

March 11, 2016

A TALE OF TWO CENTRAL BANKS: FEDERAL RESERVE LEANS TOWARDS RATE HIKES WHILE THE ECB STEPS HARDER ON THE MONETARY ACCELERATOR

Highlights

- Market expectations for inflation remain subdued in both the United States and the Eurozone. However, inflation in the U.S. is more quickly converging toward the Federal Open Market Committee's (FOMC's) target, while inflation measures in the Eurozone remain well below target.
- Inflation dynamics in the Eurozone are a function of excess slack in the economy. Since we do not expect the large negative gap between aggregate demand and supply to close in the near-term, underlying inflation is expected to remain below target beyond 2017.
- In contrast, diminishing economic slack in the United States is expected to continue to push inflation measures higher, with the Fed's preferred measure of core PCE inflation stabilizing near their target of 2.0% in about four to six quarters.
- The difference in inflation dynamics is the primary driver of monetary policy divergence between the two regions. Yesterday's significant easing actions by the ECB confirms an unwavering intent to boost aggregate demand. The long-term horizon on some of its actions like its asset purchases and refinancing operations argues that the ECB is unlikely to even contemplate reversing course over the next two years. Meanwhile, we expect the FOMC to tighten monetary policy two more times this year.

Yesterday the ECB announced a flurry of monetary policy measures aimed at stimulating bank lending with the ultimate objective of boosting aggregate demand. Although some of these policy actions were widely expected (cut in the deposit rate to -0.4% and expansion of the monthly asset purchase program), other actions (such as the inclusion of purchases of investment-grade nonbank corporate bonds, negative rates on targeted long-term refinancing operations (TLTROs), the cut in the marginal lending rate to 25 basis points (bp), and the cut to the main refinancing rate of the Eurosystem to 0 from 5 bp), signals that the ECB is deeply concerned with the persistence of low inflation relative to its target of 2.0%. Central banks are generally of the mindset that they would rather be in the position of tempering inflationary pressures than be on the flip side of the coin.

And yet, market measures of inflation expectations pose a puzzle. Based on the 5yr5yr inflation rate swaps for the Eurozone and similar contracts for the United States (Chart 1), inflation expectations have been tracking each other. However, the economic backdrops lack the same degree of parallel, suggesting that investors may be overly emphasizing the influence of energy prices on headline inflation, and may not fully appreciate the diverging

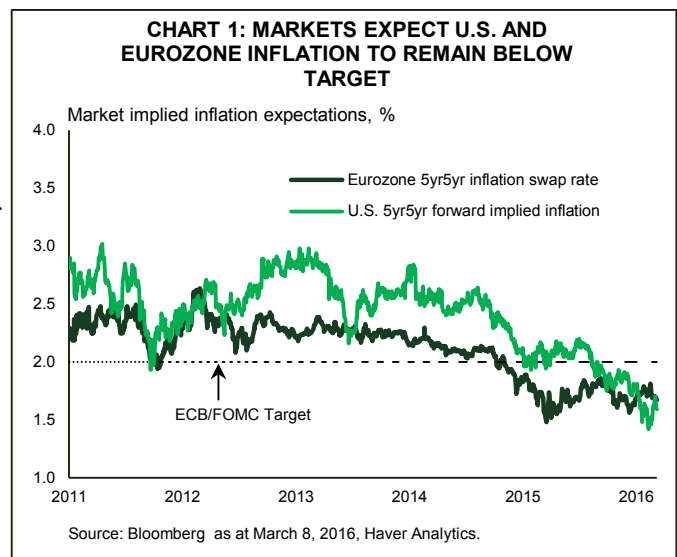
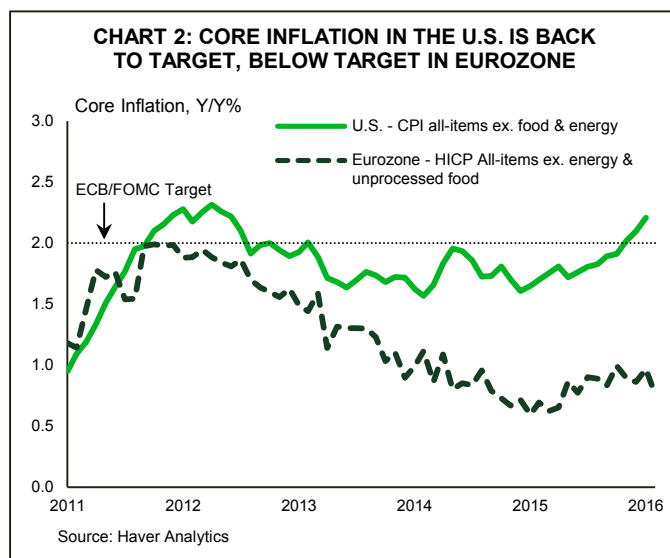


CHART 2: CORE INFLATION IN THE U.S. IS BACK TO TARGET, BELOW TARGET IN EUROZONE



trends in underlying inflationary pressures, and ultimately monetary policies, between the two regions¹. The yawning gap between the Eurozone's underlying inflation and the ECB's 2% target (Chart 2) is in contrast to the U.S. core CPI measure, which has exhibited sturdiness within a 1.7% to 2.0% range for more than a year – and recently even broke above that upper threshold. The core PCE inflation measure, which is the more relevant metric to the Federal Reserve, is now exhibiting similar behavior in its trend.

What's ultimately driving the inflation outlook in the Eurozone is the large amount of excess slack due to insufficient aggregate demand. Market expectations seem consistent on this front with our own, with underlying inflation in the Eurozone expected to remain below target through 2017, edging up at only a gradual pace as demand recovers. Weak market-implied inflation expectations in the United States,

CHART 3: EUROZONE RECOVERY HAS LAGGED THAT OF THE U.S.

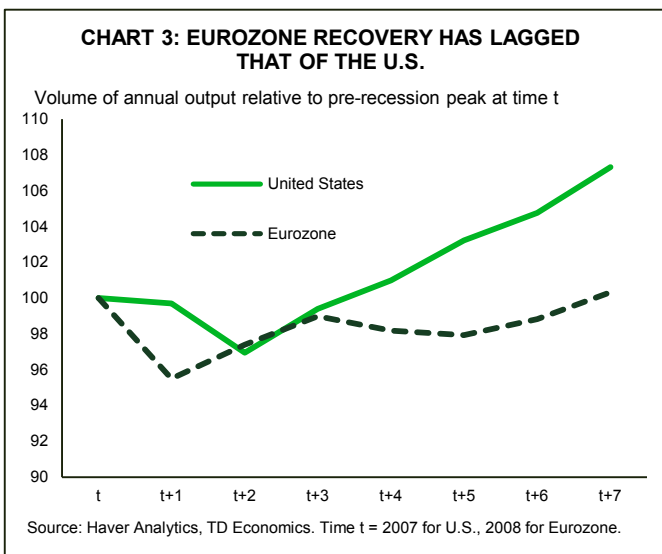
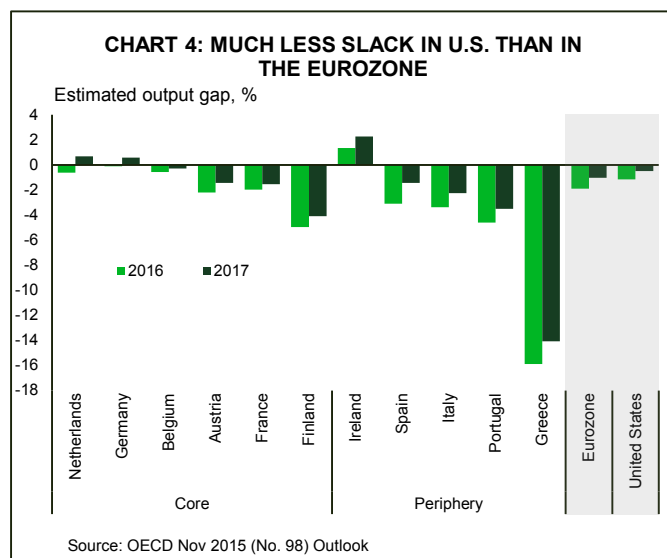


CHART 4: MUCH LESS SLACK IN U.S. THAN IN THE EUROZONE



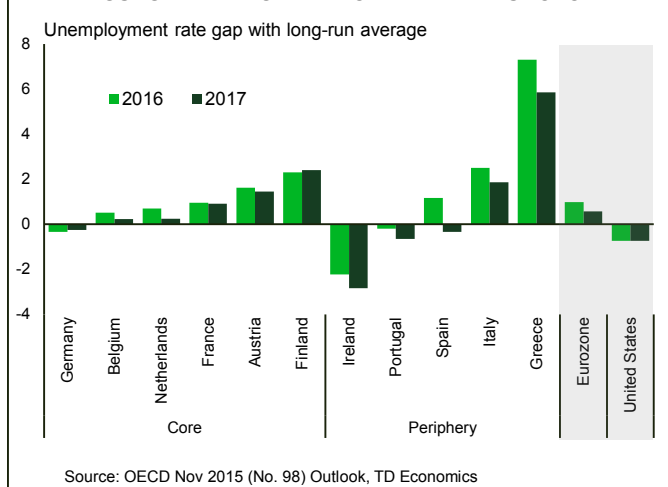
however, are harder to justify. Aggregate demand in the United States has rebounded quicker than in the Eurozone (Chart 3), supporting the notion that the Federal Reserve will continue along a gradual (and cautious) path of tightening that will remain in contrast to the European Central Bank.

Recent inflation dynamics differ between the Eurozone and the U.S.

Headline inflation in the Eurozone once again dipped below zero (-0.2%) in February, weighed down by falling energy prices. While it can be argued that much of the weakness is temporary, underlying trend inflation (headline less energy and unprocessed food) was a mere 0.8% – more than a percentage point below the ECB's target. It seems that this weakness will persist, as yesterday the ECB revised down its outlook for headline inflation to 0.1% this year and 1.4% in 2017. At the root of the ECB's policy moves are attempts to stimulate demand and counteract disinflationary concerns. In contrast, inflation in the United States has ticked up in recent months, as both headline inflation and underlying measures begin to reflect past tightening of excess supply as evidenced by declining output and employment gaps.

A dive into Eurozone data shows that inflation is trending well below pre-crisis levels. Below-target trend inflation suggests that there is substantial excess capacity in the Eurozone. Underscoring this is a one-size-fits-all-policy for a series of countries that are anything but similar. A large concentration of exceptionally large output gaps persisting within periphery states is being further hobbled by counterproductive fiscal targets. However, excess capacity is not just a problem faced by peripheral members; non-peripheral Eurozone economies (classified here as core) are also plagued by sizable output gaps and sluggish demand

CHART 5: UNEMPLOYMENT GAPS CONFIRM SUBSTANTIAL SLACK TO REMAIN IN EUROZONE



growth, which continues to be held back by household and corporate sector deleveraging.

This is in sharp contrast to the U.S. where we have seen strong employment numbers month after month, reducing the unemployment rate and the degree of excess slack in the labor market. This is underpinning firmer wage growth, and ultimately provides the necessary support to unleash pent-up demand for consumer goods and housing. This absorption of excess slack in the U.S. economy is what has been supporting the sturdier total and core inflation measures in the United States. Excess slack in the United States is forecast to virtually disappear by the end of 2017.

In both the U.S. and Eurozone, much of the drag on the headline index from past declines in energy prices will have diminished by mid-year, as commodity prices firm. But, the lifting of underlying trend inflation requires the continued

absorption of economic slack, and the Eurozone simply has more work to do on this front. The region faces stronger headwinds than its U.S. counterpart due to demand that continues to run well below economic potential (Chart 4), and a number of labor markets that embed a high degree of excess slack (Chart 5). As such, there is a case for more economic stimulus in the Eurozone, as the longer these large output gaps remain the greater the risk that inflation expectations become de-anchored. This risk is further heightened by the fact that fiscal policy remains relatively restrictive, leaving monetary policy as the only game in town.

Monetary remains the sole source of stimulus for the Eurozone

It became quickly apparent during the 2012 peak of the Eurozone's sovereign debt crisis that the utilization of significant fiscal measures to boost demand would no longer be an available solution. While often not showcased, peripheral members have undergone the largest adjustments in their primary budget balance since the onset of the crisis (Chart 6). The tight fiscal noose has led some countries, like Greece, Portugal, and Spain, to recently elect populist parties with socialist leanings. This may lead to some increased expenditures, particularly on infrastructure, but any attempts to reinstate pre-crisis entitlements in these nations will be unsuccessful. Ultimately, substantial growth-augmenting fiscal stimulus is simply not in the cards, placing more reliance on monetary policy.

Monetary easing thus far in the Eurozone has focused on lowering borrowing costs and on spurring loan creation, aiming to pull forward growth in order to kick-start an economic recovery today. The ECB's easing actions began by first reducing its target refinancing rate to Eurozone banks, followed up by forward guidance (communicating rates will stay low for some time). This was then accompanied by long-term and targeted long-term repo operations, intended to enhance financial system liquidity. Once the repo operations were underway, the ECB followed this with asset purchases soon to be running at €80 billion per month, and then by taking its deposit rate paid on excess reserves below zero to -0.4%. Yesterday's announcement of TLTROs offered at up to the -0.4% deposit rate and the cut in the main refinancing rate to zero suggests that negative lending rates will likely persist in the Eurozone for some time. While all of these measures have and will continue to improve bank lending, there is still a substantial amount of deleveraging by Eurozone firms and households remaining before these measures provide their desired boost to growth.

While the final effects on growth of the asset purchases, LTROs and negative deposit rates will remain difficult to

CHART 6: AUSTERITY MEASURES MORE SEVERE ON PERIPHERY

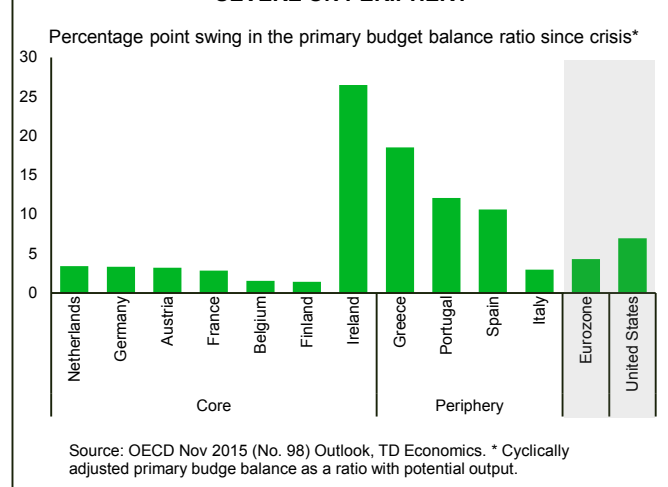
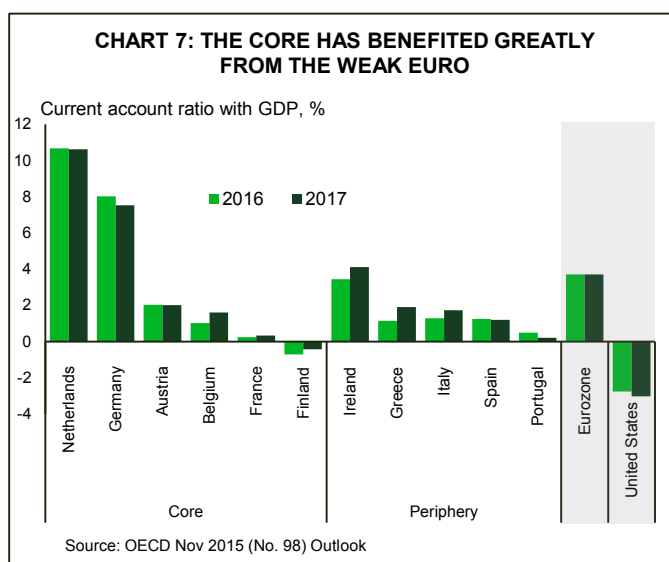


CHART 7: THE CORE HAS BENEFITED GREATLY FROM THE WEAK EURO

quantify, their contribution to the weakening of the Euro has resulted in strongly positive trade surpluses particularly for core members of the Eurozone that are expected to continue through 2017 (Chart 7). Yesterday's policy announcements by the ECB should help maintain the weakness in the euro, providing continued support to the Eurozone economic recovery. In fact, we believe that much of the short euro trade is done, and we expect the USD/EUR to trade mostly near current levels, with a slight upward bias. A weak euro implies that firmer import prices would pass-through to boost headline inflation, although this temporary impact would result in a more subdued uptick on underlying inflation.

While the stimulus measures utilized thus far by the ECB are extraordinary in some respects, they are well within the purview of monetary policy. There really are no limits to the ways that monetary authorities can act to encourage demand growth – there are just diminishing returns to these actions and, for the Eurozone in particular, strict political constraints.

As shown earlier in Chart 1, market expectations for the Eurozone inflation outlook have deteriorated in recent weeks as expectations for global growth were downgraded. The expectation of more easing and U.S. tightening has kept the EUR/USD at post-crisis lows, which should help Eurozone exports, but do little to resolve intra-Eurozone imbalances.

Given the slow but steady recovery, the ECB is likely to hesitate from undertaking any further drastic monetary policy measures, saving political capital and ammunition for a future date. This view is substantiated by comments from the ECB President, Mario Draghi, during yesterday's press conference that it is unnecessary to reduce rates further from their current levels. However, after yesterday's announce-

ment, some prudence by the ECB is warranted as it will take some time for these measures to have an impact on the real economy, and it's not certain that these measures will have the desired impact on growth. As a result, the abundant excess supply in the Eurozone will take some time still to absorb, justifying weak inflation expectations.

The outlook for inflation and policy

Putting all of this together, the excess slack that has accumulated from persistently weak demand has kept underlying inflation well below target in the Eurozone. We don't see the main headwinds to growth in the Eurozone diminishing any faster than at the time of our last forecast update in December. However, inflation has disappointed to the downside as growth decelerated through the latter half of 2015. Together with weaker monthly indicators for Eurozone growth, such as the Markit Purchasing Manager Index (PMI), this combination has acted to provide the impetus for the additional stimulus announced yesterday by the ECB.

This recent deterioration in the economic and inflation outlook for the Eurozone motivates a downward revision to our inflation outlook for 2016. Looking ahead to 2017, we expect that the rebound in oil prices could temporarily pull the headline inflation number above target, but after the energy price impact falls out of the base year, we expect inflation to return below target, in line with the underlying trend. This is consistent with the OECD's forecast that the output gap will remain significantly negative for many members of the Eurozone through 2017, and thus implies that inflation will continue to remain below target for quite some time. We will provide an updated Eurozone inflation outlook with our March Quarterly Economic Forecast later this month.

The outlook for inflation and, correspondingly, the monetary policy stance in the United States is the opposite of that for the Eurozone. We expect the FOMC to raise interest rates twice this year, with June marking the likely date for the next hike. Monetary policy tightening in the United States is being driven by a more rapid diminishment in domestic economic slack than in Europe, as evidenced by forecast declines in both the output and employment gaps through 2017. The recent uptick in inflation measures for the United States has acted to reaffirm signals from the FOMC that some modest further tightening is warranted and supported by stronger economic fundamentals.

Endnotes

1. The 5yr5yr forward inflation expectations is what the market expects inflation to average in five-years' time over the next five years. Inflation swaps are an imperfect measure of inflation expectations, since they exist primarily to compensate investors seeking to hedge inflation risks conditional on where current inflation is and the most probable evolution of oil prices. These contracts are generally illiquid. Furthermore, the recent weakness in the implied inflation expectations is likely due to a combination of the impact on inflation expectations from the recent tightening in financial conditions and the significant downside risks from the fact that any future disinflationary shock will be difficult to offset given that central bank policy rates in many advanced economies are near their effective lower bound.

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