CAPITAL MARKETS RESEARCH

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Special Update

Will Markets Wilt Post-OE2?

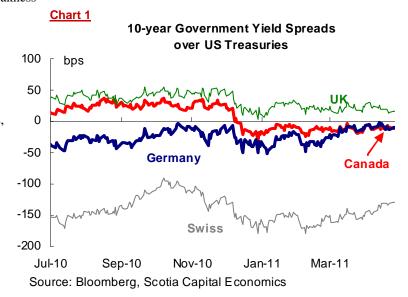
As largely expected, today's FOMC statement and the ensuing first-ever press conference carried no material surprises. Indeed, our comparison of the current statement with the prior statement offers thin gruel and maintains a generally dovish bias (see the Appendix). With the reinforced commitment to allow QE2 to expire by the end of June, however, the focus remains upon what market impact this may have. On this, the gauntlet has been dropped, and high profile firms and portfolio managers have staked out their positions. The expiration of QE2 is either going to lead to a bull flattener or a bear steepener, further depreciation or appreciation in the USD, and a risk-on or riskoff environment in commodities and equities. Clearly one side of the debate is going to be very, very wrong. In our view, the debate should have never become so polarized to begin with, as we don't see the expiration of QE2 as having a material market impact in isolation of other developments that themselves will be more important in shaping the outlook.

1. QE2 Doesn't Deserve The Blame For A Weak USD

Let's start with the impact on the USD. In assessing monetary policy implications for the USD, it is vital to separate the implications of conventional monetary policy from unconventional monetary policy in the US versus elsewhere. Conventional monetary policy — mostly measured by overnight rates — has indeed been one of the factors inducing USD weakness as short-term hot money spreads have favoured other crosses like CAD, the A\$ and the Euro over time. But unconventional monetary policy is simplistically blamed as being bearish for the USD. Consider chart 1. Since the period of time in which QE2 was first speculated upon and then introduced on November 3rd 2010, US Treasury yields rose at a faster pace than elsewhere and thus foreign spreads over the Treasury market narrowed. Narrower spreads over the US should have induced relative USD strength via attracting capital flows at the expense of other markets as yields at the margin became more attractive in favour of holding US debt. The exact opposite clearly happened through broad based USD weakness, which demonstrates that other factors of greater importance in driving weakness

in the USD against several crosses have been at play. This is true for the Euro, the Swiss Franc, the UK Pound, and CAD, among others. Therefore, since QE2 is unlikely what drove USD weakness, we don't see QE2's expiration as having a big impact on the USD relative to other drivers. Indeed, contrary to some opinions, we don't see a USD renaissance following the expiration of QE.

There is a related issue to this that entails addressing complaints across emerging markets that the Fed is intentionally debasing the USD and sparking unwanted capital flows into their own markets. We've addressed this issue before in our piece "Is The Fed Really To Blame For EM Headaches?", November 5th 2010 (co-



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authored with Scotia's EM Strategist Joe Kogan). Our main point then was that capital flows into EMs began to accelerate long before the Fed's Zero Interest Rate Policy, long before QE1, and even longer before QE2. What has attracted flows into EM currencies are more attractive relative growth prospects in what is best characterized as a pull effect on capital out of the US driven by opportunity rather than a push effect driven by Fed policy. While the US is in no position to lecture others on fiscal policy, EM fiscal largesse in several cases hasn't helped their inflation problems and made tighter monetary policy necessary albeit adding to currency strength.

Indeed, on a trade weighted basis, the USD is no weaker today following QE1 and QE2 than it was in the early days of the crisis during 2008, and has experienced two rallies during the period in which quantitative easing was being implemented. We repeat, other factors have been far more important to driving the USD's ups and downs in recent years than misplaced views on QE. Factors driving the 17% deprecation in the USD on a DXY trade weighted basis over the past year have included a combination of relative growth prospects in the US versus elsewhere such as EMs and Germany that have driven pull effects on capital, differences in conventional monetary policy between the Fed versus some other central banks especially the ECB's stricter (possibly too narrow) focus on headline inflation, and improved risk tolerance that always sparks a reversal of safe haven flows out of the USD elsewhere. In the view of Scotia Economics, most commodity strength is driven by fundamental demand from EMs particularly China, as well as a variety of supply shocks, and not speculation or loose talk of USD debasement.

This returns us to Scotia's currency call for the USD to continue depreciating into 2012 against most crosses. We are at the upper end of the forecast range for crosses such as USDCAD with the strongest forecast on the street, and well above the lowest forecast. This is not because of QE2's expiration for reasons gone over, and is at best only partly due to differences in conventional monetary policy in the US versus Canada. Even though we have a later call for the BoC than others, shops forecasting earlier BoC hikes and higher end points than we are have materially weaker forecasts for CAD despite more aggressive spread views than Scotia's. Rather, Scotia's principal view behind USD weakness against most crosses is related to what we think will be strong fiscal headwinds operating against appetite for Treasurys and the USD.

2. QE Has Theoretically Indeterminate Effects On Yields

In judging the effects on Treasurys and borrowing costs stemming from the expiration of QE2 at the end of 2011Q2, it seems logical to start by pointing out that the theoretical impact of QE on base yields and the cost of borrowing is indeterminate and the rationale for pursuing QE has proven to be malleable according to the ex-post evidence and the circumstances under which it has been imposed. We'll explain this view by noting what happened during QE1 and then QE2.

2.a. The QE1 Experience

When QE1 was pursued starting on November 25th 2008, the rationale was to spark credit spread compression and lower borrowing costs by leaning the Fed's balance sheet into a private market failure insofar as the pricing of risky assets was concerned. That was supposed to engineer lower borrowing costs that would stimulate money demand and grease the wheels of recovery in markets and the economy. We had forecast this move, and were strong supporters at the time. We had also argued that in addition to purchasing private credit, Treasuries had to be purchased or else the effect of distorted capital flows sucking away funds from what wasn't being targeted toward what was being targeted would negate the desired outcome. It may have worked, but there are three cautions in evaluating its impact. One is that we'll never really know how much of the desired outcome was due to Fed policy, versus automatic stabilizers in the global economy and markets that brought us back from the brink once the inventory cycle had run its course, factory production recovered, and a positive earnings cycle that was supportive of the risk trade was put in place. This was the rationale behind why in late 2008 we published our bullish Turning Points paper that argued that while we were not quite at a market bottom yet, the end to the recession would occur later in 2009 and a major rally in the risk trade would unfold in advance of this. But we're still at best half way in evaluating the long-run success or failure of the policy in terms of trading off a possible short-term confidence boost to markets versus a complicated exit policy and long-run inflation risks. Further, the impact of QE1 was more focused upon perhaps assisting market pricing rather than igniting volumes. Money demand in the key household sector has proven to be interest inelastic, or largely insensitive to lower rates, and the recovery in business financing was largely driven by bond rollover and at the expense of short term loans and CP such that the outcome was no material recovery in net business financing. The results are clear in terms of a lackluster growth environment that has oscillated erratically from moderately bullish to bearish prints on GDP growth especially considering the sheer volume of stimulus thrown at the US economy. In this regard, we're not left with a terribly different outcome to this point than what the Bank of Japan's application of QE did to the Japanese economy and markets through repeated applications.

2.b. The QE2 Experience

Now fast forward to QE2, and a funny thing happened on the way to policy nirvana: the story totally changed. Focused Treasury buying didn't push base yields lower or keep them low — in fact US 10s as one example climbed from about 2½% just prior to the



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point at which QE2 expectations started to be priced into the market, to around the 3½% zone since December. This is why I'm amazed to see market participants argue that a bear steepener must unfold following the expiration of QE2 on the supposition that less buying by the Fed should push Treasury prices lower and yields higher; QE2 did the exact opposite when the Fed was actively starting to buy Treasurys. Now, we're asked to believe, QE2 worked by pushing yields higher — not lower — because it raised inflation expectations and diverted the trade away from the deflation bias that had been creeping into markets late last summer. Maybe, but the cost was higher borrowing costs as manifest in the rise in 30 year fixed mortgage rates from last Fall through to today. One wouldn't have thought the US needed higher mortgage rates as a policy goal, but this is what happened during the QE2 experience. We'll give the bright minds at the Fed the benefit of the doubt that QE2 really did avert deflation risk, but with the strong caveat that we'd attach at least as much weight to the view that deflation risk could well have solved itself through soft base effects off of which prices could rise in future in the absence of QE2 — without incurring market concerns over the Fed's exit policies.

As far as the risk trade is concerned, it isn't clear that boosting discount rates such as the BAA corporate benchmark from about 5½% last August to the 6% mark by December as a correlated consequence to QE2 would have boosted equity multiples. Thus, we are also skeptical that the end to QE2 would have a material impact upon equities.

Our point is that either the policy justification totally changed with merit from QE1 to QE2, or it out-smarted itself and became too cute by half in changing the story to what supported policy actions, or the impact of QE is dependent upon the circumstances under which it is imposed and dependent upon the time frame being evaluated in terms of very short term consequences versus the impact over ensuing weeks and months. We're biased toward the latter interpretation. Text book theory might say that more demand for an asset class from a potential buyer like the Fed could push its yields lower. But text book theory would also postulate that the effects depend upon where the economy sits in terms of its current aggregate demand and aggregate supply balance, where markets sit in terms of other sources of demand and supply, and where prevailing market sentiment resides on key issues like future inflation expectations that themselves can be influenced by the very way in which the Fed is funding its Treasury purchases — through sharply expanding narrow money.

3. The Fed Won't Just Disappear

After rejecting the role of QE in debasing the USD and having a clear unambiguous impact upon Treasury yields, there are other reasons to discount the importance of the expiration of QE2 to the markets. One is that the Fed won't just roll over and die when QE2 withers. It may well retain its influence over markets through emphasizing communication tools including FOMC statements and speeches that keep the credible threat of intervention against rising yields alive. Also, a well discussed option would be for the Fed to continue to reinvest coupon into Treasurys. In his press conference following the FOMC statement, Chairman Bernanke alluded to the possibility of ceasing this practice as the first sign of tightening policy. Continuing it, however, may have the effect of mitigating market concerns over the impact of the expiration of QE2 on market yields. We caution that such Fed tools may well not have the effect of calming Treasury market concerns for the reasons cited in #2, but simply wish to point out that the Fed may not be totally powerless to control the curve at least for a time.

4. Well Telegraphed Expiration of QE2

Fourth, Chairman Bernanke has repeatedly noted that the expiration of QE2 is well telegraphed in advance and thus should be largely priced in, barring minority speculation on prospects for QE3.

5. The Perils To QE3

There are some suggestions that the Fed should contemplate QE3 despite guidance from the Fed that bond buying will cease by the end of the current quarter. We find this option to be untenable at this juncture. The impact could well split the FOMC given that several FOMC members have been fairly blunt about their opposition to such an idea. Indeed, the potential exists for the most divided Fed since the crisis unfolded should QE3 be pursued, and that raises the possibility of being sharply destabilizing to markets. Not surprisingly, the more dovish members, including Fed Vice Chairman Dudley (voting), Fed Governor Tarullo (voting), Fed Governor Duke (voting), Fed Governor Yellen (voting), Atlanta Fed President Lockhart (alternate), New York Fed First Vice President Cumming (alternate) and Boston Fed President Rosengren (non-voting), will likely stand behind Fed Chairman Bernanke should QE3 be deemed necessary. However, many of the more hawkish and outspoken members have already hinted that they would oppose QE3 or, at this point, they don't think it's necessary. These include Dallas Fed President Fisher (voting), Philadelphia Fed President Plosser (voting), Minneapolis Fed President Kocherlakota (voting), Chicago Fed President Evans (voting), Richmond Fed President Bullard (non-voting), Cleveland Fed President Pianalto (alternate) and new San Francisco Fed President Williams (alternate) have spoken little on this topic but we think all but Bullard would likely support QE3 should it be proposed.



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Further, we think the likely outcome to imposing QE3 at this stage would be to raise concern in markets that the Fed's exit strategy has become ever more complicated, and that longer-run inflation risk would rise. We are not currently in an environment in which the concerns of markets or agents in the economy are focused upon deflation risk; indeed, the bias of risks ranges from upwardly tilted risks to at best hope that inflation risk subsides into next year but nonetheless remains on the positive side of the ledger. Thus, QE3 would likely push Treasury yields — and other borrowing costs — materially higher.

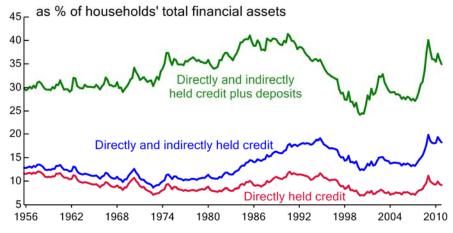
6. US Treasury Curve Forecast

We close with our forecast for the US Treasury curve in the accompanying table. Because the risk is pointed toward softer than expected growth in the first half of this year, we believe Treasury yields could move somewhat lower before rising into the back half of this year and into next. This has nothing to do with QE views, but everything to do with our concerns about the US fiscal position heading into an election year, and our view that austerity talk is over-rated at the moment as President Obama will be challenged as a Democrat to campaign into 2012 on a meaningful austerity agenda (in contrast to recent token measures) that could disproportionately hit his support base. We are also of the view that greater competition for capital through a gradual private credit recovery and less willingness of households to supply capital to the Treasury market given they are at cycle tops on fixed income asset allocation (chart 2) will combine to put upward pressure upon Treasury yields into next year.

United States	10q1f	10q2f	10q3f	10q4f	11q1f	11q2f	11q3f	11q4f	12q1f	12q2f	12q3f	12q4f
Fed Funds Target Rate	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.75	1.25	1.75	2.00
Prime Rate	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.75	4.25	4.75	5.00
3-month T-Bill	0.15	0.17	0.15	0.12	0.09	0.15	0.20	0.40	0.90	1.40	1.90	2.20
2-year Treasury	1.02	0.60	0.42	0.59	0.82	0.70	0.85	1.00	1.40	1.75	2.00	2.20
5-year Treasury	2.54	1.77	1.26	2.00	2.28	2.10	2.20	2.25	2.50	2.75	2.85	2.90
10-year Treasury	3.83	2.93	2.51	3.29	3.47	3.40	3.65	3.75	4.00	4.10	4.30	4.65
30-year Treasury	4.71	3.89	3.68	4.33	4.51	4.50	4.65	4.75	4.95	5.05	5.20	5.35

Chart 2

Fixed Income Holdings of US Households



Source: U.S. Federal Reserve, Scotia Capital Economics

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Appendix — FOMC: Side-By-Side Statement Comparison

Release Date: April 27, 2011

Information received since the Federal Open Market Committee met in March indicates that the *economic recovery is proceeding at a moderate pace* and overall conditions in the labor market are improving gradually. Household spending and business investment in equipment and software continue to expand. However, investment in nonresidential structures is still weak, and the housing sector continues to be depressed. Commodity prices have risen significantly since last summer, and concerns about global supplies of crude oil have contributed to a further increase in oil prices since the Committee met in March. *Inflation has picked up in recent months*, but longer-term inflation expectations have remained stable and measures of underlying inflation are still subdued.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The unemployment rate remains elevated, and measures of underlying inflation continue to be somewhat low, relative to levels that the Committee judges to be consistent, over the longer run, with its dual mandate. Increases in the prices of energy and other commodities have pushed up inflation in recent months. The Committee expects these effects to be transitory, but it will pay close attention to the evolution of inflation and inflation expectations. The Committee continues to anticipate a gradual return to higher levels of resource utilization in a context of price stability.

To promote a stronger pace of economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate, the Committee decided today to continue expanding its holdings of securities as announced in November. In particular, the Committee is maintaining its existing policy of reinvesting principal payments from its securities holdings and will complete purchases of \$600 billion of longer-term Treasury securities by the end of the current quarter. The Committee will regularly review the size and composition of its securities holdings in light of incoming information and is prepared to adjust those holdings as needed to best foster maximum employment and price stability.

The Committee will maintain the target range for the federal funds rate at 0 to 1/4 percent and continues to anticipate that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels for the federal funds rate for an extended period.

The Committee will continue to monitor the economic outlook and financial developments and will employ its policy tools as necessary to support the economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate.

Voting for the FOMC monetary policy action were: Ben S. Bernanke, Chairman; William C. Dudley, Vice Chairman; Elizabeth A. Duke; Charles L. Evans; Richard W. Fisher; Narayana Kocherlakota; Charles I. Plosser; Sarah Bloom Raskin; Daniel K. Tarullo; and Janet L. Yellen.

Release Date: March 15, 2011

Information received since the Federal Open Market Committee met in January suggests that the *economic recovery is on a firmer footing,* and overall conditions in the labor market appear to be improving gradually. Household spending and business investment in equipment and software continue to expand. However, investment in nonresidential structures is still weak, and the housing sector continues to be depressed. Commodity prices have risen significantly since the summer, and concerns about global supplies of crude oil have contributed to a sharp run-up in oil prices in recent weeks. Nonetheless, longer-term inflation expectations have remained stable, and measures of underlying inflation have been subdued.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. Currently, the unemployment rate remains elevated, and measures of underlying inflation continue to be somewhat low, relative to levels that the Committee judges to be consistent, over the longer run, with its dual mandate. The recent increases in the prices of energy and other commodities are currently putting upward pressure on inflation. The Committee expects these effects to be transitory, but it will pay close attention to the evolution of inflation and inflation expectations. The Committee continues to anticipate a gradual return to higher levels of resource utilization in a context of price stability.

To promote a stronger pace of economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate, the Committee decided today to continue expanding its holdings of securities as announced in November. In particular, the Committee is maintaining its existing policy of reinvesting principal payments from its securities holdings and intends to purchase \$600 billion of longer-term Treasury securities by the end of the second quarter of 2011. The Committee will regularly review the pace of its securities purchases and the overall size of the asset-purchase program in light of incoming information and will adjust the program as needed to best foster maximum employment and price stability.

The Committee will maintain the target range for the federal funds rate at 0 to 1/4 percent and continues to anticipate that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels for the federal funds rate for an extended period.

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