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UBS Investment Research South Asian Focus

India: Upturn ahead

12 March 2009

www.ubs.com/economics

Philip Wyatt Economist philip.wyatt@ubs.com +852-2971 8135

Our lead economic indicator (LEI) for India has turned up. In our earlier report (Feb 2nd) the index showed no sign of reversal before May, but we suspected it may trough out by the June quarter. Two months on it seems our instincts have been affirmed after incorporating Jan-Feb data. The lead now shows decisive signs of a turnaround in industrial activity. It tends to lead by ~5m & implies industrial recovery in progress by July. This index has now nearly finished its basic function: timing. But will the recovery last? Lead indices are not really designed to show sustainability or degree or economic recovery. But we experiment with a couple of moderate scenarios loosely based on the 2001 experience. In summary the rebound appears sustainable, particularly if interest rates are cut further, even with no change to external conditions. We are inclined to have faith in the usefulness of this LEI index as a timing device, given that this economic downturn is not driven by an extreme or unsustainable degree of local indebtedness (either in corporations or households).

Chart 1: UBS Lead Economic Indicator (real time, unsmoothed series)



Source: CEIC, RBI, UBS

We would like to thank Adarsh Jain for his work & assistance in this LEI article.

Lead Economic index - What is it?

The bulk of economic variables such as: industrial activity, consumption, investment or credit growth are regarded more or less as coincident with the economic cycle – they drive it. But there are a few indicators which lead it. These factors tend to reflect monetary policy, expectations or changes in the perception of risk. We have selected 8 such indicators and combined them into one index which we call the Lead Economic Index (LEI). In Chart 2 it is smoothed by a 5 month average & shifted forward 5 months. the reference series is industrial production (IIP). The primary function of the LEI is to provide a clear early signal of a major change in the direction in industrial economic activity, in this case by at most 5 months¹. It does not tell us much about the degree or longevity of the upswing. Latest data up to February allow us to update this LEI to July. It now points upward.

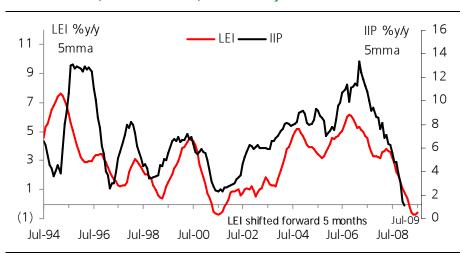


Chart 2: UBS LEI (shifted forward 5m) & industrial cycle

Source: CEIC, RBI, UBS

Lead indicator upturn - Why?

Chart 1 shows the Index in early signs of a turnaround in the June quarter. Specifically it has moved up for the past 2 months. This implies that the industrial downturn should reach a bottom by June, or at least in the June quarter. So what were the variables which brought this about?

First, the government bond yield spread, the variable with the largest weight in the index, has widened by a large margin (Chart 3). Technically this is due to the end of the rally in bonds. From an economics angle this reflects the drop in short rates (easier money) and the higher 10year bond yields prompted by higher fiscal borrowing. Longer term a steeper yield curve spread would probably require support from higher inflation expectations – it's a bit early for that.

Second, real M1 has only just started to pick up (Chart 5). Today this is due exclusively to the drop in inflation rate. But as the structure of deposit and lending rates comes down (over the next 6 months) so there will be a cyclical portfolio switch out of savings & back to spending, boosting M1. This means real M1 should keep accelerating. It turns out this is a key development in the evolution of a sustainable economic recovery.

¹ See the original article: Asian Economic Perspectives: India: Fortune Telling (2nd Feb 2009).

Finally, the currency risk premium continues to drop (Chart 4). The currency premium as measured by the 3m implied forward rate is continuing to decline. As the trade deficit narrows and official FX reserves rise this too should decline further. However, we are early days into this trend, plus there is an election to get through. Altogether these three factors account for 79% of the index, so unsurprisingly the index is turning up.

Component commentary

Government yield spreads widen. Wider government spreads boost the LEI. Spreads (10yr minus 1 yr) widened significantly from 0.28% in Dec-08 to 1.55% by Feb-09. There are two inter-linked reasons. First, easier monetary policy (incl. lower policy rates). Second, the much larger fiscal deficit involves a giant step-up in net domestic government borrowing to Rs2620bn from the local market (over double the budgeted estimate). The much higher supply of government securities thought to be in the pipeline already has pushed up bond yields. Credit rating agency, S&P has revised down its outlook on long term sovereign credit rating to negative from stable on fiscal fears.

Ordinarily we would expect a steeper yield curve spread to reflect longer term inflation expectations. But here due to easier money & higher government spending the wider spread also suggests a sharper rebound in economic activity lies ahead.

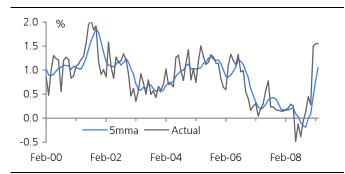
Real M1 rises. The acceleration in Real M1 growth is also significant for the LEI despite the fact that it has been produced mostly by the drop in inflation. Real M1 has jumped from 4.1% in Dec to 8.5% in Feb. But more lies in store. The weak economy should allow the level of interest rates to drop – particularly institutional rates. This in turn should boost M1 growth in the quarters ahead – as people switch from interest-bearing deposits to immediately expendable balances. This reflects the prospective shift away from a tendency to 'save' towards an attitude to 'spend'.

3M Implied forward rate. This variable has been a positive factor for LEI. It represents currency risk premium. It has declined over the last 4-5 months. Reduced perception of currency risk should reflect greater FII investment appetite. We expect the currency premium to continue to decline/remain lower over the next 5-6 months.

Foreign exchange reserves & exports. Official foreign exchange (FX) reserves are still not a positive factor. They declined very slightly from early-Jan to end-Feb (\$246bn to \$238bn). The outflow in FII investment, though much reduced was one factor here. Corporate governance issues following the Satyam incident occupy current equity investor concerns. At some stage official FX should benefit from the narrower trade gap but for now it is too early. Trade deficit narrowed (from -\$7.5bn Dec to -\$6bn Jan). Exports dropped 16% in Jan. In sum India is mid-way through the external shock and it appears too early for the external factors to turn strongly positive soon.

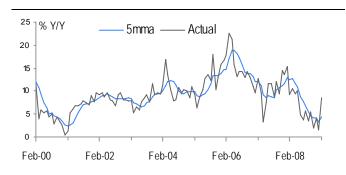
Sensex. Recently the impact of this factor on LEI has been broadly flat/negative. Last quarter the UBS universe of companies (ex-oil & gas) saw a decline of 9% y/y in net income & of 12% in EBITDA. But the Sensex appears to be reacting less & less negatively to bad news. From a general financial markets perspective one must ask whether the weight of negative news will continue to remain heavy enough to keep surprising on the downside. Or has the stockmarket reached a point where positive news, no matter how partial, minor or indirect exerts a disproportionately positive impact as investors look forward? We do not expect an uninterrupted uptrend, but looking ahead index equity gains even if short-lived would benefit our LEI.

Chart 3: Yield spread



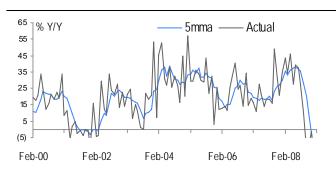
Source: CEIC, RBI, UBS

Chart 5: Real M1



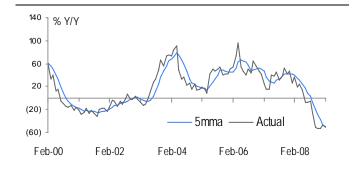
Source: CEIC, RBI, UBS

Chart 7: Exports



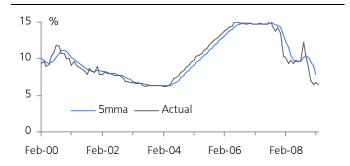
Source: CEIC, RBI, UBS

Chart 9: Sensex



Source: CEIC, RBI, UBS

Chart 4: 3m implied rate



Source: CEIC, RBI, UBS

Chart 6: Cash in circulation



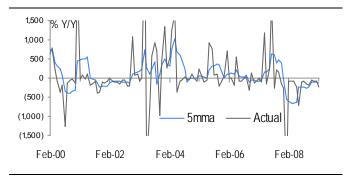
Source: CEIC, RBI, UBS

Chart 8: Official FX reserves



Source: CEIC, RBI, UBS

Chart 10: FII flows



Source: CEIC, RBI, UBS

Scenario Analysis

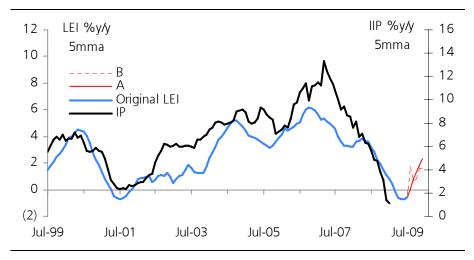
The index itself may have started to turn, but one could ask how might it fare in a turnaround similar to that seen in 2001? Here we devise 2 scenarios: A & B. Under both interest rates decline further, but the difference is degree. Under A there is faster adjustment through to a steeper yield curve and rebound in M1. Equities rebound modestly. Under B the rate cuts are delayed or more drawn out by the election and possible exchange rate uncertainty in April-May. Real M1 takes longer to turn up. Importantly under both we assume no meaningful change to the external factors: exports, official FX or investment flows. So this aspect remains a drag.

Table 1: Scenarios A & B

| | Scenario | Jan | Feb | Mar | Apr (election) | May | Jun | Jul |
|----------------------------|----------|--------|--------|--------|-------------------|---------|---------|---------|
| Yield curve spread % | Α | 1.5 | 1.55 | 1.55 | 1.65 | 1.65 | 1.75 | 1.75 |
| | В | 1.5 | 1.55 | 1 | 1 | 1.5 | 1.5 | 1.5 |
| 3m implied rate % | Α | 6.4 | 6.5 | 6.5 | 6.5 | 5.0 | 5.0 | 5.0 |
| | В | 6.4 | 6.5 | 6.5 | 6.5 | 6.5 | 6.0 | 5.0 |
| Real M1 (%y/y) | А | 1.6 | 8.5 | 9.0 | 9.5 | 11.0 | 12.5 | 14.0 |
| | В | 1.6 | 8.5 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 |
| Cash in circulation (%y/y) | Α | 16 | 18 | 15 | 13 | 12 | 15 | 15 |
| | В | 16 | 18 | 15 | 13 | 12 | 12 | 12 |
| Exports (%y/y) | Α | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | В | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Official FX (\$bn) | А | 239 | 239 | 239 | 239 | 251 | 256 | 263 |
| | В | 239 | 239 | 239 | 239 | 251 | 256 | 263 |
| Sensex (value) | Α | 9257 | 8892 | 8892 | 11115 | 11115 | 11115 | 11115 |
| | В | 9257 | 8892 | 8892 | 8892 | 8892 | 8892 | 8892 |
| FII flows (\$m) | А | -42453 | -24366 | -24366 | -24366 | -9746.4 | -9746.4 | -9746.4 |
| | В | -42453 | -24366 | -24366 | -24366 | -9746.4 | -9746.4 | -9746.4 |

Source: CEIC, UBS, RBI

Chart 11: Scenario A, B



Source: CEIC, RBI, UBS

In both the scenarios the main turning point does not change. Under A the rebound in the LEI continues, with rate cuts and the corresponding effects on the increased liquidity (growth in Real M1 & currency in circulation), the upward rise of the index looks solid and sustainable. Whereas under B the upturn is interrupted and more shallow. Other factors do not seem to play a big role at this time so the assumption of no change to external factors is not too important given the weights of exports, official FX and FII flows. The turnaround itself revolves around the speed of adjustment of the yield spread-M1 relationship: the speed with which people & companies save less-spend more. Easier monetary policy can speed it up; higher uncertainty and risk slows it down.

But do we believe it?

But do we believe the turning point can be so close by? Do lower interest rates matter? At this juncture we believe so. The reason is that the current economic downswing is not so much due to India over-borrowing and putting in too much or excess capacity across its industry. What lies ahead is not a multi-year investment overhang & clearout. As a result the role played by interest rates has not been undermined by very high NPLs across the banks – as is the case in other Emerging markets & in more developed banking systems. So we see this slump as a mid-course correction, albeit a sharp one with attendant local precaution. But despite the weak external environment & lower foreign borrowing lower local rates should still help the transition back to more buoyant spending patterns.

Improvements in the LEI

One big improvement in this edition is that we have made the lead indicator independent of the reference series, i.e. the Industrial production (IP). As highlighted in the methodology in the first edition, we no longer add the 'trend adjustment factor', which is the difference between long term average growth of the lead index and IP. What this means is that the there is no mathematics involved in forcing the lead to follow the patterns of the reference series, thus making it a truly independent lead.

Table 2: Component Weights

| Variable | Туре | Index weight (Old) % | Index weight (New) % |
|--------------------------|-------------------|----------------------|----------------------|
| Sensex | Financial markets | 3 | 3 |
| Yield curve | Financial markets | 45 | 58 |
| Implied INR forward rate | Financial markets | 27 | 11 |
| Official FX reserves | External | 3 | 3 |
| Exports | External | 2 | 3 |
| FII flows | External | 1 | 1 |
| Currency with public | Money Balance | 9 | 11 |
| Real M1 | Money Balance | 10 | 10 |

Source: UBS

However, one small side-effect of this change is a reshuffle in weights of two interest rate variables, i.e. the Government yield spread and the 3M implied forward rate. The old and new weights for each variable are given in the table above. Also, from the comparison of charts (old & new) in the below panel, we highlight the robustness of the model, as the turning points don't change significantly. Remember these charts shift the index forward 5 months.

Secondly, we have reduced the smoothing of both the series (LEI & IP) from 7 month moving average to a 5 month moving average. As seen from the graphs below, the change is not too significant in terms of the turning points. We have chosen 5 months as this helps in detecting change in trends earlier, while not exposing ourselves to too much noise (as seen in the unsmoothed LEI in Chart 1).

Chart 12: IIP Vs LEI (New: smoothed 5mma & delinked to IIP)

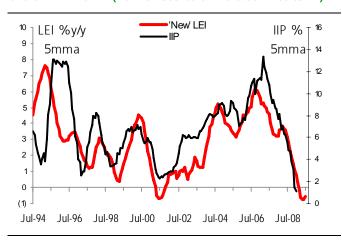
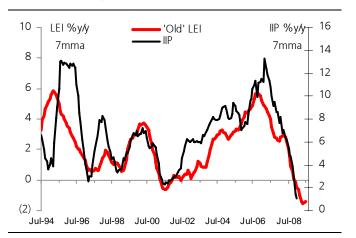


Chart 13: LEI (Original: smoothed 7mma & linked to IIP)



Source: CEIC, RBI, UBS Source: CEIC, RBI, UBS

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India

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