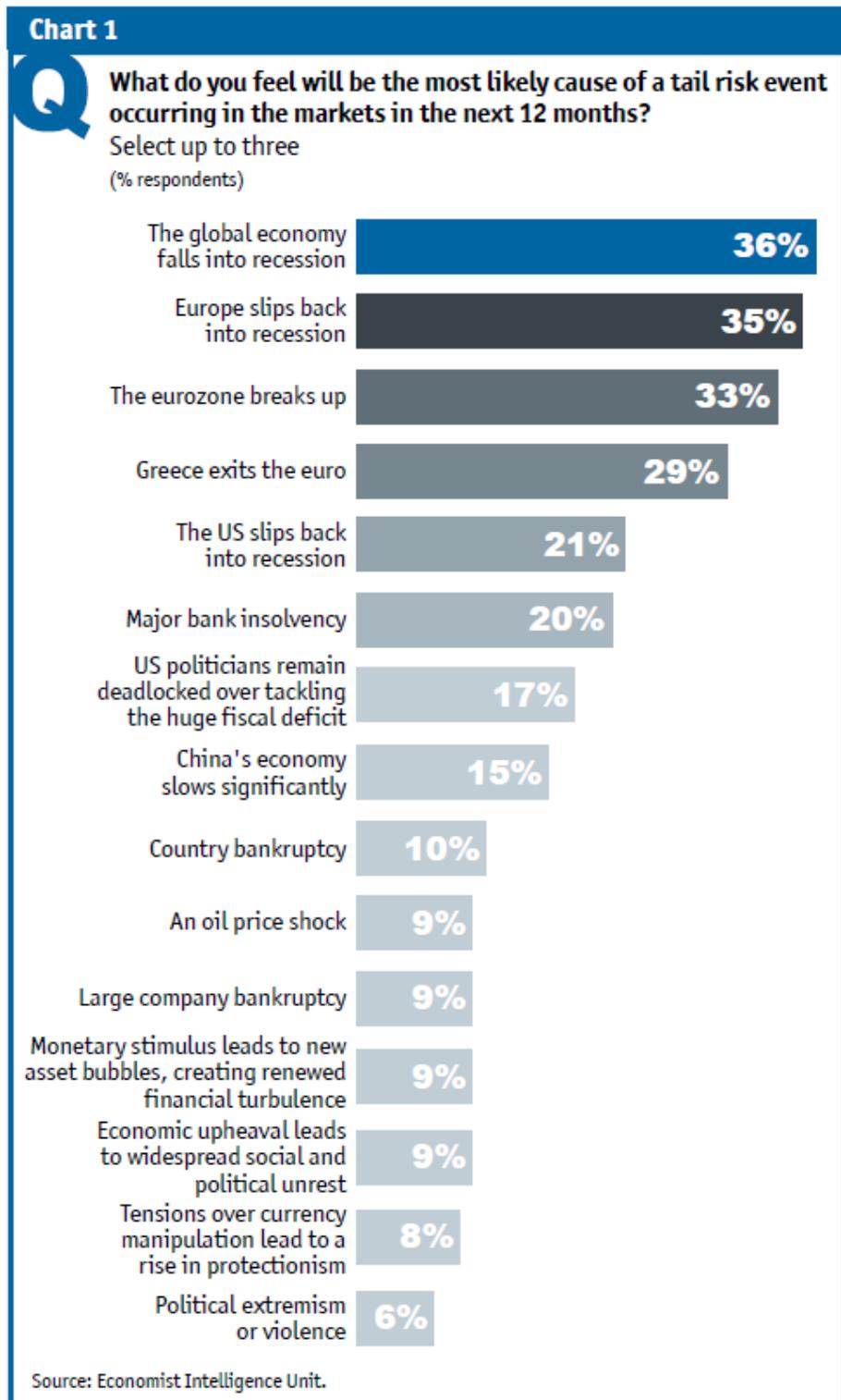
Not surprisingly, almost three-quarters (71%) of the survey participants indicated that it is highly likely that a significant "tail risk" event will occur in the next 12 months, while only 12% of the respondents considered it unlikely. Not surprisingly, managing possible "tail risk" has become a focal point in portfolio management.

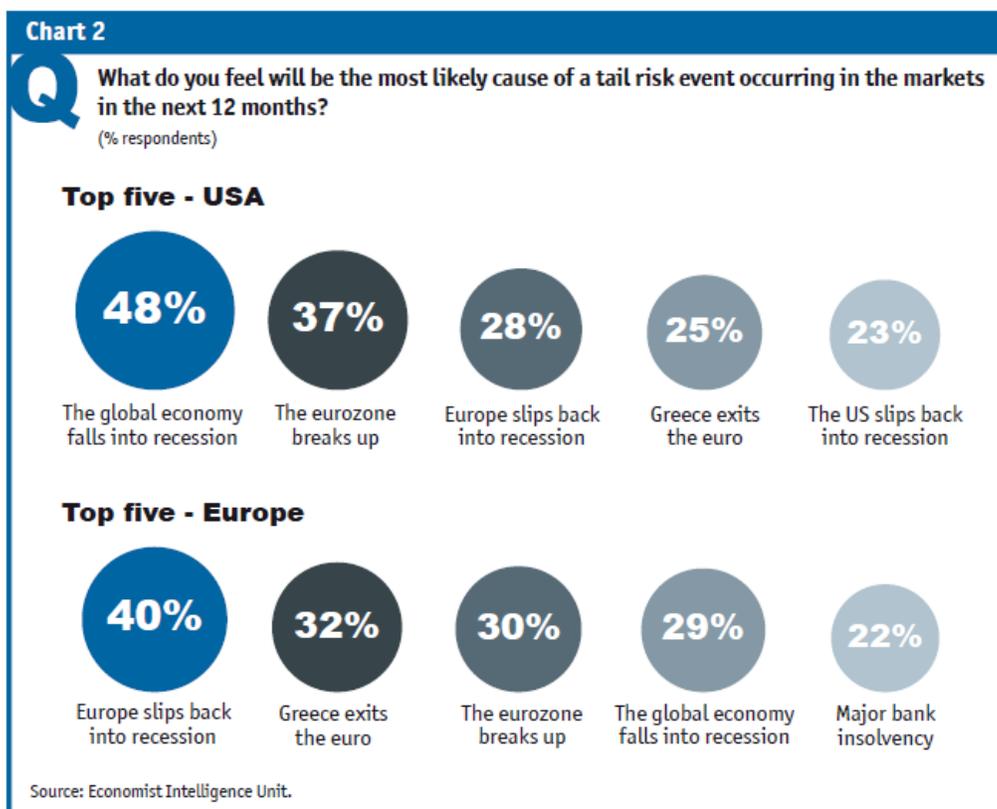
The problem, however, with employing strategies for managing "tail risk" is that it is always those risks that are not generally forecasted or expected that have the potential to cause the most damage – per definition "tail risk" events should be unexpected, otherwise it is not a "tail risk" event! More than half (51%) of survey respondents agree that investors, even those who believe that they have a deep understanding of "tail risk", almost always underestimate the frequency and severity of "tail risk" events. In fact, only a few respondents (14%) believe that most institutional investors have a very good grasp of the frequency and severity of "tail risk" events.

Greece defaulting and exiting the eurozone is now largely expected by the investment community and as such discounted in their investment decisions. One respondent noted: "Europe is the current eye of the storm, but is not really a tail risk as it is known. The US or Japan defaulting would be, and Japan has a huge burden of debt."

Thus, while Europe remains at the centre of investors' worries, other concerns are also being taken seriously. In fact, US investors are most concerned that

the global economy will slip back into recession whereas European investors have placed a European recession as their major concern (Charts 1 and 2).





In anticipating the likelihood of a “tail risk” event, investors need to consider which asset class will be hit hardest by such an event. A portfolio manager at *Pimco*—the largest bond investor in the world—noted: “The currency markets are currently most exposed, then the debt (bond) 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.”

How to avert the next market shock

Investment managers can employ a number of “hedging” strategies to mitigate the impact of extreme market shocks. The basic “hedging” strategy is *asset class diversification*, although some concerns exist that the benefits of asset class diversification, namely uncorrelated price movements and returns, typically evaporates during a deep market crisis. In fact, one finds that the

correlation between asset classes tend to move to 1 (perfectly correlated), i.e. the prices and liquidity of assets tend to fall (crash) in unison, except for the safest of cash havens, like US Treasury bills.

Besides asset class diversification, managers make use of protective strategies that involves options and futures, investing in real (tangible) assets like commodities and (unlisted) properties and investing in hedge funds (typically a fund of different hedge fund strategies pooled together) that specifically aims to provide absolute returns on an ongoing basis.

The latter strategy, however, fell out of favour in recent years. The poor performance of *fund of hedge funds* in 2008, when they generally failed to provide the downside protection expected, led to a more critical appraisal on the value of the strategy as a tail-risk mitigation approach. Moreover, 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 during the good times (pre-2008), but in the current low-return environment, management costs tend to be more heavily scrutinised.

[Side note 2: The easy game for hedge managers to earn excessive fees—and I mean really excessive—based on their “value-added skills” seems to be over, at least for now].

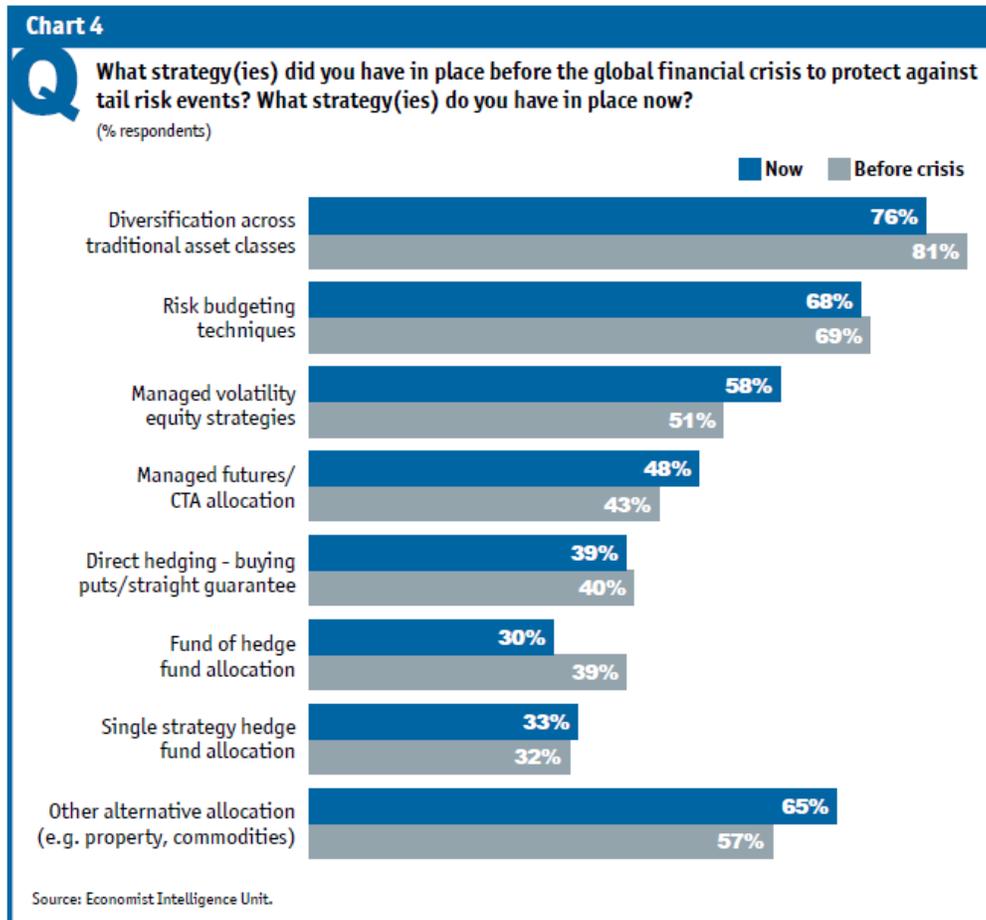
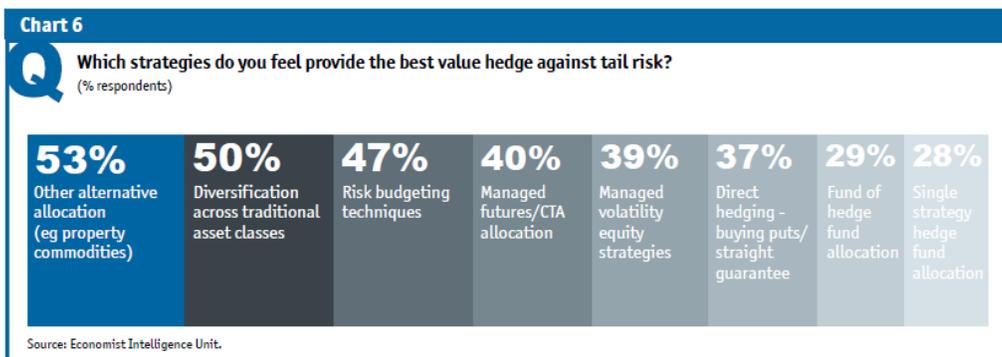


Chart 4 shows that *asset class diversification* is still deemed the most important risk-mitigation approach amongst investment managers. Since the 2008 crisis, however, investing in properties and commodities became more popular. Managers also increased their employment of sophisticated “managed volatility” and “managed futures” strategies while *fund of hedge fund* allocations lost favour.

Moreover, the majority of respondents voted traditional *asset class diversification* as the most effective hedge against “tail risk” events and they deemed it to offer the second best value of all strategies surveyed (Chart 5 and 6).



How safe is the “safety net”?

Many respondents are not entirely confident that they are protected from the next “tail risk” event. For example, only 20% of respondents were very confident that they have adequate protective strategies in place. Sixty percent of the respondents were “somewhat confident” while the rest (20%) were less than “somewhat confident”. Yet, most respondents (73%) felt confident that they are better prepared for the next “tail risk” event than they were before the 2008 global crisis.

The respondents who indicated that they are “very confident” in mitigating “tail risk” are more likely to believe that the management of “tail risk” is an integral part of a comprehensive investment plan. They are willing to sacrifice some upside potential in order to provide tail-risk protection and are making use of alternative strategies such as managed futures, etcetera.

A Wrap-up

Investors are very much focused on the possibility of downside events and how to protect against them effectively without too much drag on returns.

The survey supports the idea that investors are taking the threat of “tail risk” seriously. For example, 71% of respondents indicated that a “tail risk” event is likely or highly likely to occur in the next 12 months, 73% agreed that “tail risk” events are likely to be more severe than in the past and 80% said that managing “tail risk” should be an integral part of any comprehensive investment plan. To that extent 79% of those surveyed said that they are willing to sacrifice some upside potential in order to provide tail-risk protection in their portfolios. Moreover, a high number of respondents (73%) said they are better prepared to deal with “tail risk” events now than they were before the 2008 global crisis.

Institutional investors, however, are not confident which protective strategies are best. For example, the majority (60%) of survey respondents rated *asset class diversification* as the most effective hedging strategy, yet only 14% of respondents indicated that they disagree with the notion that traditional *asset class diversification* was disproved as an effective hedging strategy during the 2008 crisis. Thus, many respondents indicated they are sceptical about the current hedging strategies at their disposal. An appetite exists for alternative hedging strategies, but the regulatory environment/restrictions, liquidity constraints and costs pose real challenges to implement these strategies.

Source:

Economist Intelligence Unit, 2012. “Managing investments in volatile markets: How institutional investors are guarding against tail risk events”. *The Economist*.