Global Macro Strategy

Theme #2: Disinflation-felt locally, spread globally

Strategy

Global

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Low inflation redux

Monetary policy remains stimulative globally, and labor markets are tightening. Yet, global inflation is low. We expect it to remain so during the next several quarters, and any pickup should be well-contained.

Disinflation is not just about China or commodities

Recent events in China have increased attention on the issue, but global disinflation is about much more. A still-negative global output gap, rising inflation persistence, and a flatter Phillips curve have been key in keeping global inflation low, and regardless of what happens, over the near term, with China or commodity prices, they should continue to weigh.

Well-contained inflation is key for benign risk environment

At this particular macro juncture, a rise in global inflation that called into question accommodative monetary policies would be among the worst possible scenarios for pro-cyclical (risky) assets. If, however, inflation remains contained, the underlying benign global backdrop is still in place.

Equity markets featuring strong credit growth are likely to rally further

This global backdrop is particularly supportive for developed market (DM) equities where credit growth is accelerating (Europe and Japan). That said, we don't expect this "reflationary" benefit for emerging market (EM) equities. EM disinflation does not enhance valuations since it largely reflects weaker growth, not better policy.

Exchange rates from small open economies are likely to depreciate

Small open economies are the biggest importers of global disinflation. Where policy rates are below zero (CHF and SEK), the currency is the likeliest release valve: we expect FX depreciation against the EUR. There are also currencies where inflation has been elevated, but is likely to converge to G10 levels (AUD and NOK). These should depreciate, too.

Wide interest rate gaps should narrow as inflation converges

In addition to keeping interest rates low generally, disinflation should act, on the margin, to equalize longer-term G10 yields. The 150bp spread between US and German 10-year yields stands out in this regard, and should narrow.

Inflation: why is it low and what does it mean for markets?

That global inflation remains low is both well-known and much discussed; yet, its importance for markets and the broader macro backdrop remains underappreciated. Recent events in China have increased attention on the issue, but global disinflation is about much more than just China or commodities. A still-negative global output gap, rising inflation persistence, and a flatter Phillips curve have been key in keeping global inflation low, and regardless of what happens with China or commodity prices, they should continue to weigh.

Global disinflation is still underappreciated…

To be clear, we aren't arguing for an outright decline in prices (deflation), or even much lower levels of core inflation necessarily. Rather, our key point is this: even with global monetary policy remaining stimulative and labor markets tightening in much of the world, inflation is very likely to remain modest during the next several quarters, and any pickup well-contained.

This is important. A world in which inflation is close to rising is very different from one in which a pick-up remains distant. With heightened concerns about the durability of the global expansion, a rise in global inflation that called into question the ability of central banks to maintain ultra-accommodative policy would be among the worst possible scenarios for risk markets. If, however, inflation remains contained, the underlying benign global backdrop is still in place.

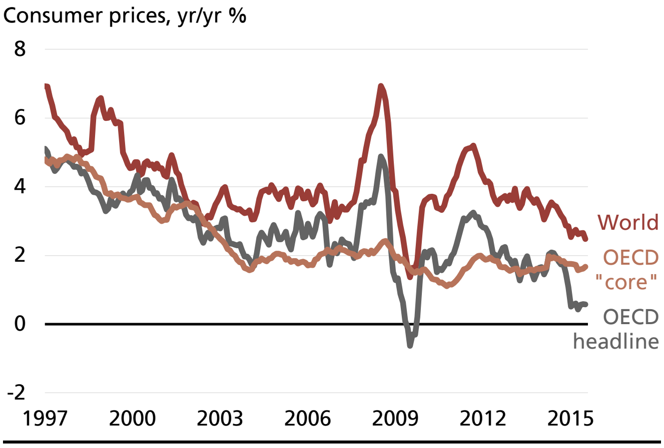
…and this makes a difference in the backdrop for policy and markets

Such a backdrop should be positive for risk assets in general, and equity markets where credit growth is accelerating, in particular (Europe and Japan). That said, we don't expect much benefit to EM equities, as EM disinflation is mostly a reflection of weaker growth rather than better policy, and is not valuation enhancing.

In G10 FX, the global nature of the inflation shock suggests being short currencies from small open economies where rates are at or below zero, and inflation is below target (CHF and SEK), as well as currencies where inflation has been elevated recently, but is likely to fall toward average G10 levels (AUD and NOK).

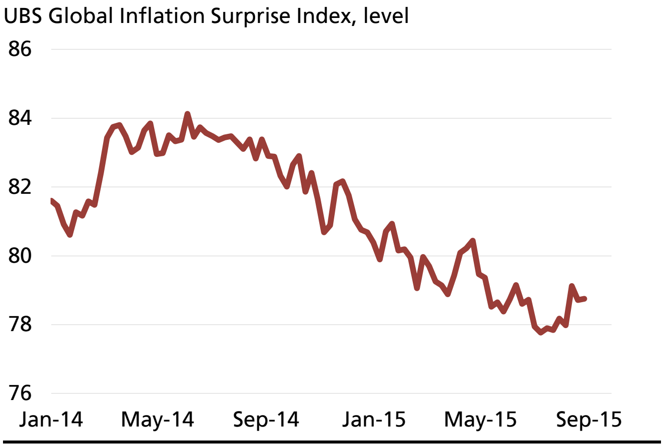
In addition to keeping interest rates low generally, disinflation should act on the margin to equalize longer-term G10 yields. The 150bp spread between US and German 10-year yields stands out in this regard, and should narrow. Finally, the UK's relatively low exposure to global inflation trends suggests higher front-end rates, at least on a relative basis, and a constructive view on GBP.

Figure 1: Disinflation is a global trend



Source: IMF, OECD, Haver, UBS. Note: "Core" excludes food and energy prices.

Figure 2: Inflation forecasts continue to overshoot



Source: UBS. Bloomberg: UBSKGLOB Index.

Inflation facts: low, surprisingly low, increasingly global

Three key stylized facts serve as a good starting point for our analysis.

- **The extent of global disinflation is clear across measures**

Inflation is at a cyclical low…

The OECD's headline and core consumer price index (CPI) measures sit at 0.6% and 1.7% year-on-year, respectively, while the IMF's global headline inflation index printed 2.5% in July. The IMF's world measure is higher than the OECD's more narrow metric, but is right near the cycle low as well (Figure 1, previous page).

On the EM side, headline and core inflation (on a median basis) have eased to their lowest levels of the past 20 years, excluding 2009. The producer price index (PPI) is even lower, contracting across large parts of EM, reflecting the strength of the disinflationary impulse in manufactured goods and fuel prices versus services prices, which have been supported by reasonably strong EM labor markets.

- **Disinflation is not well understood**

…it keeps surprising to the downside…

Although three years of similar dynamics would lead many to assume that disinflation is well understood, the data suggest otherwise. The UBS global inflation surprise index has fallen nearly every month this year, reaching a new cycle low in July (Figure 2, previous page). So, while inflation markets are pricing in low inflation for the foreseeable future, this may be based more on China and commodity prices than on the key underlying disinflationary forces.

- **There is a global component to disinflation**

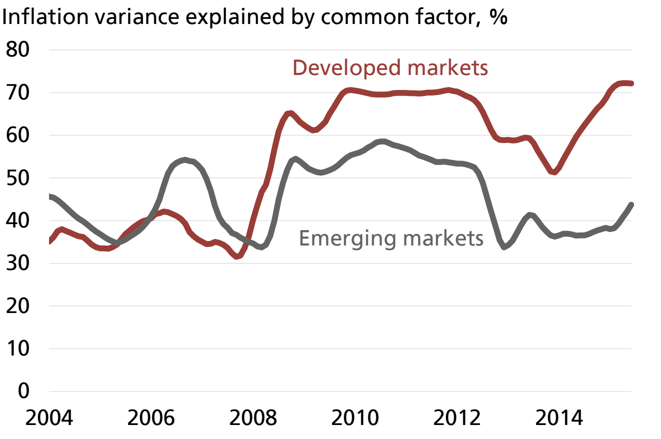
…it is felt locally, but spread globally…

While there are certainly idiosyncratic elements to global inflation, there is a large, and rising global component to it, particularly in the developed world. We can think of each country's inflation as consisting of two parts: a common global factor, and an idiosyncratic country-specific component. A data reduction technique known as principal components allows us to summarize a large data set in a few series, and in Figure 3 we use this to show the percentage of DM and EM inflation variance explained by one common factor. This gives an estimate of how much of individual country inflation is being driven by a common global factor.

…more so for DM than EM.

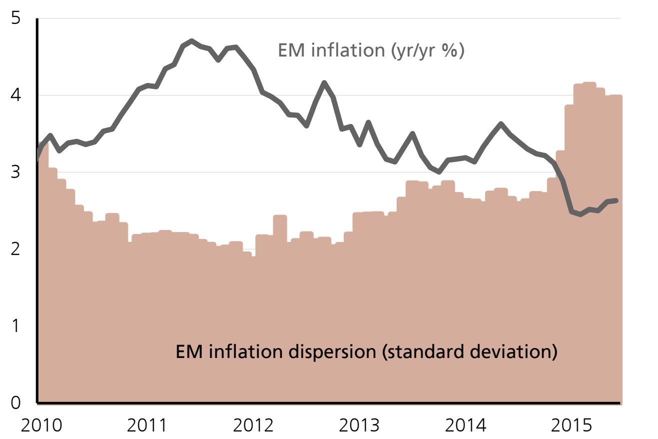
In developed markets, the common factor explains a high and rising share of inflation variance across countries (nearly 75%), while in EM, inflation remains

Figure 3: Much of DM inflation variance explained by one factor



Source: Haver, UBS. Proportion of variance explained by first principal component of inflation for 18 EMs and 33 DMs over rolling 4-year windows.

Figure 4: EM inflation falling, while dispersion is rising



Source: Haver, UBS.

more idiosyncratic. This is important, as it suggests that even reflationary domestic conditions (a closed output gap or an easing central bank, for example) in individual DM countries may not be enough to lead to a notable rise in inflation amid global disinflationary pressures. It is also consistent with our view that small open economies are most exposed to global disinflation.

On the EM side, the results are in line with the rise in inflation dispersion seen during the past year (Figure 4, previous page). There have been significant outliers to the global disinflation trend within EM: Brazil, Indonesia, Russia and Turkey, where currency weakness and idiosyncratic factors have pushed inflation higher.

Four key factors keeping global inflation low

Why disinflation?

Investors may be assuming that a combination of very easy monetary policy and improving employment dynamics will be enough to bring back inflation. We believe this is unlikely for a number of reasons, including: (1) A still-negative global output gap; (2) a diminished link between economic slack and inflation; (3) increased inflation persistence; and, (4) greater inflation drag from China and the emerging world. Let's take each in turn:

1) Mind the gap: global output gap smaller, but remains negative

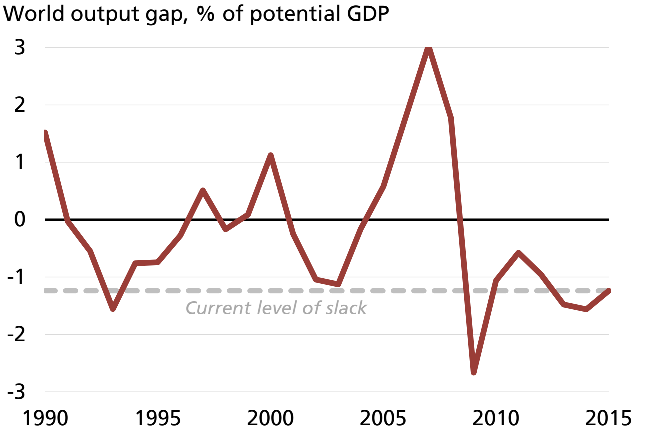
First, a sizable output gap

Perhaps most important for global inflation, despite shrinking during recent years, the global output gap remains negative (Figure 5). By definition, this should act as a restraint on inflation, even if only on the margin. No doubt, the global output gap has begun to close, and is much improved, but on most measures it remains significant enough to impact inflation.

The OECD's most recent estimate puts the world output gap at -1.2% of GDP, and while significantly better than the -3% of GDP at its 2009 peak, this is sizable on a historical basis. For context, the worst annual estimate for the OECD's output gap during the 2000 recession was only -1.1%, and the widest annual gap during the early 1990s recession was -1.6%.

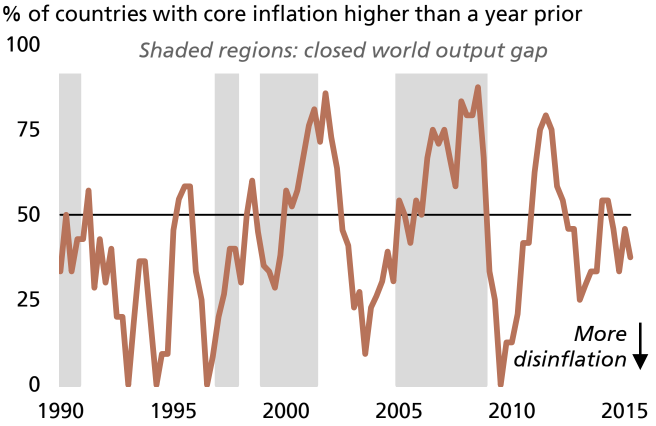
As Figure 6 shows, outside of closed output gap periods, the number of countries with rising inflation rarely exceeds the number with disinflation, especially on a sustained basis. Countries with disinflation have regularly outnumbered since the crisis, and the still-negative gap suggests disinflation will remain more common.

Figure 5: Global spare capacity shrinking, but remains substantial



Source: OECD, UBS.

Figure 6: Disinflation likely to prevail amid global slack



Source: Haver, UBS. Counts advanced economies where y-o-y core inflation exceeds y-o-y core inflation from 4 quarters prior, as a share of countries covered.

2) Flatter Phillips curve: protects against a sharp rise in inflation

Second, the trade-off between employment and inflation is less threatening

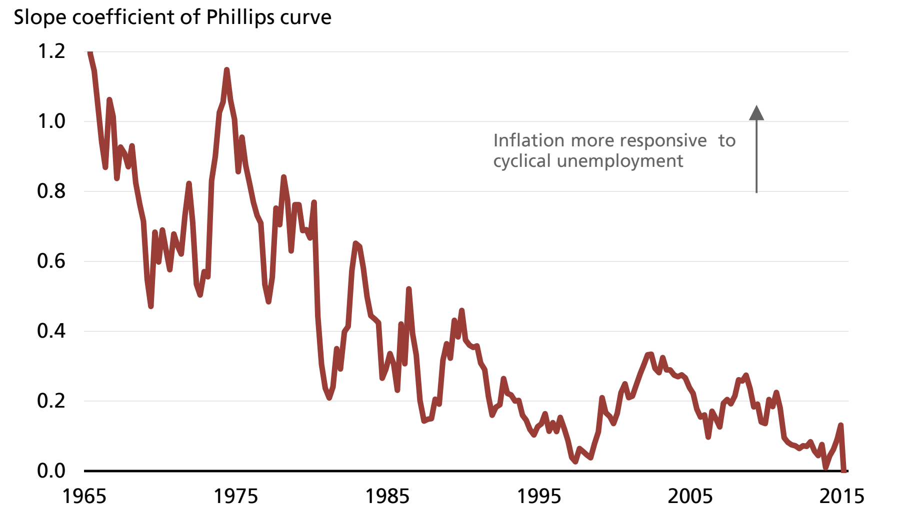
Estimating individual country output gaps is inherently difficult, as half of the calculation (potential growth) is unobservable, making error bands around such estimates wide. Global inflation dynamics during the past 20 years, however, give reason to be less concerned with this issue.

One of the most common methods for modeling inflation is known as the Phillips curve, which models inflation based on a number of variables, including spare capacity. To better understand the evolution of inflation dynamics, we use the following equation to estimate unemployment-based Phillips curves across 20 advanced economies: $\pi_t = \pi_{t-1} - u_t + \pi_t^m + \varepsilon_t$

We regress current period headline inflation π_t on: lagged inflation π_{t-1} ; the unemployment gap u_t (actual unemployment less NAIRU); relative import prices π_t^m; and an error term ε_t.[1] Lagged inflation accounts for persistence in inflation behaviour, the unemployment gap proxies for spare capacity, and import prices capture global supply shocks and exchange rate movements.

One of the key outputs from this model is the estimated coefficient on the unemployment gap, often referred to as the "slope" of the Phillips curve. This can be thought of as a measure of how responsive inflation is to spare capacity. If the slope coefficient is large, it means a positive output gap (low unemployment) would tend to push inflation up by a lot. If, however, the coefficient is small, it suggests a small impact from changes in employment on inflation.

Figure 7: The link between inflation and slack is severed



Source: IMF, OECD, Haver, UBS. Median coefficient on unemployment gap from Phillips curve models for 20 advanced economies, rolling 5-year estimations.

Figure 7 shows the rolling 5-year coefficient on the median country in our sample. Our results show a significant decline in the slope of the Phillips curve from around 0.8 in the 1960s, 70s, and early 80s, to near zero during the past 15 years. This is consistent with much of the academic literature, and while it is beyond the scope of this note to analyze the reasons behind the flatter Phillips curve, increased global trade and central bank credibility are the two most commonly cited reasons.

[1] We follow a similar framework to that used by Matheson, Sandri, and Simon in Ch. 3 of the 2013 IMF *World Economic Outlook*, "The Dog That Didn't Bark: Has Inflation Been Muzzled or Was it Just Sleeping?" NAIRU = non-accelerating inflation rate of unemployment.

Regardless of the cause, a flatter global Phillips curve has important implications, as it suggests that even if the global output gap were to close, the impact on inflation would generally be small. Of course, it is possible that the slope of the curve steepens as the output gap shrinks, though this has not happened to a significant degree during any of the post-1990 global recoveries (Figure 8).

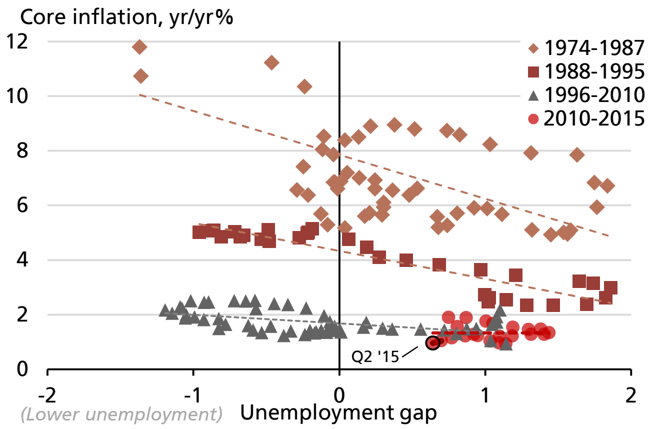
3) Inflation persistence: what I saw yesterday I expect tomorrow

Third, inflation is sticky

A general takeaway from our analysis is that inflation is less responsive to slack than it once was. With global factors explaining roughly 75% of DM inflation variance, and with inflation now lower and more stable, past inflation is an important guide to future inflation.

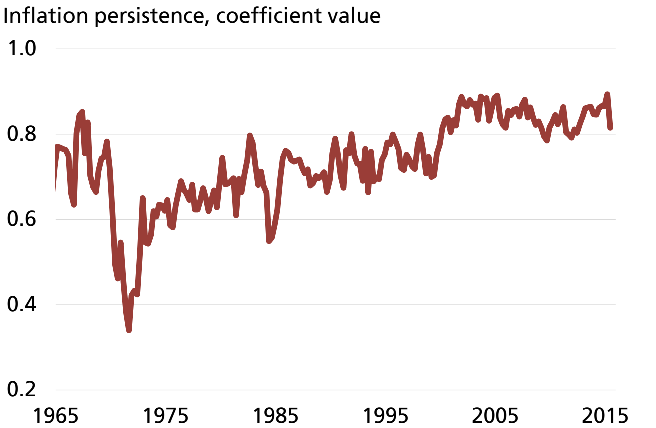
Where physicists use "inertia," economists use "persistence." Our Phillips curve models can also be used to look at inflation persistence, i.e., the tendency of inflation to stay near where it has been recently. A higher coefficient on lagged inflation means a greater impact of past inflation on the present. As Figure 9 shows, DM inflation persistence remains at a relatively high level, and suggests that consumers and businesses, seeing low inflation in recent quarters, are likely to assume it in coming quarters. In an environment of low inflation, this makes it harder to change the course and generate upward pressure on inflation.

Figure 8: Decades-long "flattening" unlikely to reverse



Source: IMF, OECD, Haver, UBS. Dashed lines show trend. Quarterly averages of core inflation and unemployment gap (unemployment less NAIRU) for advanced economies, subject to data availability.

Figure 9: Low inflation now more likely to stay low



Source: IMF, OECD, Haver, UBS. Median coefficient on lagged inflation from Phillips curve models for 20 advanced economies, rolling 5-year estimations

4) Inflation drag: China and EM

Fourth, China and EM forces are pushing down on prices

Any discussion of global inflation needs to include China, and although this has received significant market attention in the wake of recent CNY depreciation, like the issue of broader global disinflation, its impact may still be underestimated.

China's impact on global inflation runs through two channels: (1) Its role as a source of demand for goods (commodities, for example); and (2) Its role as a significant exporter of goods. A decade ago, these two impulses ran in opposite directions. Low-cost production and export of manufactured goods from China weighed on inflation, while its demand for commodities did the opposite.

More recently, however, the commodity-demand channel has turned disinflationary, as slower Chinese growth and the shift in its composition away from commodity-intensive investment, is weighing on global commodity demand. At the same time, China's PPI has fallen for 19 consecutive months. While the

potential disinflationary impact of both of these forces is well known, particularly the commodity channel, the impact of slower demand (proxied by wage growth) on global inflation is less well understood, and we think underestimated.

Until recently, wage gains in China were combining with nominal renmimbi appreciation to stimulate domestic demand as a part of the rebalancing process. This meant that appreciation in the CNY real effective exchange rate (REER) was positive for the rest of Asia.

This makes recent renminbi depreciation all the more important, as the costs of REER appreciation have now become too large for the export sector. Wage growth is already decelerating (Figure 10), and the People's Bank of China's most recent wage expectation survey indicates that wage expectations have approached multiyear lows. While strong demand was previously enough to offset the negative impact of China export prices on headline CPI in Asia, both factors are now disinflationary.

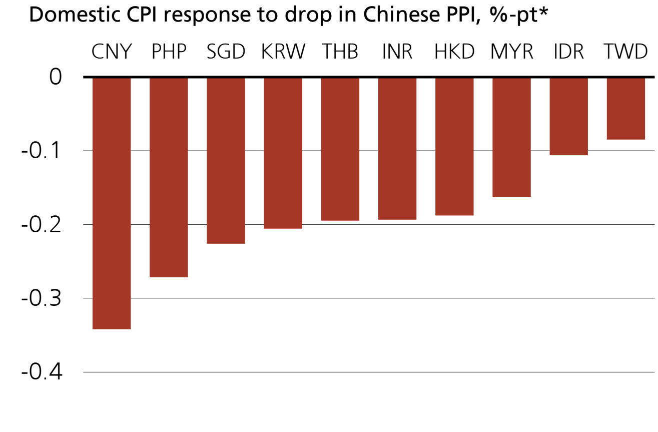
Our econometric estimates suggest that the impact of Chinese wages on regional inflation is statistically significant. This matters for the policy impulse in the region, as stimulus in response to energy-related headline inflation declines is unlikely to result in a meaningful growth pick-up, as China's exchange rate and demand headwinds will work as an offset.

Even absent further commodity price declines or CNY depreciation, China is likely to weigh on global consumer prices. Figure 11 shows the response of EM Asia CPI to a 1pp shock to Chinese PPI, which we estimate from a vector autoregression. China is most sensitive to its own PPI, but other countries CPIs are almost as sensitive.

Figure 10: Chinese wages no longer growing as fast

Source: National Bureau of Statistics of China, UBS.

Figure 11: Falling Chinese PPI pulls down EM Asia CPI



Source: Haver, UBS. *Accumulated 6-month impulse response of year-on-year CPI to a percentage point shock decline in year-on-year Chinese PPI, estimated from VAR (vector autoregression) models that include domestic CPI, Chinese PPI, oil prices, trade-weighted exchange rates, and 6 lags of each variable.

It isn't just China that is disinflationary within EM. While some countries such as China, India, Malaysia, and Central and Eastern Europe are likely to see year-on-year inflation accelerate in the near term, this will be primarily driven by base effects. Sequential inflation momentum in most of these countries does not point to much inflation acceleration. We think the following fundamental factors are likely to weigh on EM inflation:

First, there are early signs that labour markets have started to soften in EM, with wage and employment growth cooling. All else equal, this should contribute towards tamer inflation going forward. Second, increased leverage and peaking demographics in several large EMs (China, Russia, Korea, Thailand, Hungary) will likely weigh on inflation.

Finally, the pass-through from weaker currencies to inflation in markets such as South Africa, Mexico, and Turkey may have moderated relative to pre-crisis years. While it remains to be seen whether this reflects structural or cyclical factors, it does suggest that the recent currency weakness should not derail the low inflation theme playing out in EM.

Market implications of our inflation view

Disinflation broadly creates a benign macro backdrop

If inflation remains modest, the current macro backdrop of easy central bank policy, moderate global growth, and reasonably valued equity markets should remain intact, and would be supportive for risk markets. This has become all the more important given heightened concerns around global growth. Among the key risks for global markets would be a pick-up in inflation against a backdrop of softening global growth that called into question the ability of central banks to remain very accommodative.

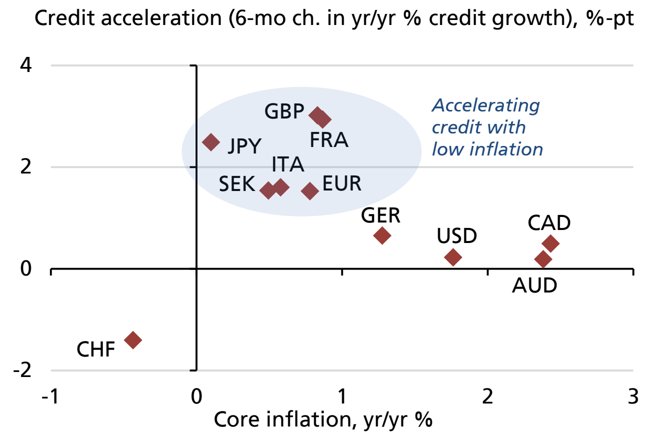
Keeping the broader backdrop generally benign is perhaps the most important market implication of disinflation, though there are significant micro ones as well.

Equities

- **DM equities: bullish where credit is accelerating and inflation is low (Europe, Japan)**

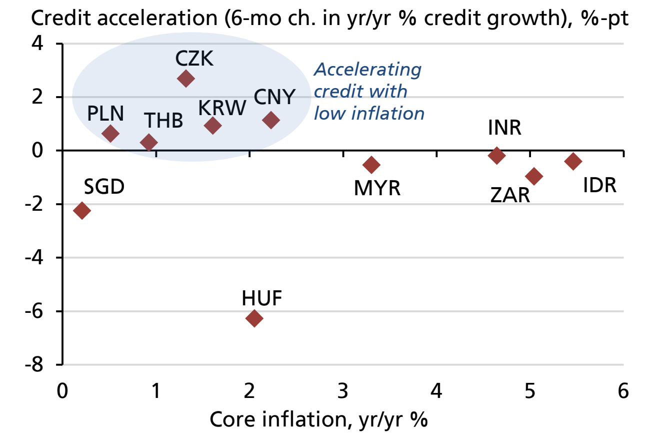
An environment where inflation remains low should be bullish for equity markets in countries where credit growth is accelerating but inflation remains low. If low inflation and low rates are enabling credit reflation, then a period of low rates and more persistent credit growth can help reflate activity, and real assets like equities should perform well. In Figures 12 and 13, we sort countries by core inflation and credit acceleration. In the G10, the Euro area and Japan stand out, with low inflation and accelerating credit growth.

Figure 12: DM credit accelerating, especially in Europe and Japan



Source: Haver, UBS.

Figure 13: Less credit acceleration in EM



Source: Haver, UBS.

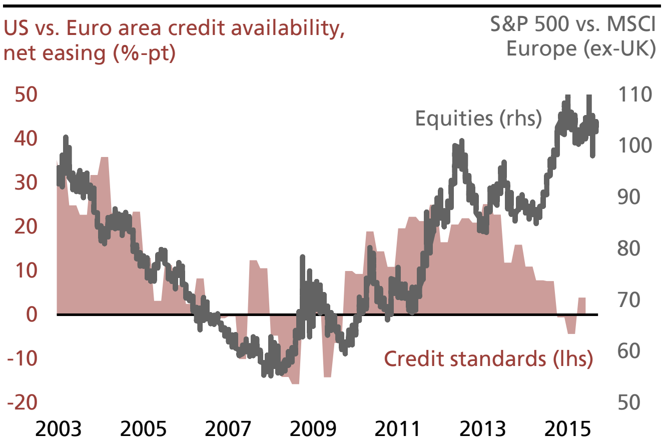
Both are consistent with the views of our equity strategists. Within the Euro area, our equity strategists prefer domestically-exposed cyclical stocks (ex-energy), especially those in Italy, Spain, France, and Portugal. Each of these countries has accelerating credit growth and is at the early stage of its profit recovery.

In DM, pairing credit growth with disinflation is key for equities

Figure 14 shows the strong historical relationship between relative credit growth and relative equity performance in the Euro area and US from 2003 - 13, and provides empirical evidence for our assertion. During the past two years, however, easier credit conditions in the Euro area have not been accompanied by equity market outperformance. This may be explained by equity-investor caution after five years of weak Euro area earnings growth and disappointments. But this may be changing-- 2015 will likely mark the first in seven that sees higher earnings growth in the Euro area than in the US, and combined with reduced Euro area political risk should help the credit/equity relationship reassert.

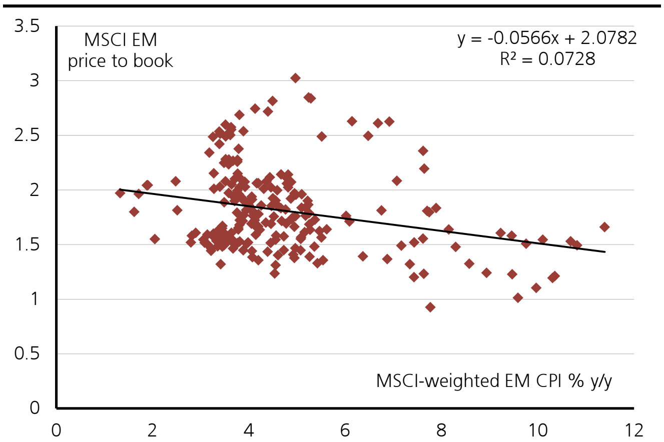
Our APAC equity strategists recommend overweight Japan as well, with credit growth accelerating, earnings momentum remaining strong, and progress continuing to be made on corporate governance reforms (see "A theme for all seasons"). At the same time, with the Bank of Japan unlikely to achieve its mid-2016 inflation target, additional easing is likely, which supports Japanese equities.

Figure 14: US-Europe: equities diverging as credit converges



Source: Federal Reserve, ECB, Bloomberg, UBS European Equity Strategy Team.

Figure 15: Lower EM inflation appears to imply higher valuations



Source: Haver, Datastream, UBS EM Strategy.

- **EM equities: Disinflation story is different, and we remain bearish**

In EM, initial conditions mitigate the benefits of lower inflation

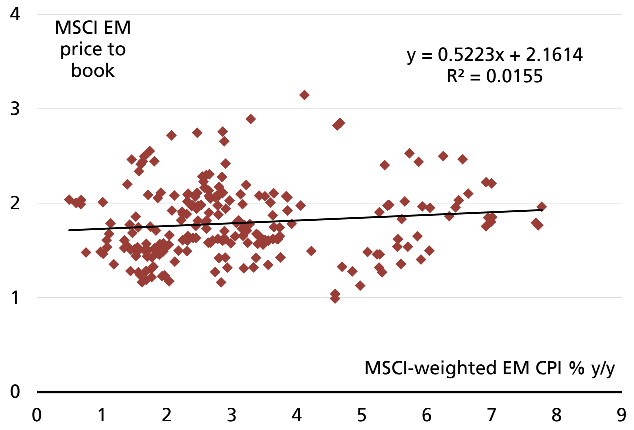
Far fewer countries are showing accelerating credit growth in EM, and our strategists remain generally bearish EM equities, even with low inflation. This may be counterintuitive, as many investors argue that because hyperinflation or high inflation has been associated with weak EM asset performance in the past, disinflation should logically be positive for EM assets (Figure 15).

We see the issue as more nuanced. For example, an improvement in policymaking that helps improve investor confidence and anchor inflation expectations is a classic way for reflation to occur in EM equity multiples. This can be seen by separating the EM aggregates into "high quality" and "lower quality" groups with respect to their inflation-fighting credibility (Figures 16 and 17, next page).

For both FX and equity valuations, it is the improvement in inflation outcomes for the lower quality markets over the past 20 years that almost fully explains the inverse relationship between inflation and equity valuations. The inverse relationship between EM inflation and equity multiples is much stronger as

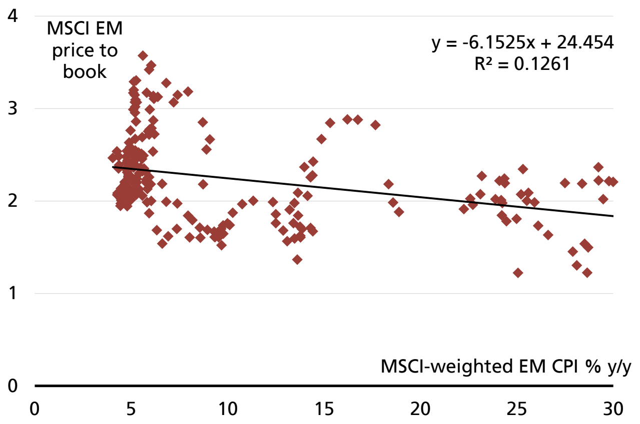
inflation descends from very high levels, but less so as it moves from average levels to lower ones. The goodness of fit falls sharply as the level of inflation declines.

Figure 16: EM P/B and inflation: for "high quality" EMs



Source: Haver. See UBS: "How do movements in inflation impact EM assets?"

Figure 17: EM P/B and inflation: for "other" EMs



Source: Haver, UBS EM Strategy.

When EM investor focus shifts from improvements in policymaking to concerns about lack of demand and declining export prices, lower inflation is no longer a positive for EM assets. Rather, it is symptomatic of a fundamental weakness in the biggest driver of EM assets – growth.

That EM disinflation is so focused in PPI further exacerbates its impact on EM equities. Disinflation in PPI, which can be thought of as a measure of prices that accrue to producers of commodities and manufactured goods, has a stronger relevance for EM equities than in the developed world. And here, the inflation picture is even worse, with PPI contracting across large parts of EM.

Unlike developed market stock indices which have high weights for sectors such as discretionary consumer staples and healthcare, MSCI EM places a greater weighting on energy, metals and mining, and utilities. It is hard therefore, against the backdrop of declining commodity prices and weak export prices even for manufactured goods in key export economies, to see much support for EM earnings growth should weak EM PPI inflation continue.

Lower inflation in EM can improve valuation multiples, but typically only does so when moving from very high inflation rates, not the record low rates that we are currently witnessing. The case for EM equity underperformance against the developed world likely remains a strong one.

- **EM equities: Poland is the exception**

We do find one exception in EM, and that is Poland, where consistent with our initial screen, credit growth has been accelerating and inflation is low (Figure 13, page 8). Our EM strategists remain Overweight Polish equities within a GEMs portfolio, based on the country's links to the improving Euro Area economy and as a beneficiary of lower oil prices. Poland's exposure to China is very small (just 1% of exports vs. 59% to DM), and it is one of the few EMs to see 2015 GDP growth upgrades. Politics is the key risk, following June's election of President Duda (of the opposition Law and Justice Party, PiS). If, in the more important Parliamentary elections on October 25th, there is also an opposition victory (they are currently ahead in the polls), it could lead to an increased burden being placed on the banks to recompense consumers with delinquent FX-denominated mortgages.

FX and rates

In FX and rates, the market implications of low inflation are a bit trickier. While we focus on credit growth in sorting equity markets, in FX and rates we look across a number of axes for market implications. We focus on the following four:

- **G10 FX: Bearish in small open economies with policy rates below zero and inflation likely to remain below target (SEK, CHF)**

In G10 FX, initial economic and policy conditions show the way

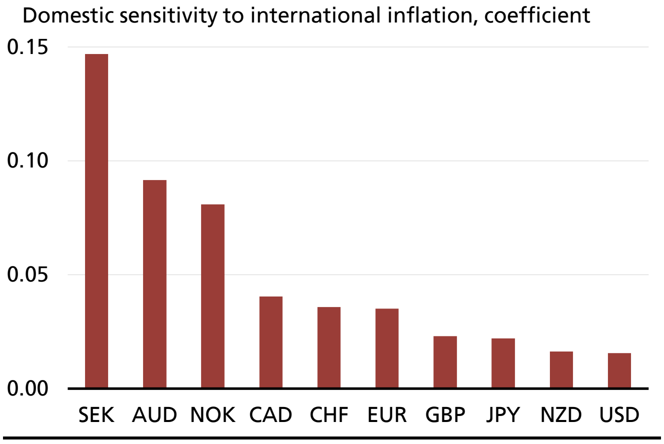
We have long argued that due to the global nature of the inflation shock, currencies from small open economies where policy rates are below zero and inflation is below target, should weaken (FX Bi-Weekly, March 2015). Such economies receive the worst of the global disinflation shock due to their openness, but at the same time have the greatest incentive to weaken their currencies, as they receive the largest benefit from the export channel. This makes FX weakness both a logical and necessary policy response in such places.

Sweden and Switzerland fit this template well, as both are among the most open economies in Europe and have policy rates below zero.[2] With inflation showing little likelihood of reaching target anytime soon in either country, the SNB and Riksbank should lean against domestic currency strength, with the potential for more drastic policy measures to weaken the currencies, particularly in Sweden.

In our previous work, we sorted economies by openness using exports + imports as a percentage of GDP. With our Phillips curve framework built, we now have a more direct way to measure individual country exposure to global inflation: add a global inflation variable to each of our individual country Phillips curve models, and re-estimate. The coefficient on global inflation represents the sensitivity of domestic inflation in each country to global inflation (Figure 18).

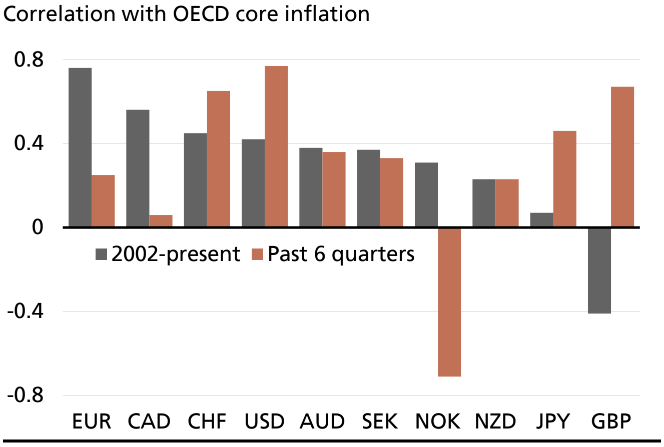
The results confirm and support our bearish CHF and SEK views, particularly SEK, as it has the highest sensitivity to global inflation. The coefficient for Switzerland isn't as high, but trade-to-GDP is among the highest in Europe, and with rates well below zero and inflation well below target, we expect further CHF weakness.

Figure 18: Sweden is most sensitive to global inflation



Source: OECD, Haver, UBS.

Figure 19: NOK/UK deviating from historical correlations



Source: OECD, Haver, UBS.

[2] SNB Chairman Jordan presented a paper on the global nature of inflation at the Fed's Jackson Hole symposium, "The impact of international spillovers on inflation dynamics and independent monetary policy: the Swiss experience". Consistent with our view, he finds a strong international influence on Swiss prices, and explains how the SNB's current policies aim to weaken CHF.

- **G10 FX: Bearish where elevated inflation is likely to fall (AUD, NOK)**

After Sweden, Australia and Norway show the highest sensitivity to global inflation, yet core CPI is above 2% in both. Convergence toward the G10 average is likely, given their sensitivity coefficients and that core CPI in both has historically been positively correlated with OECD core CPI (Figure 19, previous page).

This is consistent with our bearish AUD view, particularly given that both rates and inflation in Australia remain among the highest in the G10 (Figure 20), leaving room for further downside. The results also support our short AUD/CAD trade recommendation, given Canada's lower inflation sensitivity.

Although we are more constructive on NOK, especially from current levels, the negative correlation between Norwegian core CPI and OECD core CPI seen during the past six months is unlikely to persist. This could mean inflation re-synchronization with the rest of the G10, and risk to NOK.

- **G10 FX: Bullish economies where policy is less currency-sensitive (GBP)**

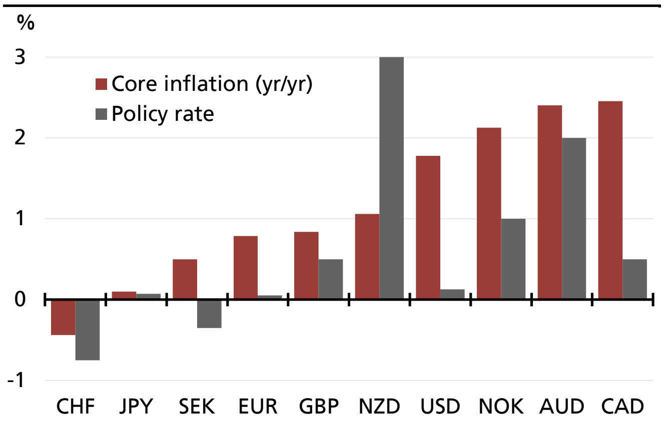
Of course, low global inflation can't be bad for all currencies, and with the UK the most closed major economy in Europe, GBP stands to benefit on a relative basis. This is consistent with our Phillips curve results, which show UK inflation having almost no sensitivity to global inflation. As such, although inflation in the UK remains well below target, the less open nature of the economy means that the BoE should be less hesitant to tighten policy due to concerns about currency strength, if and when the output gap closes enough to warrant a higher policy rate. Simple correlations provide further support for this argument, as UK inflation has historically been the most idiosyncratic in the G10.

- **G10 rates: Where inflation converges, so should yields**

In G10 rates, US/German 10-year spread should narrow

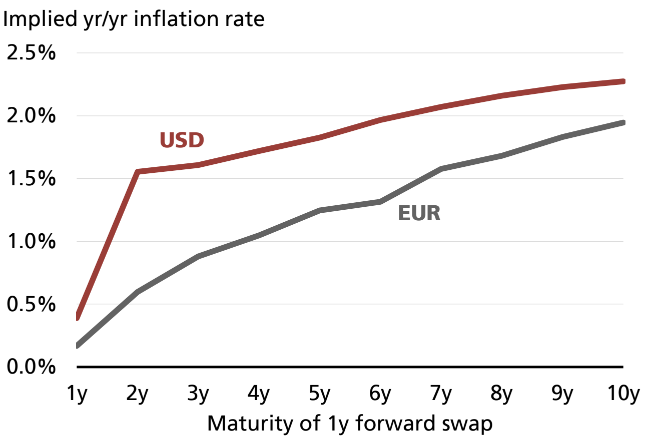
In G10 interest rate markets, convergence of longer term bond yields between the US and Germany is among the most compelling implications of persistently low global inflation. An environment of low global inflation with a significant common component should feature reduced dispersion in back-end G10 yields and narrower spreads. Low 10-year yields suggest that this has already happened in many places, but opportunities remain. After averaging 41bp since 2000, the US/German 10-year spread currently stands at nearly 150bp. This is 1.9 standard deviations away from the historical average, the widest gap in the G10.

Figure 20: Inflation and policy rates low for some, not all, in G10



Source: Haver, Bloomberg, UBS.

Figure 21: Inflation returns to 2%? US pricing years before Euro



Source: Bloomberg, UBS.

We favour receiving US 10-year rates versus paying German 10-year rates. The Euro area is perhaps the region most priced for disinflation, with inflation swaps pricing inflation to only reach the ECB's target of just below 2% in 9-10 years (Figure 21). In the US, on the other hand, market pricing implies inflation will reach that level within 3-4 years. This is too wide of a differential, particularly with the German output gap nearer to being closed than the US output gap.

Market implications aren't limited to back-end yields. Markets are currently pricing a more than eight-month gap between the first Fed hike (December 2015) and the first Bank of England hike (July 2016). Given the relative cyclical positions of the two economies, this is too wide, and also supports a bullish view in GBP/USD.

- **EM rates/FX: Focus on the scope for monetary loosening**

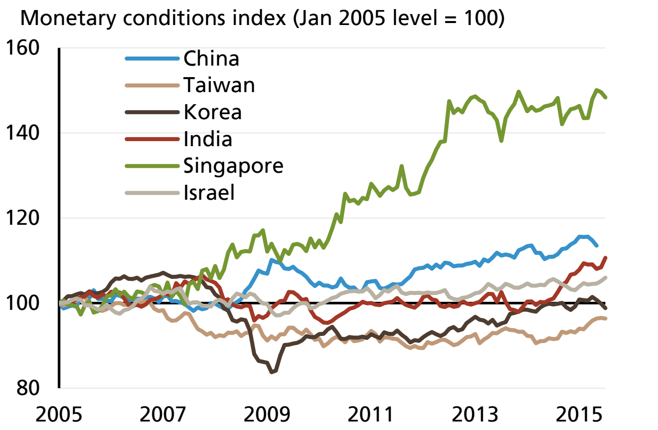
In EM FX, adjustment is the 'easy' way out; in EM rates, the space is more limited

In thinking about EM FX and rates, monetary conditions indices are a good starting point. By measuring movements in the real effective exchange rate and real interest rates, they allow us to identify the degree to which financial conditions have changed. This in turn can help identify which markets in EM are likely to experience the greatest pressure to adjust policy in response to weak inflation.

India, Singapore, Israel, Hong Kong, and the Philippines have experienced the greatest degree of monetary conditions tightening in recent years (Figure 22), and in most of these markets (India being a partial exception) this tightening has been driven by real FX appreciation. As such, weaker currencies in these places are likely the cleanest expression of a weak global inflation impulse.

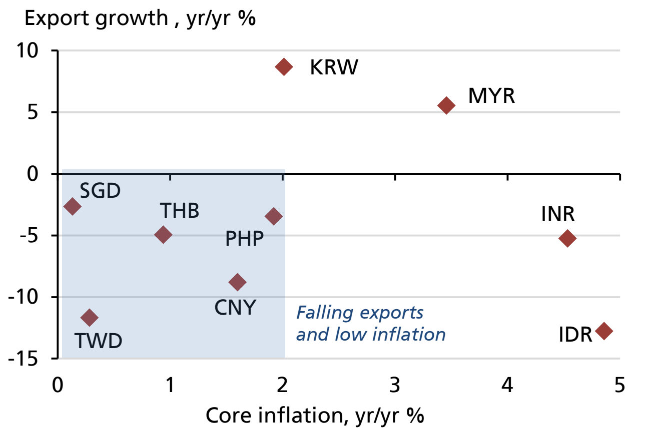
Our EM strategists have held long USD/SGD and USD/THB recommendations, and short PHP and TWD are likely to be good expressions of this theme as well. Figure 23 shows that in all four countries, exports contracted year-on-year and inflation is below 2%. Weaker currencies would address both lacklustre growth and inflation.

Figure 22: Tighter monetary conditions in many EMs



Source: Haver, Bloomberg, UBS EM Strategy.

Figure 23: Low inflation, weak export growth in much of EM Asia



Source: Haver, Bloomberg, UBS EM Strategy.

In local debt, we favour positioning for lower rates in markets with stable current account profiles, a limited FX share of external debt, and healthy net international investment positions. In these markets, policymakers can afford to pursue looser monetary policy cycles into the onset of Fed tightening without evoking pain in the local bond market. Duration in China and Korea are the best expressions of this, and we also consider inflation risk premium at the front end of the Mexican curve and in the belly of Brazilian curve to be high. We favour receivers in the front end of the Mexican curve, and Brazilian Jan' 19 swaps as a result.

What are the risks to our low inflation view?

We have focused on global spare capacity, a flatter Phillips curve, and more globalized inflation dynamics to make a case that inflation is likely to remain benign. Where could we be wrong?

- **If expectations and forecasts have already adjusted**

If forecasts (from market participants and central bank economists) are already properly calibrated to low inflation, then the risk is that upside inflation surprises could become more common. That means more hawkish surprises from central banks and a risk that yields rise quickly. While we can't be sure how much adjustment has already taken place, we don't think we're there yet. Last week the ECB lowered its inflation forecast for 2015 and 2016, and next week the FOMC is likely to lower its inflation estimates.

As a quick caveat, we would note that base effects are likely to put some upward pressure on headline inflation starting in Q4, but this will be from very low levels, and our focus is on underlying inflation pressures.

- **If output gaps are closed or positive**

Difficulty measuring slack is one reason we could be underestimating inflation ahead. If negative output gaps were actually closed/positive output gaps, then inflation could run ahead. Indeed, Athanasios Orphanides draws a link between inaccurate output gap estimates, i.e., mistaking a positive gap for a negative, and the US experience of high inflation in the 1970s. Related to that, we could be underestimating the extent of inflationary pressure on the supply-side. Less global capital investment could lead to constraints that put upward pressure on prices.

Another possibility is that extraordinary monetary policy since the crisis could become inflationary with a significant lag, though we think it is unlikely that prior asset purchase programs will cause runaway inflation years later. However, in the other direction, the inability of central banks to generate much higher inflation could become a concern…

- **…If deflation sets in**

If domestic prices were to steadily fall in a number of advanced economies and monetary policy were insufficient, this *deflation* would not be benign. Bonds would do well, but equities would be challenged by falling prices. If the perceived willingness or ability of central banks to offset deflation were doubted, then inflation expectations could fall and deflation could become entrenched. The current low level of inflation paired with central banks' limited success "beating" deflation means this is a risk to our view and could result…

- **…If we missed a critical factor**

Demography and technology are two potential medium-run inflation drivers we have not addressed. Each of these clearly deserves further research. Technology is commonly-considered a disinflationary force, although its role is challenging to show empirically. The aging population has both an inflationary aspect (with a slower-growing labor force) and a deflationary component (less increase in demand). At the margin, the sum of demographics and technology seems to be disinflationary, but we recognize there may be factors we have overlooked pushing inflation in either direction.

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Risks of multi-asset investing include but are not limited to market risk, credit risk, interest rate risk, and foreign exchange risk. Correlations of returns among different asset classes may deviate from historical patterns. Geopolitical events and policy shocks pose risks that can reduce asset returns. Valuations may be adversely affected during times of high market volatility, thin liquidity, and economic dislocation.

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Neutral	FSR is between -6% and 6% of the MRA.	42%	32%
Sell	FSR is > 6% below the MRA.	13%	20%
Short-Term Rating	**Definition**	**Coverage[3]**	**IB Services[4]**
Buy	Stock price expected to rise within three months from the time the rating was assigned because of a specific catalyst or event.	less than 1%	less than 1%
Sell	Stock price expected to fall within three months from the time the rating was assigned because of a specific catalyst or event.	less than 1%	less than 1%

Source: UBS. Rating allocations are as of 30 June 2015.
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	UBS Terminology	Time Horizon	Definition
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Credit Rating	AAA, AA, A, BBB, BB, B, CCC, CC, C (+/-)	Up to 12 months	UBS' assessment of a company's creditworthiness
Outlook	Positive; Stable; Negative	Up to 6 months	UBS' expected trend in a company's creditworthiness
Security Recommendations			
Bond Recommendation	Outperform; Marketperform; Underperform	Up to 3 months	A corporate bond's expected relative performance versus a defined reference
CDS Recommendation	Buy Protection; Sell Protection	Up to 3 months	Recommendation to hedge a company's creditworthiness

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Source: UBS

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Issuer Name	Credit Rating	Outlook
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Federal Republic of Germany[2, 4]	-	-
Korea (Republic of)[22]	-	-
Mexico	-	-
United Kingdom of Great Britain[2, 4, 5, 16, 22]	-	-
UNITED STATES TREASURY[22]	-	-

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