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The Frontier Line

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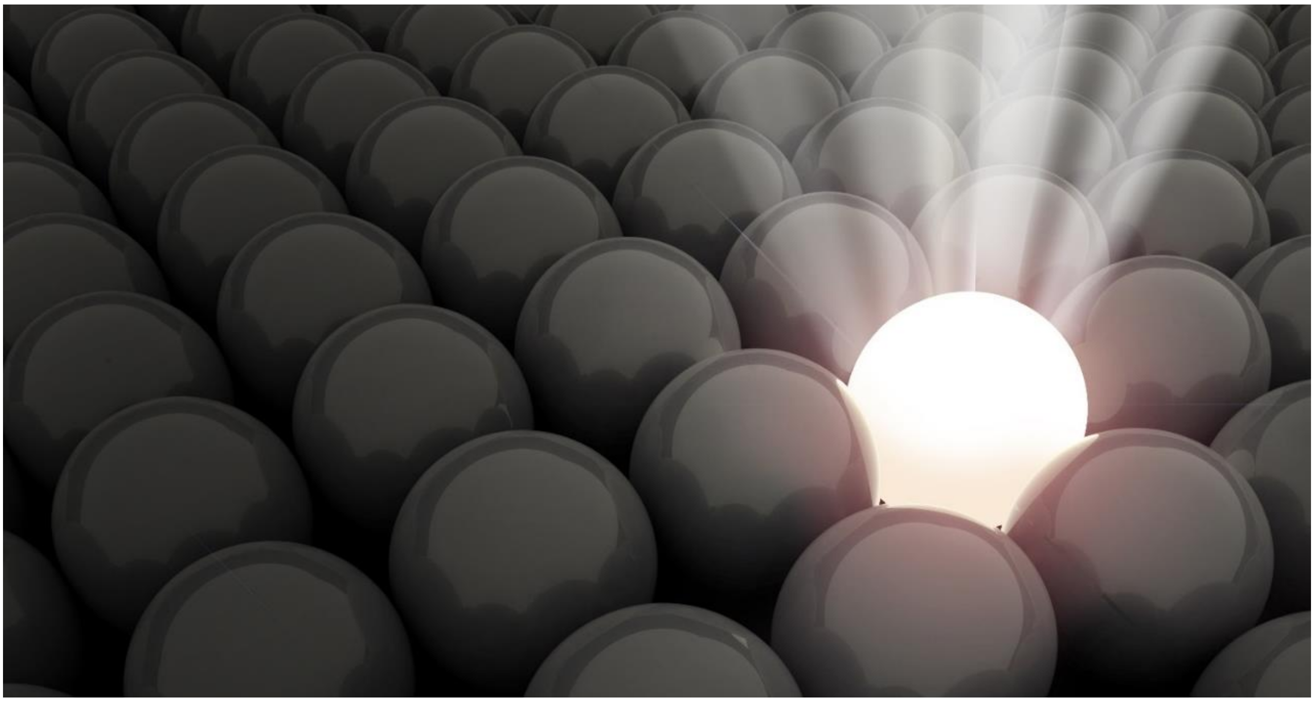
The US Federal Reserve's QE Policy
A tapering update

December 2013



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Introduction

This paper updates our June 2013 paper that explored quantitative easing and the expected "tapering"[1] of this policy by the US central bank.

The market's expectations about how and when US central bank (the Fed) quantitative easing (QE) policies are adjusted in coming quarters – either progressively wound-down (tapered via a slowing pace of securities purchases) or expanded further with additional QE strategies – will *probably be the most important* policy issue for markets and investors to navigate in coming quarters.

It's all about timing. If the market feels the Fed's tapering strategy is premature this could cause recession risks to rise sharply and very negatively impact the performance of growth-orientated asset classes.

In contrast, a tapering strategy considered by investors as being delayed for too long could cause inflation concerns to increase. This would negatively impact all asset classes – both growth and defensively orientated asset classes.

Of course, the hope is the market sees the Fed's timing as "just right" and growth across asset classes keeps ticking along.

Our expectation remains that the Fed will "taper" as slowly as possible because there is no inflation-related reason to taper aggressively, and because the risk from tapering too slowly is considerably less than the risk from tapering too quickly.

In this paper we explore:

- Recent monetary policy developments in the US, particularly the difference between tapering and "forward guidance";
- How recent volatility and uncertainty regarding expectations about US monetary policy tapering have impacted markets;
- Our "base case" expectations for Fed tapering and key asset market performances; and
- Key signposts and variables to monitor to help assess the market's tapering expectations.

[1] Tapering refers to a progressive reduction in the amount of daily securities purchases by the US Fed.

The Fed's Unconventional Monetary Policies – QE and "Forward Guidance"

Quantitative easing

The US Federal Reserve's policy response to the GFC has been to progressively cut its key policy target rate – the federal funds rate – from 5.25% to near zero and a range of "unconventional" programs designed to support the liquidity of financial institutions and create improved conditions in financial markets. The most important of these policy responses have been the so-called QE policies that have entailed the purchase of securities for the Federal Reserve's own portfolio.

Specifically, QE has entailed the purchasing of mortgage-backed securities at a pace of $US40 billion per month and longer-term Treasury securities at a pace of $US45 billion per month. It is the uncertainty about how and when QE might begin to be tapered – i.e. when and how the pace of purchases might be slowed – that has caused volatility in financial markets since 22 May 2013 when Chairman Bernanke first spoke of tapering the pace of the Fed's QE purchases[2].

Tapering postponed on September 18

Having left markets with a near certain expectation the Fed would begin to slow their rate of securities purchases (begin tapering), the Fed surprised market participants on September 18 by delaying the process, stating their monetary policy committee – the Federal Open Market Committee (FOMC) – had …

> "*decided to await more evidence that progress [in economic activity and labour market conditions] will be sustained before adjusting the pace of its QE purchases*".

The ongoing delay to the Fed's tapering policy was reiterated at the October FOMC meeting and may well occur again at the December 18 meeting. Most market participants now expect tapering to be announced after the FOMC meeting on 19 March 2014 (although there is also a meeting at the end of January at which a policy change could be announced).

The US Federal Reserve's "forward guidance" is now a key focus

A key issue for the US Fed to make clear for markets will be emphasising the difference between **tapering** (a reduction in the pace of securities purchases) and the **tightening** of policy rates (raising the fed fund rate). The Fed's "**forward guidance**" about these potential policy changes, which will be communicated to the market via the Fed's statements following all FOMC meetings, will become a key market moving issue.

The aim of forward guidance will be to convince markets that, while tapering may begin soon, the fed funds rate will likely not be adjusted (raised) for some time. This guidance is provided in an attempt to maintain low shorter term interest rates (which are "tied" to the fed funds rate). Maintaining low shorter term interest rates will help to prevent longer term rates from rising too rapidly as tapering begins.

[2] Testimony by Fed Chairman Bernanke. "*The Economic Outlook".* Before the Joint Economic Committee, U.S. Congress, Washington, D.C. 22 May, 2013.

Performance during tapering uncertainty

Here we discuss the market performance of a range of markets – equities, bonds and currencies – during the recent period of volatility associated with uncertainty around key tapering-related dates this year.

Key tapering-related dates in 2013

22 May 2013 Chairman Bernanke first mooted the potential for QE tapering;

17 July 2013 Chairman Bernanke gave guidance about the data-dependent nature of QE in his Semi-annual Congressional Testimony; and

18 September 2013 The FOMC announced the postponement of tapering.

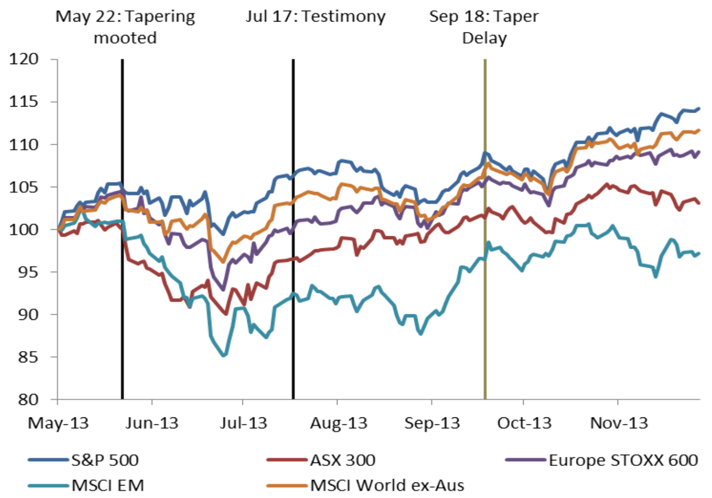
The reaction of global equities markets to tapering announcements

The performance of global equity markets since 22 May 2013 has been similar in most countries. Initially, the mooting of tapering in May had a noticeable negative impact on global equity markets while the announced delay to tapering in September had a positive impact.

Over the full period there has been clear underperformance recorded by the sectors usually viewed as defensive and higher yielding (e.g. utilities and consumer staples).

Chart 1

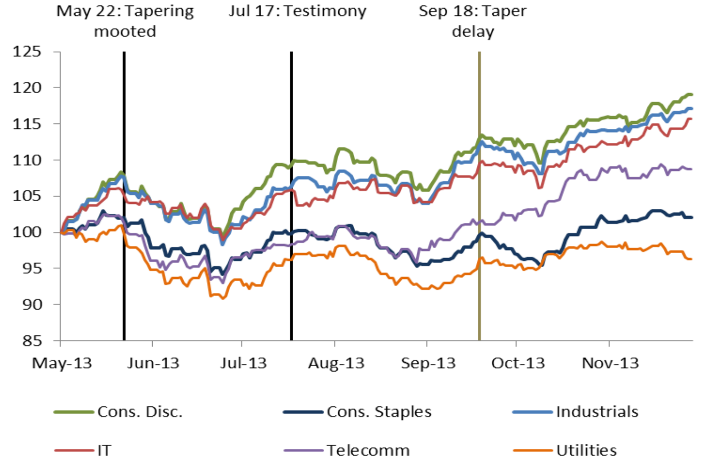
Developed and emerging equity market performances



Source: DataStream, Frontier

Chart 2

MSCI equity sector performances



Source: DataStream, Frontier

Performance during tapering uncertainty

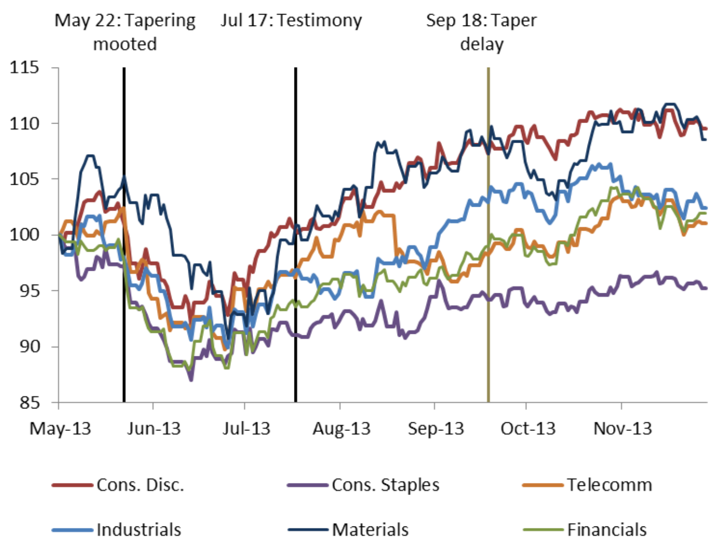
The reaction of the Australian equities market and the AUD to tapering announcements

Chart 3 shows the relative sector performances in the Australian equity market since 22 May 2013. Here the pattern is similar to the MSCI World, a finding that reinforces the very powerful “top-down” influence of US tapering on all equity markets and sectors.

Chart 4 shows the performance of the Australian dollar. The impact of tapering has been quite pronounced on the AUD with the initial impact sharply and negatively impacting, while the announcement of the tapering delay had a generally positive impact. However, recent weeks have witnessed a renewed weakening of the AUD mainly because of domestic factors (such as the “talking-down” of the currency by key RBA officials).

Chart 3

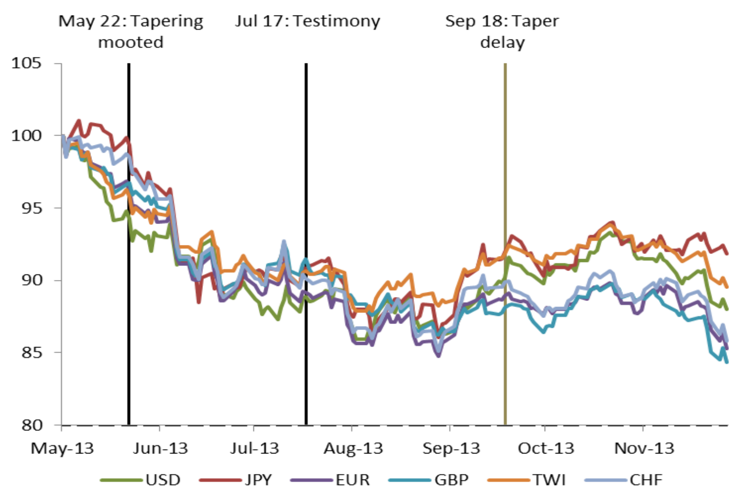
ASX 300 Relative Sector Performances



Source: DataStream, Frontier

Chart 4

Australian Dollar Performance



Source: DataStream, Frontier

Performance during tapering uncertainty

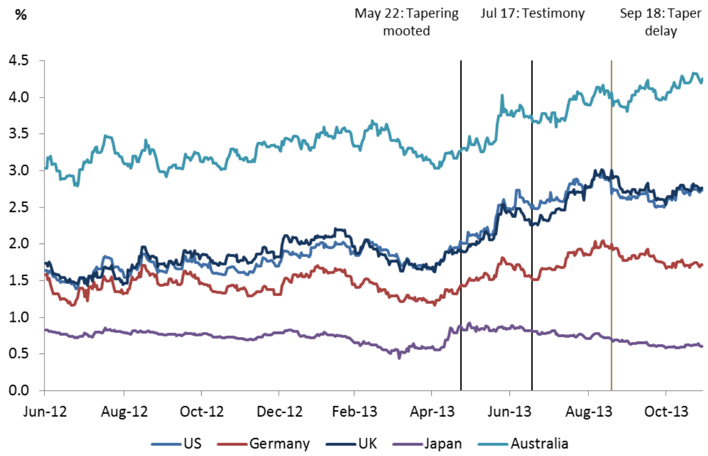
The reaction of interest rate markets to tapering announcements

There have also been some clear patterns in the performance of interest rate markets since 22 May 2013 as seen in Charts 5. Initially the effect of the first mention of tapering led to a sharp rise in longer term interest rates while the announcement of a delay slowed or reversed this trend.

Chart 6 shows most of the increase in 10 year yields since 22 May 2013 has been driven by higher real yields (not rising inflation expectations). This has important implications for investment strategy because it signals rising bond yields due to higher investor growth expectations.

Chart 5

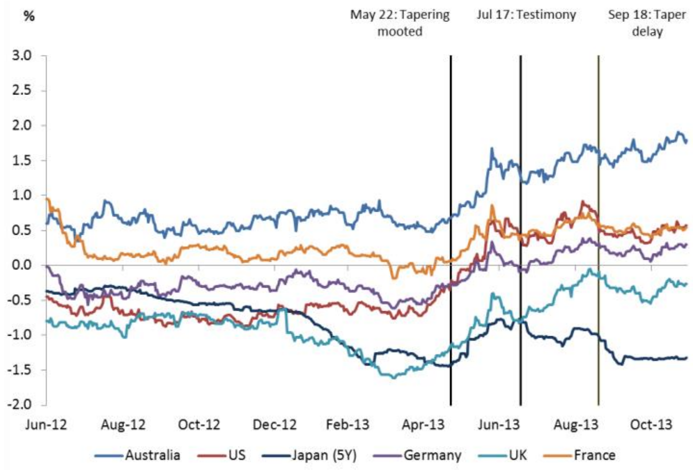
Movements in Core 10 Year Bond Yields



Source: DataStream, Frontier

Chart 6

Movements in Real Yields



Source: DataStream, Frontier

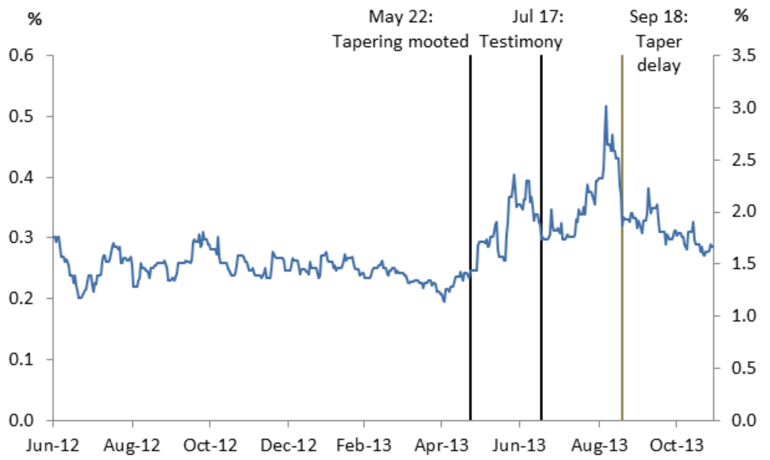
Performance during tapering uncertainty

The movement of the US 2 year Treasury note yield has also clearly been impacted by tapering announcements. This seems to be because the market has generally interpreted tapering as being indicative of an increased probability of a near term increase in the fed funds rate[3].

Because of this market reaction, the Fed has now begun to talk of its forward guidance program so the market does not automatically price-in an imminent increase in the fed funds rate when tapering begins.

Chart 7

Movements in the US 2 year Treasury Note



Source: DataStream, Frontier

[3] The 2 year note's yield is highly sensitive to changes in expectations about official interest rates

Expected impact from tapering

Here we revisit our base case in terms of the expected market impact from tapering.

Our "base case" remains an expectation the US economy's recovery will continue to be slower than usual (sub-par) while inflation pressure remains muted. This environment would be expected to enable the US Fed to begin to slowly taper its purchase of securities, withdrawing its level of accommodation at a pace slightly behind the pace of improvement in growth expectations. Such a slow pace of stimulus withdrawal should enable growth expectations to pick up, even as policy accommodation is withdrawn.

The likely impact of QE Tapering on Bond Yields

To make a judgement regarding how bond yields might perform in our expected base case tapering scenario, we have looked at the performance of bonds in prior Fed tightening periods.

Even though the analysis below uses actual tightening cycles (i.e. progressively higher fed funds rates, which is not the same as tapering), we can use these tightening cycles as a proxy for the expected upcoming tapering strategy.

The path of US bond yields during previous tightening phases is shown in Chart 8. Yields rose sharply on both prior occasions, first in 1994 and then over the period 2004 to 2006. It is most likely a further increase in bond yields will occur as and when expectations about tapering increase further, a situation we expect to develop over the next quarter. The Fed's use of forward guidance is specifically designed to limit the likely increase in long term yields.

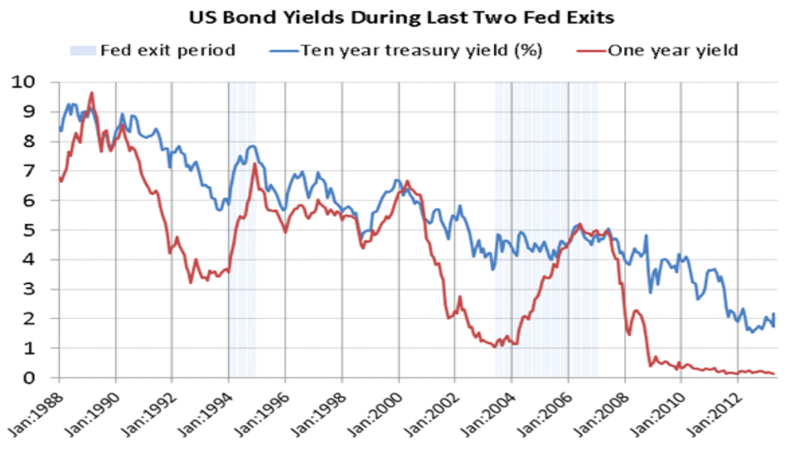
The impact of QE Tapering on the Australian Dollar

It is most likely the US dollar will appreciate as the market's expectations about tapering develop meaning the Australian dollar would be expected to depreciate.

Chart 8

US Bond Yield Performance during previous US Fed Tightening Phases[4]

Source: Financial Times, June 2, 2013



[4] http://blogs.ft.com/gavyndavies/2013/06/02/is-this-the-big-one-for-global-bonds

Performance during tapering uncertainty

The likely impact of QE Tapering on equity markets

Research by UBS[5] finds the reaction of equities to a rate-hiking phase depends heavily on the starting point from where the tightening phase begins. (Again we use historical fed funds rate tightening cycles as a proxy for tapering). In the past, if the Fed started its tightening cycle from an already elevated Fed funds rate, equity markets were likely to perform poorly. But starting from a low Fed funds level (as is the case now), tightening policy (tapering) will likely boost the equity market if history is a guide.

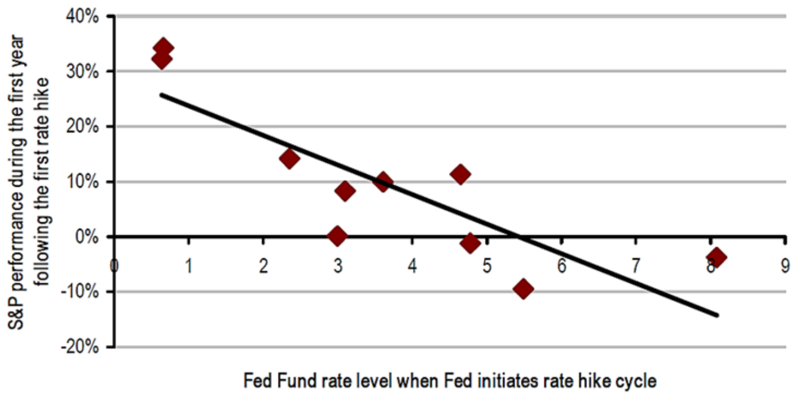
The key reason for these varied outcomes is that when a rate tightening cycle begins from a very low interest rate level, a tightening process would likely be occurring because economic conditions were improving so tapering can begin.

In this case, tapering could be expected to be positive for growth-orientated markets because it would signal a return to more normal conditions with more robust economic (and profit) growth. However, when in the past the fed funds rate has been raised from an already high level it has more usually been because of signs of overheating in the economy. In these circumstances, rates were usually being increased to slow future expected growth and inflation pressures.

Equity market valuations will also be important – equities are more likely to perform well in a rate rising environment (starting from low policy rates) if valuations are also supportive. If equities were to continue to exhibit a higher and higher P/E ratio ahead of tapering, a positive performance by equities during the tapering phase would become progressively more difficult.

Chart 9

US equity market performance during the first year following a rate hike



Source: UBS

[5] UBS Investment Research. *Is Fed tightening bad for the equity market?* January 31, 2013

What to monitor to assess tapering

We will be monitoring several key market variables to assess the market's evolving view about the timing and success of the tapering process. These will include:

1. The level and speed of change in long term sovereign bond yields, the shape of the sovereign yield curve and the change in the underlying components of the sovereign bond yield ("real" versus break-even inflation component).
2. The relative performance of "core" versus "peripheral" sovereign bond markets.
3. Movement in corporate credit spreads.
4. Changes in equity market prices, and the relative performance of different markets (emerging versus developed) and the underlying sectors of individual equity markets (i.e. relative performance of cyclical versus defensive sectors).
5. Currency market trends, particularly the foreign exchange value of the US dollar.

In following these various market variables, the key information we will be seeking will be:

1. Is the QE exit process judged to be getting closer or further away from implementation?
2. Is the implementation of the QE exit process judged to be too early, too late or optimally timed?
3. Is the QE process approaching because growth expectations have improved or because inflation expectations have increased?

Our overall assessment is that these indicators have been moving in a direction that suggests the market is increasingly pricing-in the implementation of tapering, potentially earlier than March 2014.

Conclusions

The recent market variability from 22 May 2013 may prove to be a foretaste of what is to come in markets as and when QE tapering moves closer.

We will be closely monitoring policy developments with the US (and other) central bank, but also the evolution in market pricing and expectations in regard to the QE tapering process.

This process is likely to be among the most important influences **(probably the most important influence)** on market performances over the next year.

It is likely the US Fed will want to err on the side of maintaining its stimulus for longer than required rather than winding down its QE policy earlier than required.

Our reason for this conclusion is that it would be less difficult for monetary policy makers to solve the problems caused by slow tapering (higher inflation, but stronger growth) than the problems likely to be caused by premature tapering (loss of growth momentum and rising deflation risk).

The tapering scenario we view as most likely is one regarded by market participants as being a little "late" in its implementation, and occurring mainly because growth prospects were improving.

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