

Economic Research Note

Slack attack: G-3 core inflation setting record lows

- G-3 core inflation’s rapid approach to zero locks in low-for-long policy stances
- Inflation and policy dynamics differ elsewhere

Core CPI inflation is setting record lows in the G-3 economies, reaching an estimated 0.4% oya last month. US core inflation fell to 0.9% oya in April, a level last seen very briefly in the early 1960s. Euro area core inflation declined to 0.7% oya, the lowest level in recorded history dating back to 1991. Japan’s core inflation rate (calculated to exclude all food and energy) is expected to hit a new low of -1.9% oya in next week’s April report, although the decline from -1.1% in March largely represents a reduction in high school tuition, rather than fundamental forces.

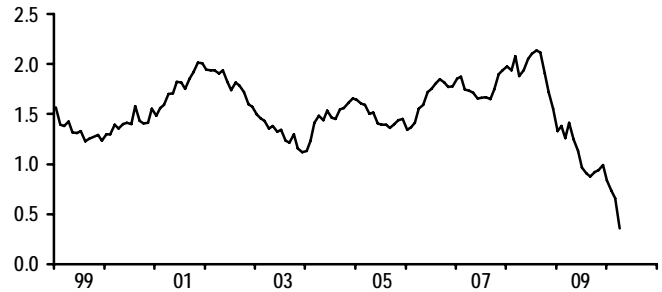
The move down also is broadly based across sectors. Core inflation in the heavily weighted services sector has declined steadily since late 2008. However, this move was tempered by an unexpected rise in goods inflation that owed to extraordinary increases in prices of US tobacco (due to tax increases) and vehicles (partly due to Cash for Clunkers). These transitory influences are now waning, and core goods inflation is moving downward.

Our long-standing forecast has been that G-3 core inflation would fall to near zero in 2010 (4Q/4Q). This forecast was based on a belief that the record amount of resource slack and the depressed level of demand would put strong, downward pressure on wages and prices (See “Slack Attack,” *Global Issues*, May 29, 2009). The relationship between slack and inflation is embodied in the Phillips curve, which posits that inflation is a function of slack (or equivalently, the output gap) and inflation expectations. According to the model, when the level of resource usage falls below normal, this puts downward pressure on core inflation. If inflation expectations are well-anchored by past experience or a credible central bank inflation objective, then inflation returns to the level of inflation expectations as resource utilization returns to normal. On the other hand, if inflation expectations are less well-anchored, a return to normal inflation would require a period of elevated resource utilization.

In estimating the Phillips curve relationship, we find that there are significant lags between movements in slack and movements in core inflation. This may reflect lags in the direct transmission of slack to inflation, or that inflation expectations eventually respond to big shifts in core infla-

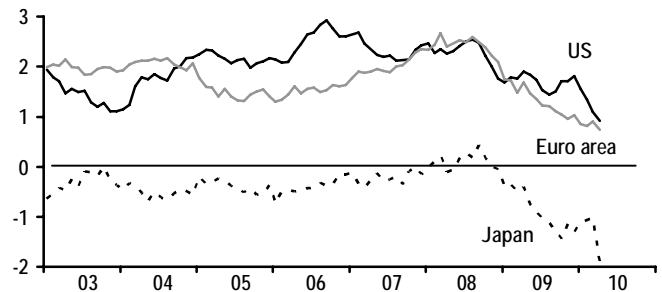
G-3 core inflation

% ch over 12 months; w/ Apr est for Japan



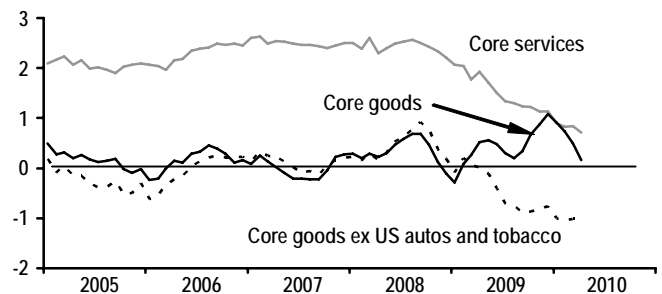
Core inflation

%ch over 12 months; w/ Apr est for Japan



G-3 core inflation by sector

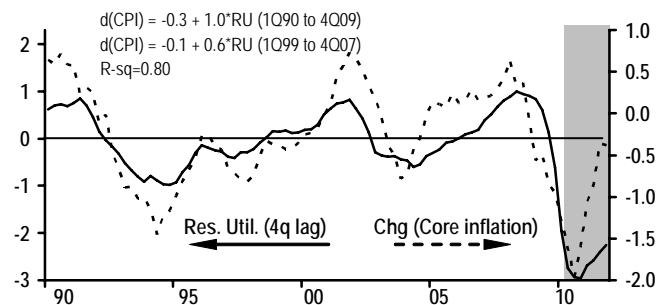
%oya



Resource utilization and the change in core inflation, G-3

Std dev from avg

%-pt; 8q chg in %oya



tion. Either way, experience suggests that core inflation will continue to decline even after resource utilization has turned the corner. So we are forecasting that G-3 core inflation will decline further in the next few quarters.

It is worth noting that our top-down Phillips curve model projects a move into outright deflation in the G-3 economies, compared to our country economists' bottom-up estimate that inflation will trough at about 0.1% oya. This may sound extreme, but bear in mind that inflation was quite low before the global downturn began.

A move into deflation would be far more likely if inflation expectations start to move down, reinforcing the disinflationary impulse from slack. Consistent with our long-standing views, G-3 central banks are likely to guard against this development by maintaining record support to the economy, including leaving policy rates at their current level of near zero well into 2011 in the US, and until 2012 in the Euro area and Japan. A more adverse growth outcome, in which spillover from the European debt crisis delivers a major blow to global growth, also would increase the risks of a move into deflation.

Core inflation has bottomed elsewhere

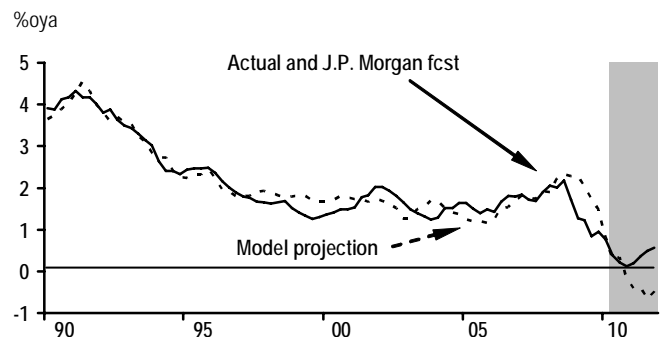
Inflation dynamics differ elsewhere. This explains why central bankers outside the G-3 are moving to normalize policy. However, with the G-3 central banks on hold, the move to normalize elsewhere is happening more slowly than domestic fundamentals would dictate, so that inflation pressures are building in an undesirable way in some countries.

Our calculations show that the level of resource utilization fell sharply across the globe during the past several years. However, there is a clear hierarchy in which resource utilization is extremely depressed in the G-3 economies, moderately low in the remaining DM economies, and slightly above average in the EM economies (the EM reading probably overstates reality because the NAIRU almost certainly has fallen in the EM).

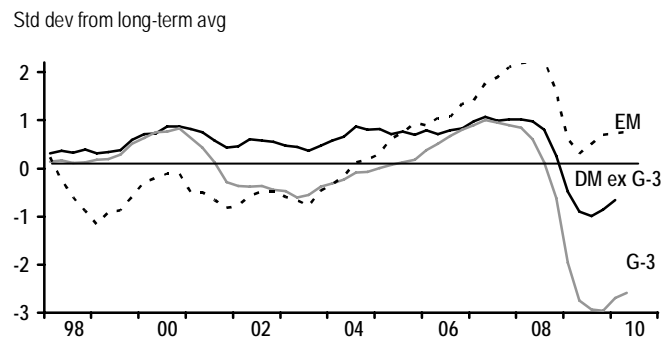
The EM and the smaller DM economies were in a more overheated condition on the eve of the global recession in 2007-08. Moreover, the recession generally was less severe in these economies. Together, these developments mean that the level of demand and resource utilization fell by less and bottomed at a higher level outside of the G-3.

In turn, this suggests that there has been less downward pressure on core inflation, and that the current rate of inflation should be closer to the level of inflation expectations (which is assumed to be at least somewhat stable in all economies, thereby providing an anchor for inflation). In

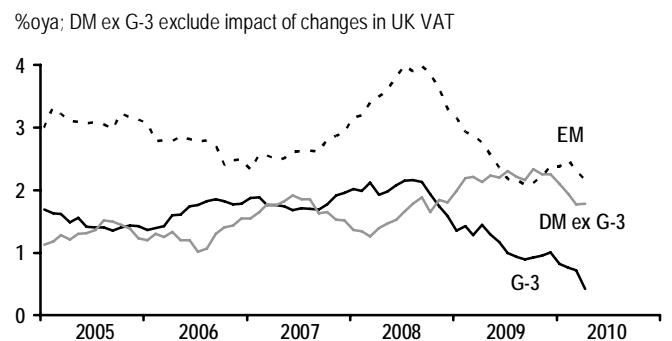
Core CPI, G-3



Resource utilization



Core CPI



addition, the recovery in commodity prices is buttressing core inflation in the EM, where the potential for passthrough is higher.

Inflation outcomes generally conform to this picture. The decline in G-3 core inflation generally has matched or exceeded that elsewhere. Moreover, core inflation may have already bottomed outside of the G-3 at a level that is low but not too far from central banks' objectives, whereas it already has reached an undesirably low level in the G-3 and is gaining downward momentum. These growing inflation divergences are likely to intensify the dilemma faced by policymakers outside the G-3, where a low-for-long policy is becoming less appropriate (see "Central bank exits and FX performance," *Global Issues*, Dec 18, 2009).