IQ INSIGHTS

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SSGA's Grey Swans for 2017

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As we start a new year and a new US presidency, we continue our tradition of identifying those tail risks that could have important implications for financial markets — although they are not our base case expectations. We call them grey swans, rather than black, because they may be unlikely, but they are not implausible, exceptionally rare or unknown. Thinking about these scenarios helps inform the risk-aware approaches we take across our portfolios.

Many pressure points that were evident to us at the beginning of 2016 are still in play for 2017, and the Trump administration presents a plethora of new opportunities and risks for markets. While these scenarios might not cover all of the surprises we see over the next year, a number of the swans we identified in 2016 did in fact swim by — most notably Brexit, though with less market impact than we may have anticipated. And so here are our top ten grey swans for 2017:

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1 China Loses Its Grip on Markets and Economic Growth

Playing a central role in the global economy and emerging markets in particular, China again tops our list as the leading grey swan for 2017 — this time for failing to control its currency and financial markets or to manage an orderly slowdown of its economy.

In 2016 we watched as the risk of a disruptive unilateral currency move by China became a reality in the first six weeks. Global equity markets plunged 11%[1] after the second surprise renminbi (RMB) devaluation in five months got out of control. Although the People's Bank of China (PBOC) intervened aggressively to defend the currency in overseas markets — depleting China's considerable foreign exchange reserves to just above $3 trillion, down nearly $1 trillion from the mid-2014 peak — the RMB still declined nearly 6% in 2016 relative to the US dollar. Financial market vulnerability reemerged in December, when China's corporate bond market seized up after the US Federal Reserve (Fed) raised interest rates. This required a temporary trading suspension and an $86 billion liquidity injection by the PBOC[2] — at odds with its recent efforts to slow the rate of credit growth and unwind excessive levels of debt.

Now 2017 has dawned with the same underlying currency, financial and economic pressures, and the PBOC has once more intervened in the Hong Kong currency market, resulting in a sharp 2% gain in the RMB and a 60% surge in offshore borrowing costs.[3] Though the currency move was quickly reversed in subsequent trading, the PBOC may try to limit RMB depreciation — lest the new US president calls out China as a currency manipulator and an unfair trading partner.[4] Against a weaker growth backdrop and a stronger US dollar, however, China's willingness to play by the current set of rules could quickly come undone if, in retaliation, the PBOC stops defending the RMB — effectively allowing it to depreciate much faster. Nevertheless, the ability to effectively manage moves in global currency markets is far from a given.

Ahead of the 19th National Party Conference in November, the Chinese government will be looking to ensure political stability by maintaining economic growth. But doing that without encouraging credit bubbles will be difficult, especially since credit creation remains a primary channel to support growth. And it has been noted that China's monetary policy has become a tool more to manage risk in the markets than to sustain growth in the economy.[5] Given the shift to a more reflationary environment and greater uncertainties around Sino-American political and economic relations in 2017, we see a bigger risk to China's ability to steer a smooth path, with potentially dire implications for other emerging markets.

2 Election Surprises Push the European Union Closer to Break Up

With a packed electoral calendar in 2017 — including general, presidential and federal elections in the Netherlands, France and Germany — the risk of another shock to European integration from the ballot box is very real.

Last year was challenging for the European Union (EU) as the United Kingdom, its second largest economy, voted to leave in June. Though not nearly as surprising, Italians rejected a constitutional reform referendum in December, which has heightened the possibility of near-term parliamentary elections that could put the anti-EU, anti-euro Five Star Movement in place to win a ruling majority in 2017 or 2018. From March's transit bombings in Brussels to December's Christmas market attack in Berlin, terrorism continues to undermine the establishment parties, who are seen as maintaining the status quo of open borders and deeper pan-European integration.

This year presents even more opportunities to splinter the viability of the EU. The question before European voters is not limited to a choice among the traditional centrist, left- or right-leaning establishment parties but between globalisation and nationalism. This sentiment was explicitly expressed by Marine Le Pen, the head of France's anti-establishment National Front, when she declared after the December 2015 regional elections that "now the dividing line is not between left and right but globalists and patriots."[6]

With the EU's commitment to the free movement of goods, services and people all viewed as political lightning rods, formerly marginal movements seen as opposing these tenets have gained traction across a broad band of the population, who do not perceive benefits for themselves in such a world. Look no further than the Brexit vote in the UK and the presidential election upset in the US to see that a platform challenging the status quo can succeed even in a large affluent democracy, which is rapidly reshaping our perception of what is possible.

3 The Fed Falls Behind the Curve

Realised growth or inflation that is higher than expected in 2017 could prompt the Fed to move faster to tighten financial conditions in a way that could trip up markets, slow down consumer spending and cause a further surge in the US dollar.

In January 2012, the Federal Open Market Committee (FOMC) provided Fed watchers with new tools to gauge their thinking, and the Summary of Economic Projections — or "dot plots" — have indicated where individual policymakers expect interest rates to be over the next three years and the longer term. During five years of these forecasts, the FOMC as a group consistently anticipated a faster pace of growth, inflation and interest rate increases than came to pass. As early as 2014, for example, the first rate hike since 2006 was projected to occur within six months. Just as consistently, however, financial markets measured by overnight index swaps (OIS) were skeptical that the Fed would be able to raise rates that rapidly, and the markets were correct. The past two years unfolded in a similar fashion, with the dot plots forecasting four interest rate hikes at the beginning of both 2015 and 2016, but the FOMC increased the target rate only once each December.

Yet in early 2017, the OIS market is almost in lockstep with the Fed rate forecast, after the 10-year US Treasury yield jumped back up quickly in the wake of the presidential election. The 108 basis point advance through the end of 2016 from a record low in July — the most since the May 2013 taper tantrum — was evenly split between real yields and inflation expectations. Further support for the view of firming inflation came in the December jobs report, which showed wages accelerating the most since 2009. We believe the markets would be able to manage and perhaps even welcome a faster pace of rate normalisation attributable to more robust growth. But an inflation-heavy mix could be toxic, forcing the Fed to tighten financial conditions at the same time that consumer purchasing power is declining.

4 Oil Prices Swoon Again

Oil-producing nations may have reached an agreement to reduce supply, but any one country's noncompliance with the voluntary cuts could lead to a swift collapse of solidarity and a ramping up in global oil inventories, renewing the downward pressure on crude prices.

After selling off by 46% in 2014 and another 30% in 2015, crude oil prices found their footing and gained 45% in 2016. Contributing to that advance, crude futures surged 9% in just one day[7] on the news that at the Organization of the Petroleum Exporting Countries (OPEC) conference in late November, members (excluding Libya and Nigeria) and other major oil producers (including Russia) reached an agreement to cut production by 1.8 million barrels per day through June 2017.[8]

In the past, such quotas among oil producers have been difficult to enforce. Already in the first weeks, some countries were selling more oil than before the agreement. Even if the lower target holds, new sources from countries exempt from the agreement could more than make up for it — including as much as 0.9 million barrels per day[9] from fields that the Libyan civil war kept offline. Add to that a revival of US shale extraction, which becomes more cost effective as oil prices rise. Global oversupply in 2014 was attributed to these wells, and the deregulation of some US fields under a more industry-friendly Trump administration may also boost US production.

5 Emerging Markets Get Squeezed

The protectionist rhetoric of the Trump campaign translates to new restrictions on global trade, dramatically limiting accessibility to US markets just as emerging markets are struggling with the stronger US dollar and higher US interest rates.

After a difficult environment in 2014 and 2015, emerging market (EM) equities, bonds and currencies posted better than expected results in 2016, outpacing developed market (DM) performance. That reversal of fortune can be attributed to at least two important factors. The first was the recovery in global commodity prices, which benefited Brazil and Russia in particular. Both had plunged into recession in 2015 on the sharp decline in commodities. But as those prices recovered, these countries were among the best EM equity performers in 2016, with Brazil and Russia up more than 66% and 55%, respectively, in US dollars for the year.[10] The second contributing factor was a slower pace of Fed tightening than originally anticipated, which helped to maintain relatively easy global financial conditions.

In 2017, we expect improving growth and inflation prospects in the US to lead to a more aggressive pace of interest rate hikes. The translation of Trump's protectionist campaign pledges into action could further cloud the EM outlook. For EM equities, we saw the first indications that the impact would be anything but positive when the MSCI EM Index plunged 7% over the four trading days after the US election, at the same time that DM equities rallied. EM debt fared no better, with the Bloomberg Barclays EM Local Currency Diversified Bond Index declining 7% in value as spreads widened sharply and EM currencies sold off. Such a negative reaction has reflected the policies expected from a Trump administration: pro-growth fiscal stimulus, which would likely accelerate the pace of Fed tightening, along with a contraction in global trade flows and EM export opportunities. That details of these policies have not been forthcoming creates even more uncertainty for EM assets.

6 Productivity Surges to the Upside

For no other reason than a simple reversion to the long-term trend that typically prevails over the business cycle, the economy experiences an improvement in productivity growth, which has been lacking so far in this expansion.

During the weakest US economic recovery in the postwar period, one of the unresolved puzzles has been the secular decline in both US and global productivity gains. Even with an unemployment rate of 5% or lower for all of 2016, US GDP is expected to grow at just 1.6% for the year. Growth in US output per worker has stagnated at no better than 0.5% over the past five years, against a longer term historical level close to 2%.

With consensus expectations for US GDP growth at just 2.3% for 2017,[11] an uptick in productivity is one potential upside surprise that could break the logjam of this subpar economic expansion. Advances in technology can take years to translate into productivity gains, with current innovation in the nascent peer-to-peer economy perhaps taking longer to manifest. Capital deepening through investment spending is another means for improving output per worker, and that could pick up under the more favourable tax treatment anticipated from the Trump administration. Not all grey swans bode ill.

7 Trade Wars Break Out

Trump's actions to force changes in trade relationships could be seen as a foreign threat that other nations need to address aggressively, imposing their own restrictions on the imports of US goods — with China in particular having little to lose and much to gain by retaliating.

The new president has been anything but subtle in his feelings toward recent US trade agreements. Even before his swearing in, his declarations have already caused the Mexican peso to fall to record lows and influenced at least one company not to follow through on plans to relocate jobs in Mexico. He has also stated his intention to tax US companies that move production offshore and, as mentioned above, threatened to label China a currency manipulator. With his cabinet appointments,[13] Trump has evoked a material departure from the free trade agenda that has reigned in Washington for much of the past 25 years.

Rather than simply agreeing to roll back trade agreements, countries that see their economic interests in jeopardy could choose to go on the offensive, likely targeting the most competitive parts of the US economy. Using their own protectionist policies to support uncompetitive or obsolete industries, these countries could retaliate by placing restrictions on goods and services produced by US firms that are competitive exporters. Not only would this negatively impact shareholders, employees and customers of those firms, but essentially the uncompetitive parts of the global economy would be propped up at the expense of competitive areas, with aggregate social welfare paying the price.

If Trump's rhetoric with regard to China involves more than symbolism, the ramifications could be particularly acute. President Xi's further consolidation of power is likely to dominate the agenda at the Party Congress in November. Our thesis remains that Xi will target a steady level of growth leading up to this, causing policymakers to navigate and manage the Chinese economy carefully to maintain the status quo. Significant protectionist trade policies employed by Trump would exacerbate existing economic challenges and cause exactly the kind of volatility that China's leadership wants to avoid. As Eurasia Group has suggested, Xi will need to look strong and so could respond vigorously to any perceived threat[14] — including moves to force changes in trade relationships. Retaliation might take the form of further restrictions on US trade with China. At the same time, aggressive, pro-growth policies could inflate asset bubbles or supercharge inflation, while overly restrictive capital controls could rile the markets. Any of these scenarios would raise the likelihood of making a policy mistake that could have serious consequences globally.

8 Cyber Terrorism Escalates into Cyber War

Beyond criminal operatives stealing personal data or sovereign states attempting to influence foreign elections, cyber attacks orchestrated by rogue nations remain a key risk, possibly taking the form of terrorism to weaken local infrastructure or confidence in global markets.

Disillusioned individuals with access to sensitive national, corporate, financial, and personal data can always wreak havoc by disclosing information to others who may use it for nefarious purposes. Russia is anticipated to actively support right-wing, anti-establishment parties in European elections this year through hacking and leaking fake news, false rumours and propaganda, in a similar fashion to the tactics reportedly employed during the US presidential election last year. While Russia has certainly garnered attention for its alleged cyber activities, other countries may also be building out cyber aggressor capabilities. Eurasia Group has pointed out that Iran may not be able to compete with the US militarily but its cyber activities can be disruptive.[15] More insidious infiltration of transportation and utility infrastructure, financial institutions or government agencies could be the next stage in the escalation of cyber attacks by hostile states, terrorist organisations and criminal enterprises.

Recent experience suggests that many institutions are ill prepared for such an environment, lacking well-defined policies to deal with these incursions. What are the rules of engagement for first identifying the responsible parties in a timely and reliable manner, then pursuing the appropriate response? While some argue for clear retaliatory steps that could involve counter strikes, economic sanctions or military options, others claim that the lack of transparency and the potential for overreaction necessitate caution. The RAND Corporation suggests that more international collaboration is needed to help address the situation.[16] Without that, these cyber attacks have the potential to cause significant turmoil.

9 Health Care Becomes a Policy Battlefield in the US

After the hasty repealing of Obamacare before a viable replacement has been legislated, the US President and Congress play hot potato with health care while consumers, doctors, drug companies and other providers of medical equipment and services are left in the dark.

The Trump administration intends to repeal and replace the Affordable Care Act upon taking office — though at the time of this writing, the contours of any replacement program were hard to come by. We have heard that popular provisions of the existing law would be retained, including maintaining access to health insurance for those with pre-existing conditions. Such a promise has important costs: according to a 2013 study by the Kaiser Family Foundation, the most expensive 10% of patients accounts for roughly two-thirds of all health care spending.[17] Providing this group with insurance coverage would require a continued subsidy from other policyholders or the government. Given this challenge, an alternative framework may be hard to design, so something similar to Obamacare may actually survive. In the interim before a more permanent solution is legislated, the uncertainty is likely to weigh on the health care sector and consumers.

Adding even more uncertainty around health care, Trump stated in his January 11 press conference that drug companies have been "getting away with murder" with their prices, and he would look to have the government become more involved in the pricing of pharmaceuticals in the marketplace. A number of drug stocks sold off sharply immediately after his remarks — another example of the new president's power to influence sentiment in the markets.

10 New International Alliances Form

Long-standing geopolitical and economic alliances have come under pressure in recent years, and if the US cedes ground by scrapping current agreements, 2017 may see new coalitions come together to replace the existing global order, with China stepping in to fill the void.

Multinational institutions and agreements associated with the integration of the global economy, such as the EU and the North American Free Trade Agreement (NAFTA), are likely to face even more challenges in 2017 than in 2016. As globalisation remains far more popular among emerging nations than in the developed world, new arrangements may well evolve to take their place. With the near certain rejection of the Trans Pacific Partnership (TPP) by the US government, for instance, China has put forward its own regional trade agreement — excluding the US, of course — that a number of Asian nations are expected to take up.

Beyond these economic relationships, an example of the fluidity of global geopolitics is Turkey's pivot away from aspirations to join the EU and move closer to a rapprochement with Russia. This could present a major challenge to US and western objectives in the Middle East.

Preparing for the Unexpected

With these grey swans complicating the outlook for global markets — along with others we have not identified — how might investors get ready for what they least expect? As in past years, we suggest that investors thoroughly review whether their portfolios have adequate downside protection against tail risks. Such protection can take the form of strategies with built-in rebalancing triggers tied to volatility, or strategies that aim to manage volatility using either rules-based or alpha-seeking active management. One approach systematically tilts portfolios toward lower beta holdings when appropriate. For a quick primer on these and other approaches, see SSGA's "Tail-Risk Strategies: A Two-Minute Guide." And stay tuned for more updates from the Policy and Politics team throughout the year.

[1] FactSet: MSCI All Country World Index (ACWI), incorporating both developed and emerging countries, was down 11.34% from December 31, 2015 through February 11, 2016.

[2] *Wall Street Journal,* "China Central Bank Extends Emergency Loans to Financial Firms," December 16, 2016.

[3] *Wall Street Journal,* "China Doubles Down on Defending Its Currency" by Saumya Vaishampayan, January 6, 2017.

[4] See SSGA IQ Insights, "Is Trump Right to Call China a Currency Manipulator?" by Simona Mocuta, December 2016.

[5] *Wall Street Journal,* "Why Beijing's Grip on the Yuan Is Becoming Tenuous" by Anjani Trivedi, January 6, 2017.

[6] *Wall Street Journal,* "We Are Not the World" by Greg Ip, January 6, 2017.

[7] Based on the West Texas Intermediate front contract as of November 30, 2016.

[8] *Wall Street Journal,* "Oil Surges on OPEC Deal to Cut Production" by Benoit Faucon and Georgi Kantchev, November 30, 2016.

[9] *Wall Street Journal,* "Libya Ramps Up Oil Production, Threatening OPEC Plans" by Benoit Faucon and Hassan Morajea, January 11, 2017.

[10] FactSet: MSCI Brazil Index was up 66.8% and MSCI Russia Index was up 55.9% for 2016.

[11] Bureau of Economic Analysis.

[12] Bloomberg, January 12, 2017.

[13] For example, Wilbur Ross as commerce secretary and Robert Lighthizer as chief trade negotiator.

[14] Eurasia Group, "Top Risks for 2017," January 3, 2017.

[15] Eurasia Group, "Top Risks for 2017," January 3, 2017.

[16] RAND Corporation, "America's Cyber Security Dilemma – and a Way Out" by Chad C Serena, December 22, 2016.

[17] *Wall Street Journal,* "Health Care's Bipartisan Problem: The Sick Are Expensive and Someone Has to Pay" by Anna Wilde Mathews and Louise Radnofsky, January 12, 2017.

Glossary

Renminbi (RMB) The official currency of the People's Republic of China.

People's Bank of China (PBOC) The central bank of the People's Republic of China with the power to carry out monetary policy and regulate financial institutions in mainland China.

European Union (EU) A politico-economic union of 28 member states that are located primarily in Europe.

Federal Open Market Committee (FOMC) A committee within the Federal Reserve System (the Fed), is charged under the United States law with overseeing the nation's open market operations.

Organization of the Petroleum Exporting Countries (OPEC) An intergovernmental organization of 13 nations, founded in 1960 in Baghdad by the first five members (Iran, Iraq, Kuwait, Saudi Arabia, Venezuela) and headquartered since 1965 in Vienna.

Emerging Market (EM) A country that has some characteristics of a developed market, but does not meet standards to be a developed market.

Developed Market (DM) A country that is most developed in terms of its economy and capital markets.

North American Free Trade Agreement (NAFTA) An agreement signed by Canada, Mexico, and the United States, creating a trilateral trade bloc in North America.

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