

# Focus: Inflation Cycle Risks in China, India and Western Economies

The recent rise in international inflation is being driven increasingly by more than food and energy. This is the message from a set of alternative future inflation gauges not only for the major Western economies, but also for India and China.

**Spreading Inflation Worries** With the global economy clearly out of recession, inflation in the world's major economies is on the rise. Following recent spikes in food and energy prices, inflation jitters have begun to appear on the economic landscape. Inflation in the Eurozone has risen sharply, while U.K. inflation stands at 4%, double the 2% target set by the Bank of England.

In the U.S., as well, concerns about economic growth have started to give way to those about inflation, especially in view of the second round of quantitative easing, adding to already unprecedented massive monetary and fiscal policy stimulus. Japan remains the exception, as it is facing a renewed recession and deflation remains an issue.

Rising inflation is even more worrisome in China and India, where food represents a more significant share of the consumption basket. Although Indian consumer price inflation has eased from a peak of 16.2% in early 2010, it is still quite high at 9.5% in its latest reading.

Rising inflation becomes a threat when there is a cyclical upswing in inflation, which converts a disinflationary environment into an inflationary one. Thus, the question is whether such risks have risen significantly for the key global economies – the U.S., the U.K., the Eurozone, China and India.

**A Different Approach** The central problem with the development of leading indexes in many economies, especially developing countries like China and India, is the scarcity of appropriate forward-looking cyclical data. Given such data limitations, alternative approaches to cyclical analysis may be called for.

More than six years ago, ECRI developed the Chinese Leading Industrial Production Index (CNLIPI), which was the first leading index ever constructed for the Chinese economy (*International Cyclical Outlook, Vol. X, No. 1, January 2005*). At the time, we noted that the major hurdles to the creation of a Chinese leading index were the "quality, coverage, frequency and timeliness of Chinese economic statistics. Thus, it is challenging to accurately monitor the Chinese economy using official Chinese data."

In a pioneering effort, we went around these obstacles by taking an oblique approach to the problem – using non-Chinese data to predict Chinese industrial cycles. The resounding real-time success of the CNLIPI (*Chart 27, page 31*) – even during a severe global downturn and a sharp rebound in Chinese industrial growth that came as a surprise to most – is testimony to the value of such innovation.

As students of economic cycles, we know that they are propelled by powerful feedback loops, which also drive inflation

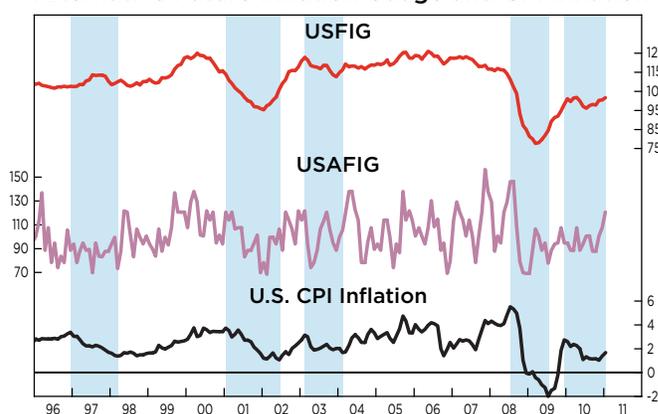
cycle upswings in particular. When a cyclical upturn in inflation becomes self-sustaining, inflation expectations also rise, further reinforcing the upswing.

Today, there is a common perception, even among policymakers, that the recent upswing in international inflation is being mainly driven by a surge in food and energy prices. The implication is that the consequent rise in headline inflation – especially when related to supply shocks – will be contained enough not to influence "core" inflation. Of course, that would be a vain hope if a cyclical upturn were to take hold, transforming what might have seemed to be a temporary spike in relative prices to a persistent upswing in inflation affecting far more than food and energy.

Our analysis therefore seeks to investigate this very issue, devising new measures of the underlying process that drives cyclical swings in inflation. In the process, we present alternative forward-looking measures of inflation cycles not only for the major Western economies – where ECRI already maintains future inflation gauges that are forward-looking measures of underlying inflation pressures – but also for India and China, where there is a dearth of such forward-looking cyclical measures. In particular, these measures inform our view of the likely course of inflation for these key economies.

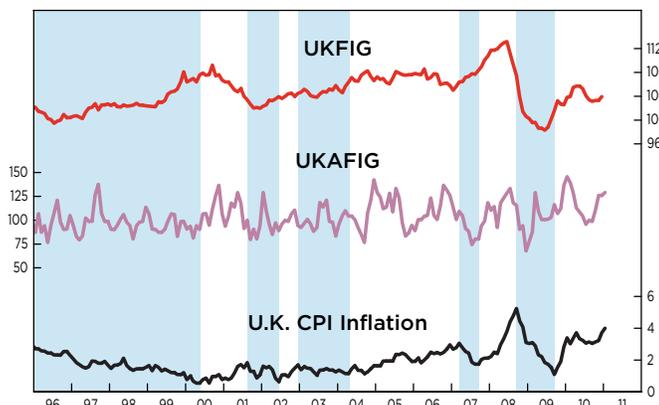
**Inflation Outlook for Major Western Economies** Slowly but surely, U.S. inflation pressures have been rising since early last summer. This has been the clear message from the U.S. Future Inflation Gauge (USFIG), shown in Chart 2a (top line), which is now almost at a 28-month high.

**Chart 2a: U.S. Future Inflation Gauge, Alternative Future Inflation Gauge and CPI Inflation**



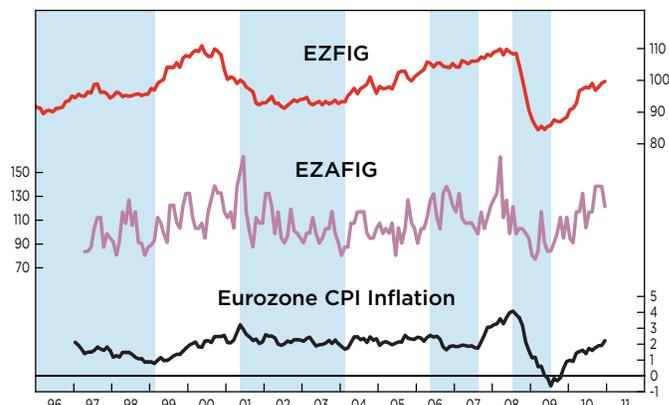
Shaded areas represent cyclical downturns in headline year-over-year U.S. CPI inflation.

**Chart 2b: U.K. Future Inflation Gauge, Alternative Future Inflation Gauge and CPI Inflation**



Shaded areas represent cyclical downturns in headline year-over-year U.K. CPI inflation.

**Chart 2c: Eurozone Future Inflation Gauge, Alternative Future Inflation Gauge and CPI Inflation**



Shaded areas represent cyclical downturns in headline year-over-year Eurozone CPI inflation.

Shortly after the USFIG began its latest upturn, the U.S. Alternative Future Inflation Gauge (USAFIG, Chart 2a, middle line) also turned up. In fact, the USAFIG is already at a 29-month high. Finally, the actual U.S. headline year-over-year CPI inflation rate (bottom line) has turned up recently, following the upturns in the USFIG and USAFIG.

As Chart 2a illustrates, the USAFIG anticipates cyclical turns in inflation, leading them 90% of the time, with a median lead of almost two quarters, compared with two to three quarters for the USFIG. Its obvious disadvantage is that it is much noisier and somewhat prone to false alarms than the USFIG, making it more difficult to interpret in real time. Still, in conjunction with the USFIG, and by focusing squarely on the vital issue of positive feedback, it can serve as a handy additional tool to divine the cyclical direction of inflation pressures. What it is telling us today is that the cyclical upturn in inflation is growing steadily stronger.

Analogous findings hold for the U.K. as well (Chart 2b). In fact, the U.K. Future Inflation Gauge (UKFIG), which has a median lead of more than three quarters over inflation turns, has perked up again after a brief period of easing (top line). The U.K. Alternative Future Inflation Gauge (UKAFIG, middle line), which leads inflation turns nearly 80% of the time with a median lead of almost two quarters, has also turned up, but even more decisively. Finally, the U.K. headline year-over-year CPI inflation rate (bottom line) is clearly resurgent, following the upturns in the UKFIG and UKAFIG. The point is that, notwithstanding the Bank of England's hopes, the rise in inflation is becoming cyclical, and is set to climb even further above its target.

In the Eurozone (Chart 2c), inflation pressures have risen even more noticeably. In fact, the Eurozone Future Inflation Gauge (EZFIG), which has a median lead of nearly three quarters over inflation turns, has been rising inexorably since its recessionary lows, and is now at a 26-month high (top line). The Eurozone Alternative Future Inflation Gauge (EZAFIG, middle line), which leads inflation turns nearly two-thirds of the time, but with a median lead of only one month, remains in a cyclical uptrend. Finally, the Eurozone headline year-over-year CPI

inflation rate (bottom line) is in an evident cyclical upturn. With both the EZFIG and the EZAFIG remaining in cyclical upswings, the upward trend in Eurozone inflation is likely to persist.

The short one-month median lead of the EZAFIG is a bit of an exception, possibly because inflation feedback loops within the Eurozone may occur more within individual countries than across the entire monetary union. This is a subject for further research. Still, it is notable that the EZAFIG leads at almost two-thirds of turning points.

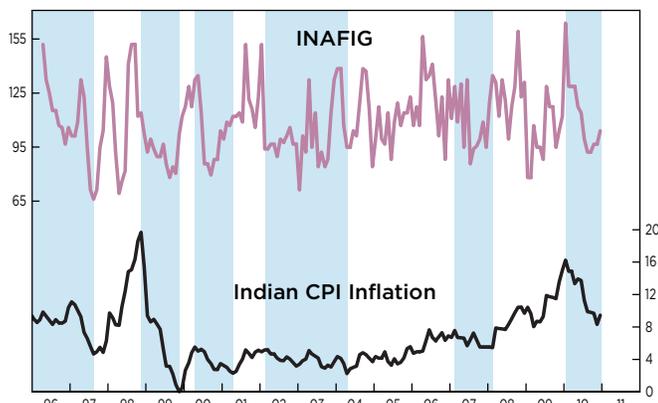
In any case, in conjunction with ECRI's standard future inflation gauges, these alternative future inflation gauges are now confirming that cyclical upswings in inflation are underway in the major Western economies, underscoring the likelihood of further increases in headline inflation driven by more than food and energy. That is the substantive finding.

However, an even more valuable conclusion we can draw from these cyclical relationships is the proof of concept that such alternative future inflation gauges lead inflation turning points with a fair degree of consistency, and have useful leads. The real power of this finding lies in the fact that we can construct such alternative future inflation gauges for India and China, where forward-looking cyclical indicators are especially difficult to find.

**Inflation Prospects for India and China** The burning question facing the major economies in non-Japan Asia is whether they have enacted enough policy steps to bring inflation under control. Thus, forward-looking inflation measures are particularly useful in this context.

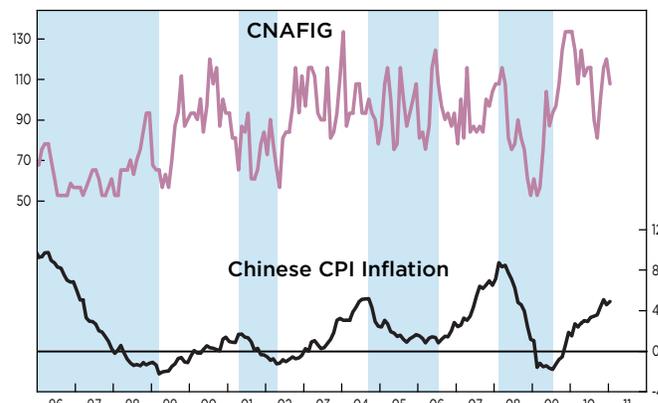
In India, the economy is especially plagued by high inflation. After a run-up to 16% in January 2010, consumer price inflation has moderated noticeably, but still stands just under 10% in its latest reading. Is inflation going to subside further? As it turns out, the Indian Alternative Future Inflation Gauge (INAFIG, Chart 2d, top line), which leads inflation turns 80% of the time with a median lead of about one quarter, turned up in September after a sharp decline, and is already at a six-month high. The Indian headline year-over-year CPI inflation rate (bottom line)

**Chart 2d: Indian Alternative Future Inflation Gauge and CPI Inflation**



Shaded areas represent cyclical downturns in headline year-over-year Indian CPI inflation.

**Chart 2e: Chinese Alternative Future Inflation Gauge and CPI Inflation**



Shaded areas represent cyclical downturns in headline year-over-year Chinese CPI inflation.

has also ticked up in its latest reading. The message from the INAFIG is that Indian inflation is now in a fresh cyclical upswing, and could easily rise to double-digit readings once again.

Chart 2e shows the situation for China. In this case, the Chinese Alternative Future Inflation Gauge (CNAFIG, top line), which leads inflation turns over 85% of the time with a median lead of nearly three quarters, turned up in 2009 and, despite a brief pullback last year, has been on the rise again since the fall. The Chinese headline year-over-year CPI inflation rate (bottom line) remains in a cyclical upswing. Despite its latest downtick, the CNAFIG still suggests that Chinese inflation will stay in a cyclical upswing for the time being.

**Implications of Rising International Inflation** The developing economies in the Asia-Pacific region, including China, India, Korea, and Taiwan, pulled out of their economic downturns earlier than the Western developed economies. Since then inflation has become a key concern for these economies, prompting central banks to take action in recent months to battle rising prices.

Two months ago in this publication ([Vol. XV, No. 12, December 2010](#)), at a time when the consensus view was relatively sanguine about Chinese inflation and was therefore surprised by a Christmas Day rate hike, we discussed the issue of Chinese inflation pressures in extensive detail, concluding that the aforementioned "rate hike will surely not be the last one in this cycle." We also highlighted the risk that policymakers, who were behind the curve on inflation, would "have to stomp hard on the brakes, with the attendant lagged impact on economic growth." Since then, the Chinese authorities have actually taken numerous steps in repeated attempts to curb inflation.

In fact, China has recently raised its benchmark interest rate to 6.06%, the fourth increase since last October, while raising the reserve requirement ratio to 19.5%, the seventh hike since 2010. The Reserve Bank of India began hiking interest rates even earlier, from 3.25% in February 2010 to 5.5% this year. Korea and Taiwan have also raised their interest rates three times since mid-2010. The Fed, the Bank of England and the

European Central Bank, however, have kept their benchmark interest rates at historical lows.

What is worrisome is that the current rise in inflation is driven not only by food and energy prices, but is becoming increasingly self-feeding, meaning that international inflation is in a cyclical upswing. Under the circumstances, policy is apt to become even more restrictive in the Asian developing economies, and tightening cycles may need to begin in the major Western economies earlier than many might expect. The lagged effect of such policy steps could weigh on economic growth down the road, reinforcing the global industrial growth downturn that has already been foreseen by ECRI's most far-seeing indicators as starting by next summer.

In sum, our findings about the relationship between the alternative future inflation gauges and overall CPI inflation provide valuable insights into future directional changes in international inflation cycles and the leeway that policymakers may have in these economies. Even though they are relatively noisy, they are more forward-looking than any other economic indicator that is available for China and India, where inflation is the central issue today.

As we showed three years ago in this publication ([Vol. XII, No. 10, October 2007](#)), ECRI's future inflation gauges anticipate not only directional shifts in inflation cycles but also directional changes in the target interest rates. Therefore, it is more appropriate to monitor the future inflation gauges where possible. Meanwhile, the relationship between the alternative future inflation gauges and policy rates is the subject of our current research. In any case, the alternative future inflation gauges showcased here contain vital advance information about the direction of inflation, most importantly for China and India. ■