

# India: Has miracle turned to myth?

### **April 2008**

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Issuer of report: The Hongkong and Shanghai Banking Corporation Limited Singapore Branch

MICA (P) 316/06/2007

#### **Disclaimer & Disclosures**

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- Economy to continue to soften and we still expect 7% GDP growth in 2008/09
- Key WPI inflation measure could hit 8% and remain high for some time
- Problems reflect cyclical & commodity effects. Structural story intact; just not quite as good as many thought

### Cycle trouble

India's remarkable economic success of the last few years is fading somewhat. Domestic, as well as export growth has softened at the same time as wholesale price inflation has shot up. This in turn has left policy makers scratching their heads and markets wondering what happened to India's supposed immunity to failure. Has miracle really turned to myth quite so quickly?

The answer is no, although perhaps the strong growth and low inflation of recent times was not quite as miraculous as many believed. In our view, part of the success was cyclical, reflecting the benefits of very loose policy conditions which were correctly tightened as the economy began to hit supply-side constraints. Higher interest rates, along with the stronger currency and weaker global growth, are now taking their toll and will continue to do so.

We still expect real GDP growth to average 7% in 2008/09. This would be the worst performance for six years but far from disastrous except in a world of euphoric expectations. Meanwhile, WPI inflation will rise further away from the Reserve Bank's objective, possibly reaching 8% and proving slow to drop back again. It is important to bear in mind that measured inflation in India has little to do with domestic economic developments and rather more with international commodity prices.

Nevertheless, policy interest rate cuts are off the agenda and the authorities are searching for measures that reduce inflation but have little adverse impact on growth. Further import duty reductions, for example, look imminent although the growing risk of a budgetary overshoot means the room for manoeuvre is limited. Any renewed upward pressure on the rupee is unlikely to be resisted that strongly.



## No longer shining?

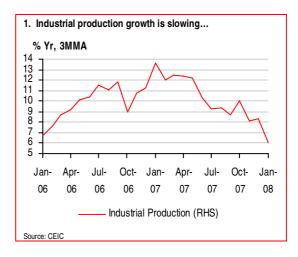
- Economic growth, particularly in the industrial sector, has slowed...
- ...while WPI inflation has moved from below to above target
- We investigate what has gone wrong, what the future holds and what recent events tell us about the trend growth rate

## Slowing growth, rising inflation

India's economic star is no longer burning quite so brightly. This is certainly the message of recent data, illustrated in charts 1 and 2, which have pointed to slowing growth and rising inflation.

Back in January last year, industrial production was comfortably expanding at a double-digit rate and many were heralding this as the start of India's long-awaited "industrial age". But subsequently output growth has more than halved to an average of 6% over the 3 months to January this year. Meanwhile, in the space of a few short months, Wholesale Price Inflation (WPI) has doubled, moving from well below the central bank's 4-4.5% target to comfortably above it. In so doing, it has also served to remove the chances of a near-term rate cut.

In our report of August last year, entitled "Excess Success?", we argued that this was the likely direction of both growth and inflation, although we incorrectly argued that the Reserve Bank of India (RBI) would have raised the repo rate by now. The aim of this report is to investigate what has gone wrong, what does the future hold for growth, inflation and rates and what do recent events tell us about India's sustainable growth rate.





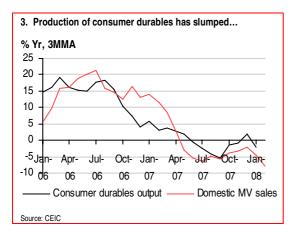


## What's gone wrong?

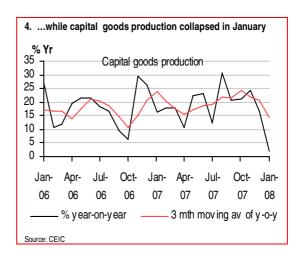
- Slowdown reflects first effects of higher interest & exchange rates
- Inventories continue to mount
- Pick in WPI inflation mainly the result of commodity shocks

### The right kind of slowdown?

So far the slowdown has been most visible in the production of consumer durables, which has seen year-on-year growth slump from a high of 19% in the three months to March 2006 to -2.2% in the latest figure for January. At the same time, basic and intermediate goods output has also softened, albeit less dramatically, as has non-durable consumer products.



The good news, bearing in mind India's virtually unlimited infrastructure requirements, is that the growth in the production of capital goods has remained much firmer. That is until the latest release for January, which showed output growth in this key sector collapsing to 2.1% - the weakest year-on-year rate since April 2002.

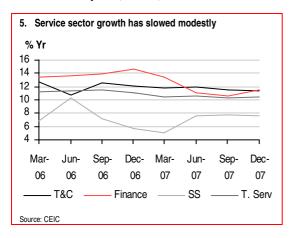


In practice, the severity of the fall, from 16.6% in December, means this is likely to prove something of an aberration and we would be surprised if the series didn't bounce back sharply in February and/or March. Nevertheless, it is worth watching closely, particularly when bearing in mind that the January Federation of Indian Chambers of Commerce and Industry (FICCI) survey recorded the first downturn in sentiment within the investment goods industry during the current cycle.

As for the rest of the ex-agriculture economy, high frequency data on the service sector are few and far between and we can really only rely on the national account figures, which extend to the October-December quarter of last year, to give us a less than timely idea of what is going on. In year-on-year terms, services output has slowed



from a high of 11.5% growth in July-September 2006 to 10.5% in the final quarter of 2007. Within the sector, financial services have experienced the biggest downturn, although the industry was still enjoying double-digit growth at the end of last year (chart 5).

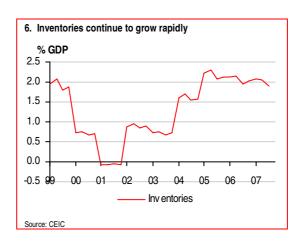


Overall, therefore, figures from the output/supplyside of the economy suggest that it is the manufacturing sector, particularly consumer durables producers, which have borne the brunt of the downturn so far.

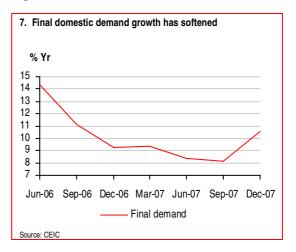
#### From supply to demand

But what about the demand-side? Weaker output growth would be of lesser concern if the growth in demand was holding firm and the inventory of unsold products was falling. Unfortunately, however, this doesn't seem to be the case judging by chart 6, which tracks the quarterly change in stocks as a percentage of GDP.

It may be, of course, that the inventory data are simply being mismeasured and part of what is being lumped into stocks should really be in final demand. Nevertheless, some series, such as domestic motor vehicle sales, lend weight to the argument that spending has indeed softened in some areas (chart 3).



The development of final demand, which encompasses private and public consumption, investment and exports, is shown in chart 7. Having peaked at more than 14% in the second quarter of calendar 2006, the growth rate nearly halved over the following 15 months, before improving again in the final three months of last year, largely on the back of a surprising bounce in exports (from –2% to 15.8%).



In our view, the slowdown in the expansion of final demand, albeit from an exceptionally strong growth rate to still a strong one, was absolutely necessary to ease what we argued in *Too fast, too loose* (23 October 2006) were clear signs that the economy was overheating badly. The downturn itself, which has taken many by surprise, is likely to have reflected several factors:



- The tightening of monetary policy which has seen the RBI raise the repo, reverse repo and Cash Reserve Ratio (CRR) by 175bp, 100bp, 250bp respectively since October 2005.
- ▶ Weaker growth amongst key trading partners, such as the US and UK. This, along with the hikes in export credit interest rates (which were partially reversed in July 2007), largely explains the export downturn.
- which is up 10% in real trade weighted terms since mid-2006 and close to its highest level for a decade. As we argued in *Export slowdown: don't blame the rupee* (23 August 2007), a stronger currency ironically tends to do greater damage to Indian domestic demand than exports as companies usually keep their foreign-denominated prices unchanged and take the hit on their profit margins which then effects jobs and investment.
- Sharply higher crude oil and other energy prices, some of which has come through at the producer/consumer level, squeezing profits and real incomes.

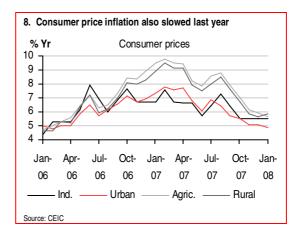
The question we seek to address in the next chapter is how much of the total impact of these developments is still to be felt by the economy. Are we at the beginning, middle or end of their various effects and are there other factors (either cyclical or structural) that are likely to play important roles in the months ahead?

For now, however, we switch our attention to inflation.

#### Inflation: it's back and it's bad

Last year, at the same time as many of its Asian neighbours were seeing inflation rise, India was luxuriating in the exact opposite. WPI inflation, the country's key measure, slowed from close to 7% at the beginning of calendar 2007 to little

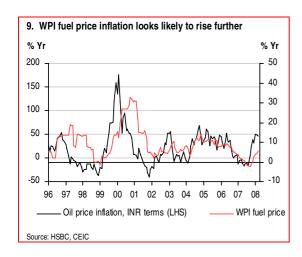
more than 3% by November (chart 2) – its lowest rate since mid-2002. Meanwhile, the various measures of CPI inflation also dropped through the course of the year, as illustrated by chart 8.

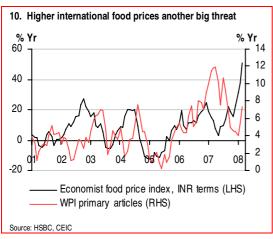


Although, as we have noted, demand was slowing throughout this period, we very much doubt that it can explain much of the drop in price pressures, just as the recent rise in factory gate inflation is most unlikely to be signalling a sustained turnaround in demand. Instead, the development of commodity prices and the strength of the exchange rate hold the key.

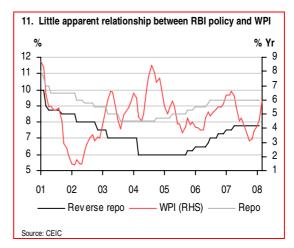
Metal, food and oil price inflation all slowed during the first half of last year, helping drive the manufacturing, primary articles and fuel components lower. As charts 9 and 10 show, these commodity price changes don't have an instantaneous effect on the Indian WPI, but do feed through in time and are now working in the opposite direction, driving factory gate inflation sharply higher.







But while the widespread assumption, heavily fuelled by the Bank's own statements, is that the RBI's rate policy is largely at the mercy of what happens to WPI inflation, this is not that well supported by the data (chart 11). At the very least, chart 11 indicates that the central bank is often prepared to "look through" short-term cycles in the WPI. And this is important to bear in mind when thinking about the outlook for policy rates in the months ahead; a subject we will return to in the next section.



#### The WPI and the RBI

As we have argued in the past, the undoubted heavy dependence of WPI inflation on international commodity prices would seem to make it inappropriate for the central bank to pay so much attention to this price measure. After all, its ability to influence the world oil price, for example, via its monetary policy decisions must be extremely limited.



## The future's...mixed

- ▶ WPI inflation could hit 8% and remain high for months
- Downturn in growth will be prolonged as effects of previous policy measures filter through. Still expect 7% GDP growth in 2008/09
- Policy rates will probably remain unchanged this year

## Spot the turning point

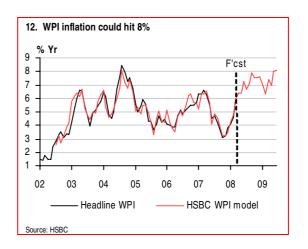
With the economy having been slowing for the last 18 months and inflation already at a high level it is tempting to assume that the cycle will soon start to improve and inflation is close to a peak. But is this just wishful thinking? We have used statistical analysis to investigate the issue.

#### Inflation: An 8% peak?

Chart 12 shows the fit and forecasts of our newly created WPI equation. It explains monthly movements in the year-on-year headline rate on the basis of changes in international food and oil price inflation (in rupee terms), the nominal trade weighted exchange rate and industrial production growth. It passes all the statistical tests and has an R-squared of 0.88.

According to the equation, WPI inflation will continue to move higher in the next few months, albeit not at the same pace, reaching 8% as the lagged effects of higher international food and energy prices continue to come through.

The really worrying feature of the model-generated forecasts, however, is that inflation doesn't drop quickly as it has several times in the past, but rather remains at elevated levels well into 2009.

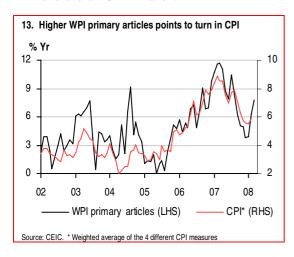


The results in chart 12 are based on the assumption that both oil and food commodity prices remain flat at their current levels in rupee terms. Hence, the implication of our analysis is that India will either need to see the INR strengthen much further or international commodity prices drop in level terms if headline WPI inflation is to begin retreating in a meaningful fashion over the coming year.

CPI inflation, meanwhile, has yet to show a definitive turn, although we strongly suspect that the January data will represent the bottom. The key here is what happens to food prices, which make-up between 47% and 73% of the four different CPI baskets, and the reason for concern is the fact that the food component of the WPI has recently strengthened. As chart 13 shows, there is



a close relationship between food inflation in the WPI and overall CPI inflation.



#### **Pay Commission effects**

A further upside risk to both WPI and CPI inflation stems from the implementation of the Sixth Pay Commission, which has recently revealed its recommendation for one-off pay rises of up to 77% for more than 3 million central government workers. The increase is designed to compensate employees for the real wage losses incurred since the last Commission reported eleven years ago.

Whether or not it has meaningful inflationary implications will depend on the extent to which the central government chooses to follow the recommendations, which in turn will carry important implications for railway industry and state government negotiations, as well as the private sector response to the public sector increases.

Given the implications for the public finances if the Commission's recommendations are followed in full (we estimate it would add 0.4% to the central government budget deficit in 2008/09) then some scaling back or phased introduction of the plans seems likely. It should be borne in mind that in coming up with a central government deficit forecast of 2.5% of GDP this year, the finance ministry didn't allow either for the pay hike or the full financing of the loan waiver

scheme (see later). On our calculations, the cost of both, if fully implemented, would send the deficit beyond 3% of GDP – the level required to meet the Fiscal Responsibility and Budget Management (FRBM) Act.

As for the private sector response, a slowing economy and consequent squeeze on profit margins should mean that any reaction is limited (also one of the main points of the Pay Commission is to ensure public sector wages don't fall too far behind those of the private sector, rather than vice versa!)

Overall, our feeling is that the Pay Commission shouldn't provide the catalyst for a major cost/inflationary impulse in the country.

#### Growth: drawn out downturn

As for the growth outlook, we raised the question earlier on as to what extent have the interest rate and exchange rate effects already been felt in the economy.

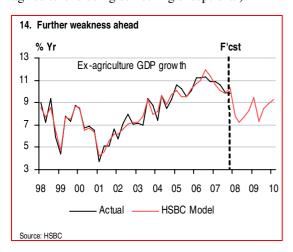
Unfortunately, our suspicion is that there is likely to be quite a bit more to come through during the course of calendar 2008. Two factors are important here. First, that the sharpest tightening of monetary conditions occurred during the latter part of 2006 and the early stages of 2007; not only were policy rates rising, but banks generally widened their lending rate spreads at the time. Second, statistical analysis suggests that, as elsewhere, it takes up to two years to see the full impact of policy changes in India. Combine these points and the implication is that it won't be until well into 2009 that we can be confident that the worst effects are over.

This is broadly the message of our growth model, the results of which are shown in the chart below. The equation itself incorporates mainly interest and exchange rate variables and was detailed in the *Excess Success* report of August last year.



Rather than get fixated by the quarterly profile suggested by the equation, which is rather bumpy, the key point is that it points to ex-agriculture GDP growth of 8.2% in 2008/09, down from a likely 9.7% in 2007/08 and 11.1% in 2006/07. If it's right, then the ex-agricultural sector is headed for its weakest performance since 2002/03.

While hardly a disaster one would have thought, it might feel quite painful bearing in mind how optimistic expectations had become. Growth should then improve to about 8.5% in 2009/10. (Overall GDP growth is generally around 1.5% points below the ex-agriculture rate, unless agriculture is doing something exceptional)



As always, models such as these should only be used as a guide and we need to consider some of the risks around it. There are several:

#### Global growth

Although exports still only account for 20% of GDP and we couldn't find a statistically significant role for any measure of US or global growth in the equation, it would seem unwise to ignore the influence of overseas developments altogether.

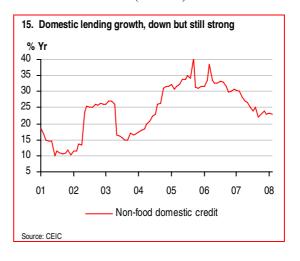
Even if, as we believe, domestic growth in Asia and most other emerging markets will remain solid, the developed world is looking set to experience a sizeable slowdown in 2008, which may well extend well into 2009 (see *Unfinished Business*, March

2008, by Stephen King and Ian Morris). The weakness is already apparent in the US, which is teetering on the brink of recession, but we fear it will spread to Western Europe and Japan.

Against this background it is hard to be that optimistic about India's export performance; the three countries combined account for just over 30% of the country's total external demand.

#### **Credit conditions**

Another downside risk stems from the banking crisis in the US and any fallout it might have on the availability of credit in India. The good news here is that state owned and domestic private institutions dominate local bank lending (international banks account for about 7% of lending to the domestic sector) and, as far as one can tell, haven't acquired much, if any, exposure to the US sub-prime market. It is certainly true to say that the growth in bank lending has slowed in India, although it is still running at a strong rate above 20%, where it has been reasonably stable for a few months now (chart 15)





But all this is not to say that the economy is out of the woods as far as the credit situation is concerned. There are several points to make:

- Domestic institutions may take a lead from their foreign counterparts by tightening lending standards.
- Borrowing offshore is likely to have become more problematic for two reasons. First, as a result of additional restrictions on External Commercial Borrowing (ECB) introduced in August 2007. These mean that ECB over USD20m can only be used for foreign currency expenditure, with those borrowing less than USD20m and wanting to use the funds for rupee spending having to get the RBI's permission. Second, because of a heightened reluctance amongst many industrialised country banks to supply credit.
- Rising Non-Performing Loans in the domestic economy could have a big impact. Some banks have reported higher NPLs for unsecured loans but this is from low levels, while such lending is still a small proportion of the total loan book (roughly 20% for all scheduled commercial banks). So far, there is little evidence to suggest that NPLs on secured lending are picking up and many argue that it runs completely contrary to the nature of Indian people to default on their mortgage for example. But while this might be true of the older generation, it seems hard to believe the younger generation will necessarily follow suit. In any case, they may have no choice if jobs are lost. It also pointed out that loan to value ratios are relatively low in India, although if property prices decline, as they are now in some cities, this is not going to hold true.
- Given the period of exceptionally low interest rates two to three years ago and the euphoric

growth/profit expectations of the time, there is a danger that some of the extraordinary expansion in lending is proving more difficult to justify now. As we have noted before, these are the kind of conditions often associated with "excess" investment.

#### **Fiscal policy**

One offset to these negative influences could come from the government's recently announced 2008 budget. Amongst other things, this provided for sizeable loan waivers to farmers, at an estimated cost of INR250bn (0.3% of GDP) in 2008/09, and will take many out of tax altogether by raising the income threshold.

At the same time, however, capital spending is budgeted to decline in absolute terms in 2008/09 and the tax net is being been extended to cover more services. Overall, it seems to us that the budget is not as expansionary as might appear at first sight.

#### **Equity prices**

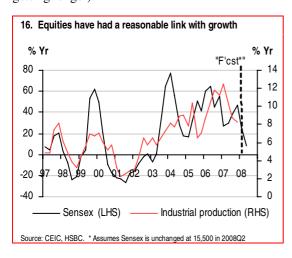
Another important issue worth bearing in mind relates to the potential role played by equity prices in driving economic growth. This could take the form of wealth effects, for example, while also influencing the ability/willingness of companies to raise funds in the market.

Statistical analysis supports the notion that yearon-year changes in equity prices have typically led growth in both ex-agriculture GDP and industrial production over the last 10 years. However, according to so-called Granger-Causality tests, the extent of the lead is fairly short, at just one quarter, while, despite the name of the test, it is not clear whether the result is signalling a casual relationship or not.

For what it's worth, our suspicion is that if there is a macro economic effect from equity market developments it is small. After all, only 10% of households own shares, equity issuance is only



used to raise a relatively small amount of money (equivalent to 1.7% of bank loans in 2007), while the impact seems implausibly quick to be picking up the impact of changes in equity prices on spending/investment behaviour (although interestingly chart 16 suggests the lead could be getting longer).



Instead, the results are more likely to reflect the ability of the market to discount short-term movements in economic growth. If this is true then it means that equities may at least be a useful lead indicator to the direction of growth in a country where we have so-far failed to find a single such measure. If they are, then it would support our view that the economy is headed for some more bad news in the short-term (chart 16).

Having suggested that the macro economic influence of the equity market is generally a limited one, we can also imagine that it might become more important at times when other borrowing channels have been restricted. In the case of India, this really means bank borrowing, given the largely dysfunctional corporate bond market (corporate bond issuance was equivalent to just 1.5% of bank loans in 2007).

The good news here is that the domestic banking sector is functioning well, although, as we argued earlier, there are also some risks in this area. Clearly *if* those risks were to materialise, then it

would be very helpful if the equity market had returned to health.

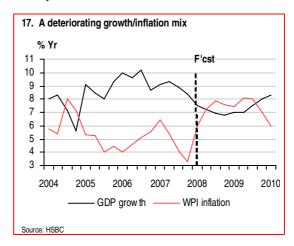
#### Real estate market

Aside from equity prices, the property market is the other potential source of wealth effects and here again the picture is by no means as unambiguously positive as it was.

While data limitations prevent a full analysis, it is clear that some of India's major cities are experiencing a sizeable correction in prices. Indeed, there are tales of 10-15% nominal price declines in the likes of Bangalore and New Delhi, although, as with equities, one suspects that the macro consequences will be reasonably limited. Apparently, prices in much of Mumbai as well as India's second-tier cities continue to rise at a reasonable rate.

### More pain before the relief

Chart 17 shows our quarterly GDP growth and WPI inflation forecasts up to end of the 2009/10 fiscal year.



The key points are:

We continue to expect overall GDP growth of 7% in 2008/09 (a forecast we have had since August of last year), improving to 7.8% in 2009/10. WPI inflation is likely to average 7.5% and 7.3% respectively in the two years.



- WPI inflation will rise further over coming months, possibly hitting 8%. We expect a similar sort of CPI peak, albeit around 6 months later.
- ▶ GDP growth should continue to soften through 2008, eventually slipping slightly below 7% in the second half of the calendar year. We then expect a gradual recovery as the policy tightening effects begin to diminish.

### Policy prospects

Assuming our profile for growth and inflation is right, how is the RBI likely to react?
Unfortunately, this is a fairly tricky question to answer! As we suggested earlier, the central bank's reaction function is not that easy to judge even at the best of times and when one throws in the fact that the general election must be held by May 2009 and that there may be a new RBI governor in place before end-2008 then the waters are muddied still further.

Given the RBI's twin objectives of strong growth and low inflation, the key lies in judging when the emphasis is likely to swing from one to the other. For the last couple of years, the control of inflation has taken priority, while before that the Bank's monetary policy looked to be directed towards boosting growth. Earlier this year, there were some comments from senior RBI officials which we interpreted as suggesting that growth was again returning to the fore. But the extraordinary pace at which WPI inflation has strengthened in recent weeks looks to have ended that for the time being.

In our judgement, the next move will be a cut albeit not for a long time yet as the Bank will be reluctant to ease while WPI inflation remains in excess of 6% and CPI inflation is still rising. To do so, we believe, would require a bigger downside growth shock than seems likely. At present, we have pencilled in 75bp of rate cuts in

2009, but the risk is that we get less than this or even nothing at all.

At this stage, the RBI and government may be more willing to let the rupee appreciate as a means of controlling WPI inflation (and a more effective one, in our view, than raising interest rates). But the problem is that sizeable portfolio outflows have led to some downward pressure on the currency in the early months of this year and we doubt the authorities are yet prepared to intervene to push it higher having intervened so aggressively in the other direction through the course of 2007.

Assuming sentiment settles, the currency team are looking for renewed rupee appreciation, with a target of INR39.5 at end-2008 and INR37.5 by mid-2009.

We can also look forward to other measures designed to reduce inflation, without harming growth too much. Further import duty reductions would appear to be imminent, although, as we argued in *All that glistens...?*(21 February 2008), the government's room for fiscal manoeuvre is fairly limited. We also expect some easing of the ECB constraints, particularly if the rupee continues to soften.



## Cycles and trends

- ▶ India is experiencing is a cyclical/policy driven downturn...
- ...while the structural growth story remains unchanged
- Many estimates of trend growth are too cyclical!

### Structurally secure?

In this report, we have focussed on the outlook for growth and inflation, concluding that the former is likely to fall further and the latter likely to rise further in the next few months. So what does this imply about the development of the trend/sustainable/potential growth rate of the Indian economy? Absolutely nothing!

What we have described here is the potential outcome of cyclical and policy events rather than anything more structural. And yet what we have already started to witness, and will no doubt continue to see, is forecasters becoming gloomier about India's *long-term* growth prospects on the back of recent developments. In our view, this is not because those long-term prospects have actually diminished but rather because many were too optimistic about them in the first place. It is often the case that trend growth estimates prove to be more cyclical than they should be and indeed we wouldn't be surprised if some became overly pessimistic in due course.

As we see it, the recent episode of 9%+ GDP growth in India was mainly a function of extremely loose monetary conditions and euphoric profit and income expectations spurred on by China's extraordinary performance. In the initial stages of the recovery, the economy was making up for a period of sub-trend growth (and a

negative output gap) but then started to run into numerous capacity constraints. It should be stressed that the country's inflationary measures are far from perfect indicators of whether or not the domestic supply-side constraints have been hit. Instead, we should focus more on survey-based indicators of capacity utilisation, skill shortages and the like, none of which have yet to ease substantially.

In reality, nobody knows exactly what India's trend growth rate is. We can and do use various techniques to estimate it but they all have their limitations. Calculations using past data can be criticised for not properly picking up the dynamic development of the economy. Meanwhile, those which add together labour and capital inputs as well as 'trend' productivity are only as good as the assumptions that they are inevitably based on. A lot of attention, for example, is paid to the investment share in GDP, but how certain can we be that all of the capital spending is 'structural'. There is presumably a possibility that some of it was the result of 'excessive' profit expectations.

What we can say with a much higher degree of certainty is that it is very unusual for an economy to have sustained a 9% growth rate let alone a double-digit one for a decade or more. In the 25 years prior to the Asian crisis, for example, only one country, China, achieved an average increase in real GDP of more than 9% (it was 9.1%). The



next best was South Korea (8.4%), followed by Taiwan (8.3%), Singapore (8.2%), Thailand (7.5%), Hong Kong (7.5%) and Malaysia (7.4%).

We can probably also agree that India has several serious supply-side constraints which many of its Asian neighbours, particularly China, didn't have or were able to remove swiftly. These include chronic infrastructure bottlenecks as well as educational deficiencies.

Some of course will point to the fact that India is different from the smaller Asian economies and more like China in the sense that it has a huge population. However, it is not clear when looking at a wider sample of countries that size really matters all that much in driving economic performance.

It is *not* our intention here to suggest that India's long-term growth prospects are poor or that the country doesn't have important advantages over others. Instead, our argument concerns what is realistic and hence what should be deemed as a successful performance.

It seems to us that if India were to experience average real GDP growth of 7-8% over the next 25 years, then that would be an excellent result. Anything more would be fantastic.



## Disclosure appendix

#### Analyst certification

The following analyst(s), who is(are) primarily responsible for this report, certifies(y) that the opinion(s) on the subject security(ies) or issuer(s) and any other views or forecasts expressed herein accurately reflect their personal view(s) and that no part of their compensation was, is or will be directly or indirectly related to the specific recommendation(s) or views contained in this research report: Robert Prior-Wandesforde

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