

Equity Strategy

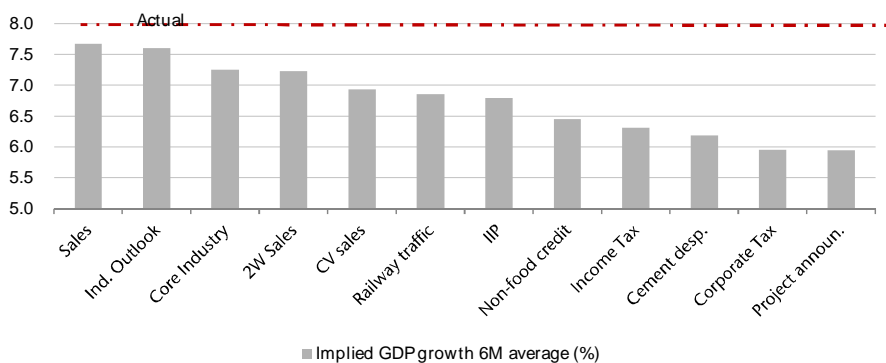
On longer, higher, cleaner growth

Key Takeaway

To us, the Indian economy is off the celebrated 8%+ growth path. And now this should be the number one economic concern. The causes are not all in the global environment. We present a basket of signs to point that something is amiss. More importantly, we discuss what we deem as the true drivers of long-term growth and what policy action is needed as a solution. Until efforts are being made to address growth, or we see signs of global stability, we maintain our defensive bias on equities.

Needed first and foremost – an admission that growth is off: We study the past relationships of 12 high frequency domestic economic indicators with GDP. All of them suggest that current domestic growth is likely lower than the headline published GDP growth with more slowdown ahead.

All other economic indicators imply that it doesn't feel like 7.7% GDP growth



Source: CMIE, Bloomberg, Jefferies

Not a cyclical issue and not a secondary issue: We argue that the ongoing decline in the growth rate is not just due to cyclical/global reasons that would mend themselves over time. Growth revival needs active effort and without recovery, many other economic issues that are currently perceived as more severe – like inflation, fiscal deficit or the currency – could get worse.

Five points to ponder on the nature of Indian growth to arrive at the right policy mix: For higher, less cyclical, long-term growth, we discuss in detail the following five points: 1) Demographics play little role in India's growth; 2) Growth is fuelled when consumption is growing slower than GDP; 3) Savings rate has stalled, particularly the productive savings; 4) Savings' conversion into investment too has stalled and for reasons other than high interest rates; and 5) Negative cash flow economy would need global stability for near-term relief.

With no policy support for growth, we stay defensive: Internal economic circularities could take a vicious turn for the Indian economy if the world remains unstable and in the absence of strong policy support for growth. These are only risks as of now, but rising. We see risks of further downside for the index and maintain OW on consumer sectors, telcos and stable earnings companies.

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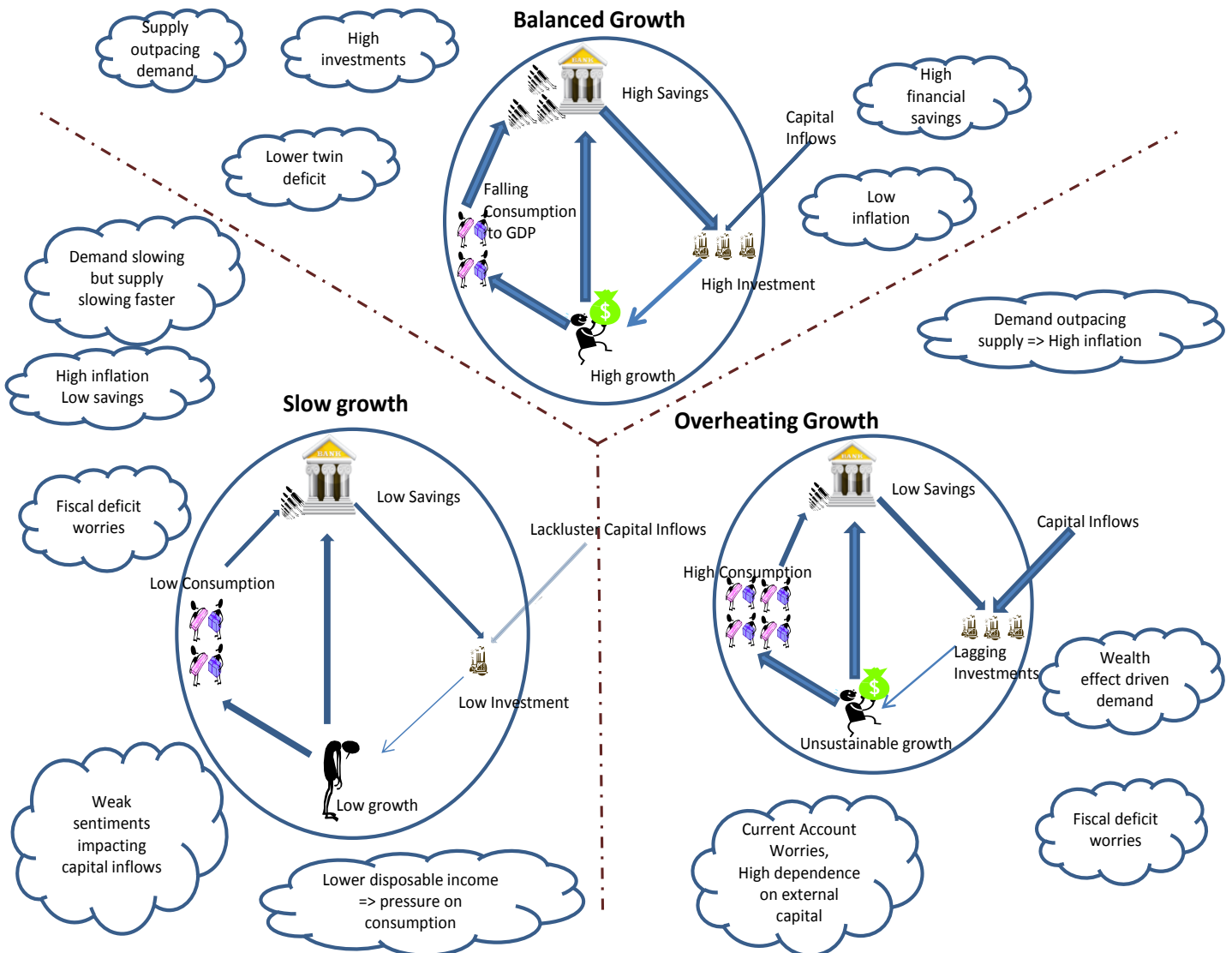
Focus Charts

Exhibit 1: Most indicators are in the lower half of their historical performance range with a half in the bottom quartile of the range since 2004

	Range (2004-Current)			Percentile of latest nos.
	Current	Max	Min	(2004-current range)
Cement despatches	10.5	19.8	-5.9	62%
Commercial vehicles sales	24.4	162.8	-58.2	69%
Core industries	6.1	10.3	1.0	62%
Corporate sales	17.2	27.6	-15.9	82%
Corporate tax	-11.4	177.4	-33.9	6%
Goods traffic on railways	7.4	15.6	-0.9	51%
IIP	3.3	20.0	-7.2	13%
Income tax	-0.7	159.1	-56.7	26%
Industrial Outlook	41.4	53.7	11.2	21%
Non-food credit	9.0	33.3	-2.6	22%
Project announcement	-54.2	804.4	-59.2	11%
Two-wheeler sales	14.7	59.9	-11.4	49%
GDP	7.7	10.1	5.5	21%

Source: CMIE, CSO, Jefferies

Exhibit 2: Different growth dynamics and impact on various economic parameters



Source: Jefferies

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Short term: Growth needs support

When did the future switch from being a promise to being a threat? – Chuck Palahniuk

Real life economic growth tends to change far more than what economists' models predict in times like now

Analysts, particularly economists, have an incrementally moving world in their models. Economists' forecasts rarely swing substantially in a proactive manner. Their models' consistency works well in a normal world but their estimates lag rather too harmfully when real life turns volatile as is the case now. The slowest moving of all macro estimates is normally the GDP growth forecast, which also tends to be the most critical.

GDP forecast errors often cause policy errors

The economy depends about as much on economists as the weather does on weather forecasters – Jean-Paul Kauffmann

While financial markets do not wait to price in forecasters' changes, the harm caused by slow-moving forecasts is in policymaking

So why is GDP growth forecast critical? The psychological and political importance of this number cannot be overstated. Even in financial markets, the moods and impressions of many investors are shaped by not only the outlooks on GDP but more often by the changes in the outlooks. In general, when one thinks about growth, the language is GDP growth.

That said, GDP forecast is less important for the decision-making professionals in financial markets compared to earnings and revenue estimates and many other monetary factors. However, a substantially overestimated or underestimated GDP by finance sector analysts – regardless of general impression as reflected in the quote above – could cause enormous harm in misleading policymakers, corporate decision-makers and general investors at inflexion points.

If India's GDP growth is to truly bottom at 7% or so, the market and policymakers would not have much to worry about on the growth front, but is it truly the case?

Indian economic growth has been at one such inflexion point for a while. Industry macro analysts have slowly revised their estimates from around 8.5-9% for FY12 to around 7-7.5% now. While there have been downgrades, the latest forecast of 7-7.5% in absolute terms is a praiseworthy level of growth, particularly in the current global context. If the economy is truly growing at somewhere around this level with prospects of only a higher growth later, policymakers are absolutely right in their focus on the containment of inflation, fiscal deficit and a couple of other issues.

Export report critics missed woods for trees in ivory tower analysis

Smooth shapes are very rare in the wild but extremely important in the ivory tower and the factory – Benoit Mandelbrot

Details show that slowdown is already far more than published GDP growth numbers with circular risks of more slowdown

These analysts have believed that Indian economy has already slowed down much more meaningfully than what headline numbers predict. In our 29 July 2011 report titled 'Export boom, really', we dissected the national income series to show that domestic economy had already slowed down to a level below the lowest reported in 2008.

We showed trends in totally diverse data series to conclude that India's high reported export growth rate that supported the reported 7.7-7.8% GDP growth print of the past two quarters needs more examination. We are not export experts and certainly not economists. Our analysis had only one objective: to raise the awareness on the slowdown in domestic economy and hope for a growth support (we will talk about the need for growth support later in the document).

The believers of world's best export growth could have served all better simply by providing bottom-up evidence of growth than spending time on our analysis

Some of the economists in the financial industry fraternity decided to prove the validity of export growth numbers – extremely rightly so. Doubting published data is justifiably not common in India. Given the implications, those who are convinced that the economy is growing at the published rate should make all the efforts to dispel anything that tries to claim otherwise.

However, most our critics tried to find faults with analysis rather than conclusions. We macro analysts are masters at manipulating data. We will be the first one to admit that past correlations could be shown to use diametrically opposite conclusions in the macro

world with simple calibration of scales, selection of analysis period and/or adjustment of factors like simple average, growth, aggregation etc.

That we showed data disconnection on numerous fronts was our biggest defence. Those with counterclaims had a far easier task: not in claiming that every individual chart disconnection was within some hypothetical error margin but by simply enlisting a dozen or more large exporters having 50% or more growth. Alas, this is something not only we cannot find (and was the starting point for our claim) but no one else we know has shown bottom-up evidence of 50%+ growth in USD200bn export segment.

Export-import revisited: In the least, a likely future GDP drag

One has not only an ability to perceive the world but an ability to alter one's perception of it; more simply, one can change things by the manner in which one looks at them – Tom Robbins

A sudden jump in monthly exports, and non-oil imports, like in another high interest rate period of early-2008

The following chart on absolute level of monthly import as well as export revenues appears somewhat inconsistent with the slowdown in global and Indian economic trends. Average monthly exports were range-bound and gradually rising until Oct-2010. Like in early 2008 – another period of high interest rates in India – it suddenly sprang to life and bounced by around US\$8bn per month from 4Q2010. Once again like in 2008 – the non-oil average monthly import too experienced a similar sudden bounce with a similar 2-3-month lag.

The similarity with 2008 is eerie. Indian exports and non-oil imports rapidly jumped at the time despite the full blown global financial crisis. Trade numbers fell somewhat suddenly when Indian interest rates began to decline rapidly from Oct-2008.

Exhibit 3: Exports and non-oil imports have jumped sharply – similar to another high interest rate period in early-08

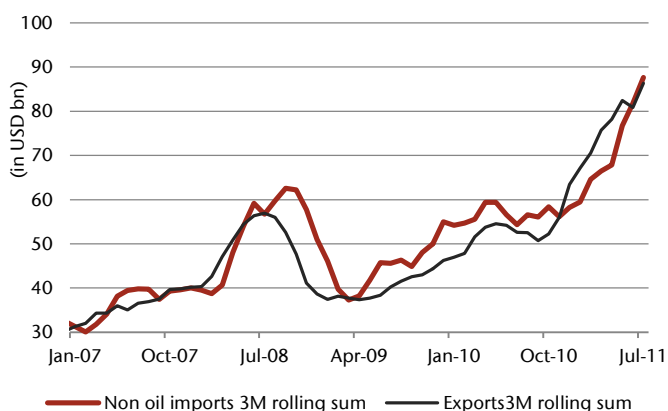
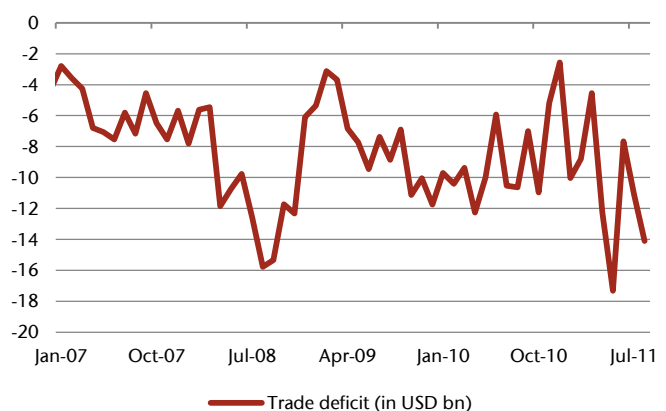


Exhibit 4: 2008 saw a huge volatility in trade deficit as well as currency as the trade numbers slumped later



Source: CMIE, Jefferies

We do not discount the possibility of trade actually growing extremely rapidly but evidences point to high interest rate driven flows, which if right, could reverse and cause needless volatility in currency

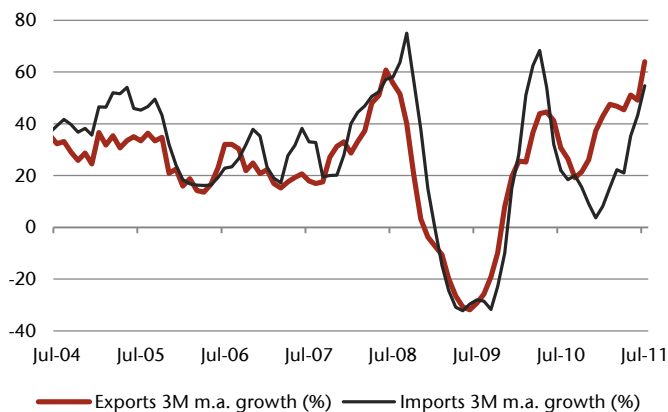
Source: CMIE, Jefferies

Let's look at the chart above one more time, which is not about growth in trade but for actual trade numbers. Such a significant bounce (annualized at about US\$100bn) should have been accompanied by a plethora of bottom-up tales of rapid growth. At least, we don't notice them in our reading of corporate headlines and this is the reason behind our suspicion of some hot-money capital flows taking place through the trade route.

If this hypothesis is correct, monthly trade deficit numbers should continue to stay volatile with the likely significant at least one or two high negative numbers in months ahead. Notice that this was indeed observed in 2008 around the time of first high, and then falling, Indian deposit rates. That said, our concern in this note is not exports, trade balance or currency volatility. It is about the true level of economic growth.

Even if this hypothesis is totally wrong – and we surely believe that too as a possibility despite what some of the critics of our analysis like to conveniently classify us as in their creation of the proverbial straw man – it is still likely that growth in trade numbers to undergo a rapid reversal in 1H2012. The impact on overall GDP statistics will be a function of the net trade statistics and not only exports, but our back-of-the-envelope calculations still hint at a substantial drag on the headline GDP growth. If domestic GDP maintains the growth of the past four quarters for the next few quarters and Imports and Exports growth mean revert to their trend growth, GDP growth could fall to well below 7% in the coming quarters.

Exhibit 5: Reversal in export and import growth likely – like in 2008



Source: CMIE, Jefferies

Exhibit 6: Leading to sharp slowdown in headline GDP (purely statistical on simple trends and not forecast)*



*Statistical estimate based on no changes in domestic consumption and investment growth and cyclical growth rate changes in exports and imports Source: CMIE, Jefferies estimates

This 7.5%+ growth appears different

...the most commonly repeated and most expensive investment advice ever given in the boom just before a financial crisis stems from the perception that 'this time is different.'
– Carmen M. Reinhart and Kenneth Rogoff

Published GDP growth may not disappoint much despite what our statistical analysis shows due to a host of reasons

GDP numbers move more mysteriously than most other economic series. They are most unlikely to follow the trajectory our statistical estimates show above. Even if trade statistics follow the trend we deem likely, their conversion into volume growth, deflators used for other domestic consumption and investment series, future revisions, and revisions in past GDP numbers could all combine to make published numbers appear 7% growth or more in the foreseeable future.

Aside: the fixation with YoY growth and past revisions

There is a difference between what holds importance in forecasts for corporate analysts and economists. For analysts calculating the fair-value of a security, what matters more are the absolute levels of per share earnings, cash flows and revenues. Growth numbers are derived, but markets and analysts are rarely happy with higher growth numbers that are arrived through the restatement of past numbers.

In the YoY growth world of Indian macro, a part of most recent published growth was due to the unseasonal, unusually large change in the denominator

Macro analysis, on the other hand, rarely stresses absolute numbers. This does not matter most of the time when the past number revisions – a common occurrence in GDP calculations – are mild and not finely timed. The GDP revisions are fully justified as final numbers contain many more details that are available only later (with annual surveys, audited annual financial results, smoothening of annual trends, economic depreciation etc) compared to the initial estimates.

The above trend has changed somewhat in the first final revision of 1QFY11 GDP numbers that added 50bps to the growth number of provisional 1QFY12 GDP. If historical trends

had been maintained, the revision should have been with all the other quarterly numbers for fiscal FY11 somewhere in Jan-May 2012.

Exhibit 7: Current revision in 1QFY11 the largest downward revision in past five years and at odds with flat to somewhat positive revisions in GDP series historically

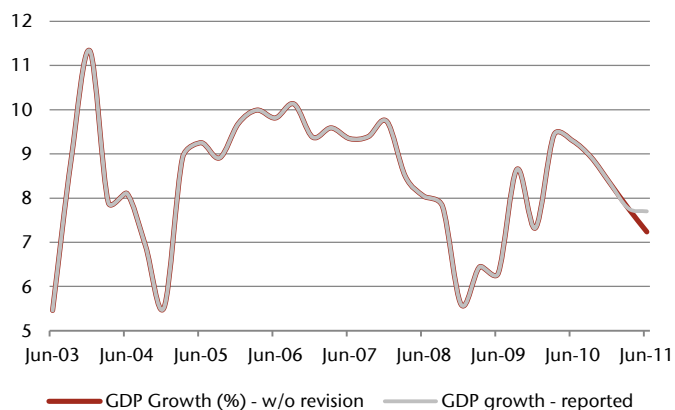
Quarter	Nos. of changes before 1st final no.	Date of 1st final nos.	Revision in first final nos. (of abs value in bps)		Second final nos. date	Range of change in prevision revisions in growth (in bps)	
			from last revision	from first release		Max	Min
1QFY06	1.0	31-Jan-07	-10	30	31-Jan-08	40	40
2QFY06	1.0	31-Jan-07	-40	0	31-Jan-08	40	40
3QFY06	1.0	31-Jan-07	180	170	31-Jan-08	-10	-10
4QFY06	0.0	31-Jan-07	70	70	31-Jan-08		
1QFY07	1.0	31-Jan-08	50	120	31-Jan-09	70	70
2QFY07	1.0	31-Jan-08	-10	90	31-Jan-09	100	100
3QFY07	1.0	31-Jan-08	60	70	31-Jan-09	10	10
4QFY07	0.0	31-Jan-08	60	60	31-Jan-09		
1QFY08	2.0	31-Jan-09	-10	-20	31-Jan-10	0	-10
2QFY08	2.0	31-Jan-09	-20	20	31-Jan-10	40	0
3QFY08	1.0	31-Jan-09	10	50	31-Jan-10	40	40
4QFY08	0.0	31-Jan-09	0	0	31-Jan-10		
1QFY09	2.0	31-Jan-10	0		31-Jan-11	0	-10
2QFY09	2.0	31-Jan-10	0		31-Jan-11	10	0
3QFY09	1.0	31-Jan-10	40	90	31-Jan-11	50	50
4QFY09	0.0	31-Jan-10	0	0	31-Jan-11		
1QFY10	3.0	31-Jan-11	-60	20		60	-10
2QFY10	3.0	31-Jan-11	0	70		70	-10
3QFY10	2.0	31-Jan-11	0	130		80	50
4QFY10	0.0	31-Jan-11	80	80			
1QFY11	4.0					40	-50
2QFY11	2.0					0	0
3QFY11	1.0					10	10
4QFY11							
1QFY12							

Source: CSO, Bloomberg, Jefferies

The denominator revision masked the continuing weakness in domestic components of GDP

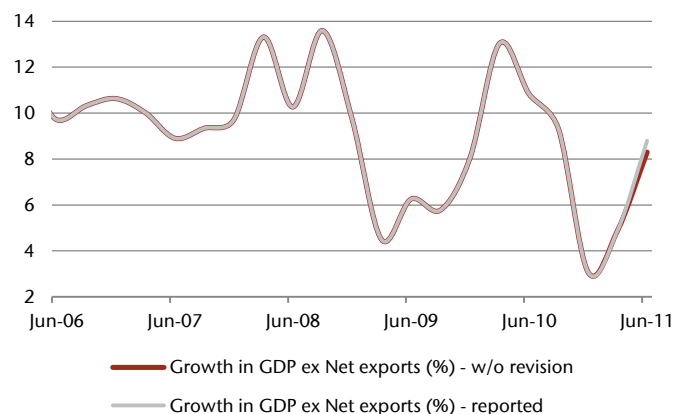
Without somewhat unseasonal change in past numbers, the all-important headline growth for 1QFY12 would have been lower and would have shown a weaker trend for domestic components of GDP. It must also be noted that while each quarterly GDP number goes through multiple changes, our compilation of nearly 100 changes since FY05 show only one instance of a higher absolute downward revision in the past.

Exhibit 8: GDP growth ex revision stood at just 7.2%, which would have raised more policy alarms without revisions



Source: CSO, CMIE, Jefferies

Exhibit 9: Domestic GDP too had a boost with revisions although it is certainly undergoing a cyclical rebound



Source: CSO, CMIE, Jefferies

Time to discuss and accept the extent of slowdown because the remedial actions will begin only when the need is felt

A majority of high frequency economic indicators are in the bottom quarter percentile of the range traversed by them since 2004

Eleven high frequency indicators all suggest current GDP growth between 5.8-7.6% based on their past relationship with severe further slowdown risks

Proxy indicators point to a sharper slowdown

[Statistics are] the only tools by which an opening can be cut through the formidable thicket of difficulties that bars the path of those who pursue the Science of Man. - Francis Galton

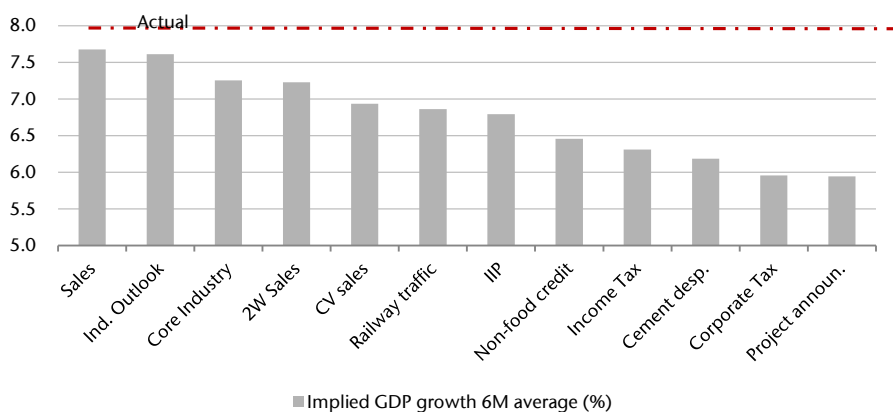
Our basic contention in all the above arguments is that Indian economy is undergoing a sharp slowdown that needs to be arrested as soon as possible. Given the persistence of “respectable 7-7.5% growth bottom followed by a recovery” talk amongst policymakers, we feel the need for more discussion on the extent of slowdown. The GDP statistics do not tell the story, and as a result we turn our attention to a host of proxy indicators. That said, we attempt to convert the slowdown in other economic indicators for their GDP growth equivalent using past relationships as “GDP growth” language is the one we all understand

In other words, we show that domestic economic growth is much slower than the reported national account statistics using a basket of other macro indicators. We take a look at eleven indicators from the corporate and real world, including tax collection data, credit growth, sales growth, projects announcement, auto sales and business outlook to determine the growth implied by their current growth levels.

A majority of the indicators, as Exhibit 9 shows in the last column, are currently in the lowest quartile of the range traversed by them since 2004. This is also the case with published GDP. The reported GDP numbers already indicate a slowdown but our argument is that the level of growth is perhaps lower with sharp further downside risks.

For each of these indicators, we look at their linear correlation historically with GDP and arrive at the projected current GDP growth if the historical equations had held. Of course, the past correlations are weak for individual indicators, but the tell-tale conclusion is that each and every indicator studied shows that the ongoing growth is likely lower than the published GDP growth numbers. In other words, the weakness indication is weak if one were to rely on individual factor correlations which are too weak to be reliable, but the collective message is extremely strong.

Exhibit 10: Almost all high-frequency economic indicators point to a lower headline growth based on their past relationship with GDP growth



Source: CMIE, Bloomberg, Jefferies

Exhibit 11: Most indicators are in the lower half of their historical performance range with a half in the bottom quartile of range since 2004

	Range (2004-Current)			Percentile of latest nos. (2004-current range)
	Current	Max	Min	
Cement despatches	10.5	19.8	-5.9	62%
Commercial vehicles sales	24.4	162.8	-58.2	69%
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Project announcement	-54.2	804.4	-59.2	11%
Two wheelers sales	14.7	59.9	-11.4	49%
GDP	7.7	10.1	5.5	21%

Source: CMIE, CSO, Jefferies

Methodology

We use historical data from 1981 (or earliest data point available after that). For nominal indicators like non-food credit, income and corporate tax, the numbers are deflated using CPI-IW. We use annual growth rates till 1999 and four-quarter moving average growth rates from then on. To determine implied GDP growth, we first use historical data to develop a linear relation between indicator growth and GDP growth, and then use this relation to predict the GDP growth based on current level of the indicators.

We agree that the relationships do not have to be linear without leads and lags. We also agree that individual factor correlations are relatively weak. However, like the way we showed in our previous two reports on investments and exports, the consistency of the message through a large basket of diverse factors gives material more credence to the conclusion.

The above twelve indicators are discussed alphabetically over the next few pages. For readers not interested in detail, please proceed to page 22 for the discussion on our views on what creates growth in India and what is possibly being required.

Overestimation in forecasts and current GDP growth numbers are being concluded from the collective message coming from the analysis over the next few pages

Cement despatch growth is lowest since 2002

Indicator 1 – Cement despatched growth and GDP

Cement despatches data is available monthly from industry sources. This data helps provide a proxy for the capital expenditure (capex) or investment activity by corporates and construction by household. This in turn helps provide a proxy for the business and consumer sentiment that impact GDP. The ongoing slowdown in cement despatches reflect subdued sentiment with negative implications for the overall economy – not just at present but even in future. A rebound in cement despatches could be a leading indicator for the economy's revival.

Exhibit 12: Cement despatch correlation with GDP is 19%

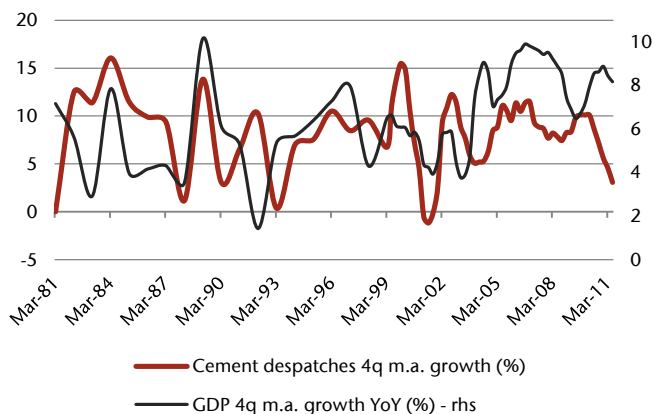
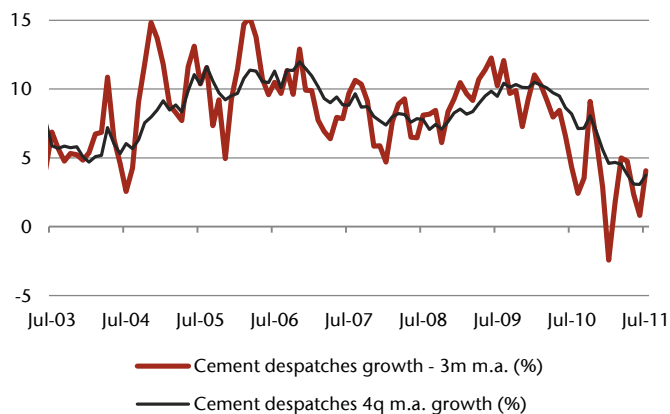


Exhibit 13: Cement despatch growth has slowed sharply on moving average basis



Note: Annual data till 1999, 4q m.a. from then onwards; Source: CMIE, Jefferies

The correlation of cement despatches growth with GDP growth is 19%. Cement despatches growth in the first five months of the fiscal year stood at just 3.7%.

Exhibit 14: Cement despatch growth is at a nine-year low

Period	Cement despatches 4q m.a. growth (%)			GDP growth (%)		
	Max	Min	Average	Max	Min	Average
2004-07	11.5	5.3	9.5	9.9	7.1	8.8
2008-10	10.1	7.4	9.0	8.9	6.5	7.5
Current			3.1			8.2

Source: CMIE, Jefferies

Cement despatches growth is currently at a nine-year low, even below the low seen in FY08-09. The GDP growth implied by the current level of cement despatches growth is just 6.3% if one looks at the past six months.

Exhibit 15: Implied GDP growth is just 6.3%

	Implied GDP growth (%)	Actual
Cement despatches 6m growth (%)	6.3	7.8
Cement despatches 4q m.a. growth (%)	6.2	8.2

Source: CMIE, Jefferies

5 October 2011

The trend in CV sales is sharply down and portends further weakness in quarters ahead

Indicator 2 – Commercial vehicle growth and GDP

Commercial vehicle (CV) sales data is available from the industry monthly. This along with two-wheelers and passenger vehicles (PV) provide an indication of the consumer demand in the country and are a proxy for consumption. This series had held up quite well until recently and its sudden plunge from heady 50-60% in the middle of 2010 to barely above 20% is more a worry because of the trend. On current momentum, the series could revisit the negative territory in the months ahead.

Exhibit 16: CV sales correlation with GDP is 40%

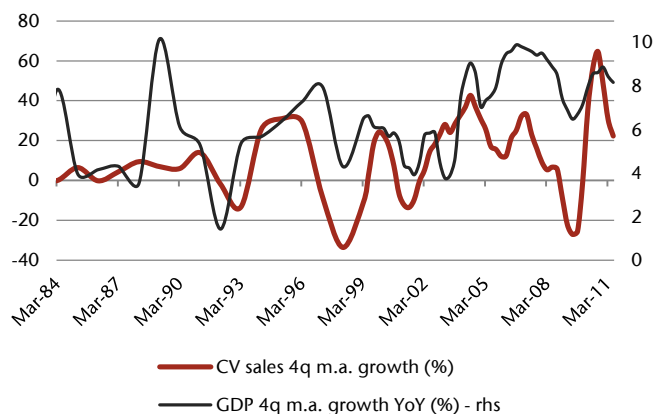
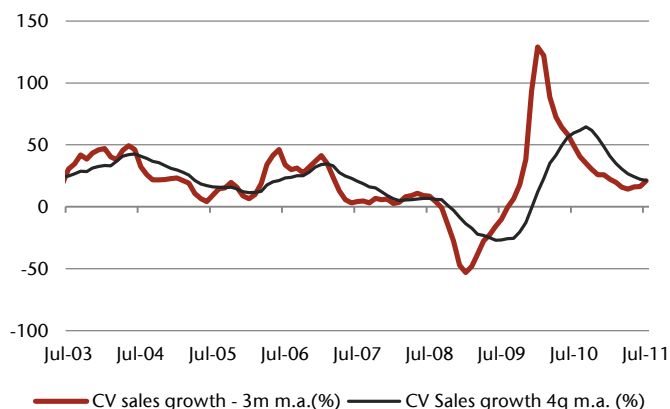


Exhibit 17: CV sales are down sharply



Note: Annual data till 1999, 4q m.a. from then onwards Source: Source: CMIE, Jefferies
CMIE, Jefferies

The correlation of CV growth with GDP growth is 40%. CV growth in the first five months of the fiscal year stood at just 18%, much lower than last year's growth of 49% during the same period. The overall growth, so far, is far better than the low witnessed in 2008 but the trend is so sharply negative that a contraction is possible before the year-end.

Exhibit 18: CV sales growth is similar to the average in 2004-07

Period	CV Sales 4q m.a. growth (%)			GDP growth (%)		
	Max	Min	Average	Max	Min	Average
2004-07	42.7	12.2	25.4	9.9	7.1	8.8
2008-10	35.1	-27.0	-4.6	8.9	6.5	7.5
Current			22.3			8.2

Source: CMIE, Jefferies

The GDP growth implied by the current level of CV sales growth is 7.1% if one looks at the past six months.

Exhibit 19: Implied GDP growth is just 7.1%

	Implied GDP growth (%)	Actual
CV Sales 6m growth (%)	7.1	7.8
CV Sales 4q m.a. growth (%)	7.2	8.2

Source: CMIE, Jefferies

Lack of momentum in core industry growth in recent quarters is anomalous with the cyclical pattern observed in past

Indicator 3 – Core Industry growth and GDP

Core industry data for India is available monthly. It is an index of the production activity in the eight infrastructure sectors of India (previous series had six indicators). It is an indicator of the industrial activity in the nation and is used in GDP calculation. With infrastructure related capacity turning out to be a key apparent bottleneck for the overall growth, core industry growth turns extremely important for the sustainability of GDP growth over medium term. In the past few years, the indicator has exhibited highly cyclical pattern – it's range-bound recent period performance is a concern from this regard. The indicator had seen the usual cyclical drop after the sharp recovery in 2009 and has stayed in a narrow range for the past few quarters.

Exhibit 20: Core industry correlation with GDP is 27%

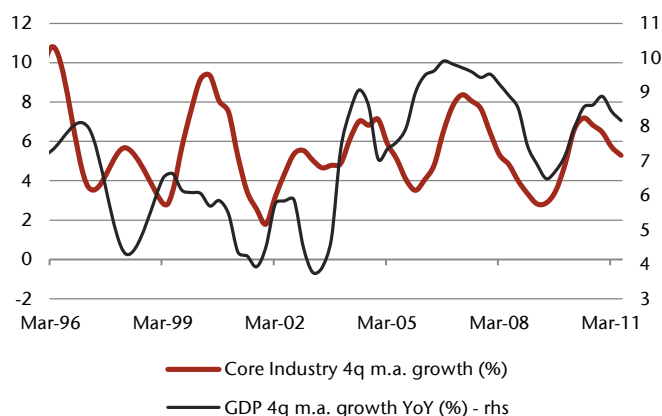
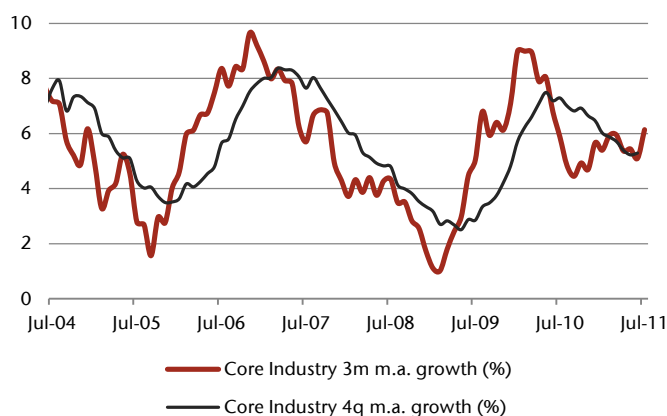


Exhibit 21: Growth has moderated over FY11



Note: Annual data till 1999, 4q m.a. from then onwards; Source: CMIE, Jefferies

The correlation of core industry with GDP is weak 27%. Core industry growth in the current fiscal is 5.8% compared to 6.5% last year although somewhat positively it is relatively stable compared to a few other indicators.

Exhibit 22: Core industry growth above 2008-10 average

Period	Core industry 4q m.a. growth (%)			GDP growth (%)		
	Max	Min	Average	Max	Min	Average
2004-07	8.4	3.5	5.9	9.9	7.1	8.8
2008-10	6.6	2.8	4.1	8.9	6.5	7.5
Current			5.3			8.2

Source: CMIE, Jefferies

The GDP growth implied by the current level of core industry growth is 7.3% if one looks at the past six months.

Exhibit 23: Implied GDP growth is just 7.3%

	Implied GDP growth (%)	Actual
Core industry 6m growth (%)	7.3	7.8
Core industry 4q m.a. growth (%)	7.2	8.2

Source: CMIE, Jefferies

Inflation adjusted tax collection did not rebound much with GDP post FY08 – an indication of how post financial crisis growth is different. Continuing weakness does not bode well for overall GDP with non-private sector growth also stalling

Indicator 4 – Corporate tax growth and GDP

The Indian government makes available corporate tax receipts data on a monthly basis. Corporate tax in India has to be paid quarterly before specific dates. Corporate tax gives a picture of the earnings expectations of the Indian corporates and hence is a good determinant of the expected private sector GDP. The collections in this series are often impacted by the changes in the tax structure as well as volatility in profitability. Regardless, changes in real corporate tax collection – i.e., tax collection deflated by inflation – should provide a good picture of the health of India's key economic driver – private sector India.

Exhibit 24: Corporate tax correlation with GDP growth is 35%

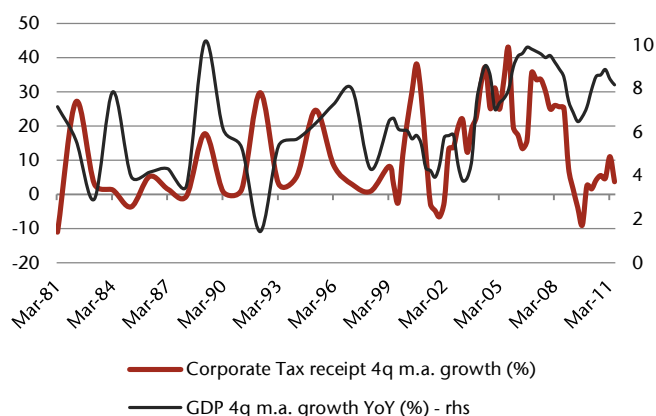
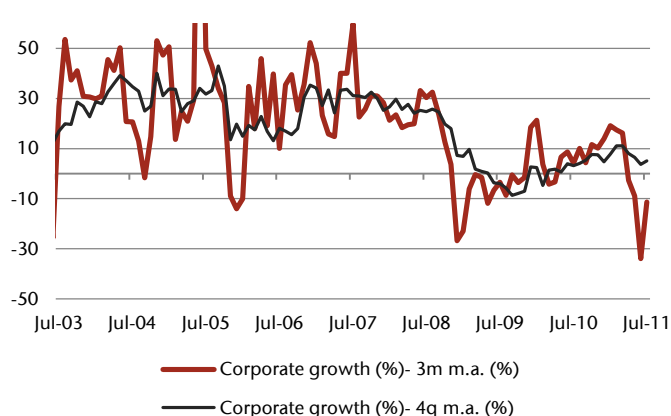


Exhibit 25: Corporate tax collections have fallen sharply



Note: Corporate tax growth is for receipt deflated by CPI-IW; Annual data till 1999, 4q m.a. from then onwards; Source: CMIE, Jefferies

Note: Corporate tax growth is for receipt deflated by CPI-IW; Source: CMIE, Jefferies

The correlation of corporate tax receipt growth with GDP growth is 35%. Corporate tax in the first four months of the fiscal year have actually de-grown by 17% compared to 18% growth last year. Real corporate tax collection has actually de-grown by 25%.

Exhibit 26: Corporate tax growth is below 2008-10 average

Period	Corporate Tax receipt 4q m.a. growth (%)			GDP growth (%)		
	Max	Min	Average	Max	Min	Average
2004-07	42.7	13.3	27.5	9.9	7.1	8.8
2008-10	25.6	-9.0	6.4	8.9	6.5	7.5
Current			3.7			8.2

Note: Corporate tax growth is for receipt deflated by CPI-IW; Source: CMIE, Jefferies

Corporate tax growth currently is lower than the average growth in the 2008-10 period. The GDP growth implied by the current level of corporate tax growth is just 5.8% if one looks at the past six months.

Exhibit 27: Implied GDP growth is just 5.8%

	Implied GDP growth (%)	Actual
Corporate Tax receipt 6m growth (%)	5.8	7.8
Corporate Tax receipt 4q m.a. growth (%)	6.3	8.2

Note: Corporate tax growth is for receipt deflated by CPI-IW; Source: CMIE, Jefferies

Sustained IIP rebound is critical for supply – rather than mere demand-driven economic growth – something necessary for non-inflationary long-term growth

Indicator 5 – IIP growth and GDP

Industrial production data for India is available monthly. It is an indicator of the industrial activity in the nation and is used in GDP calculation. The indicator, though, has been volatile in recent terms and its base was revised in the current year. Overall weak rebound in IIP from the depth of 2008 crisis is another signal that shows that post-financial crisis growth was of a different nature compared to growth in 2003-07. With consumption growth hitting the wall of capacity/inflation, a revival in the series is of paramount importance for sustainable growth.

Exhibit 28: IIP correlation with GDP growth is 58%

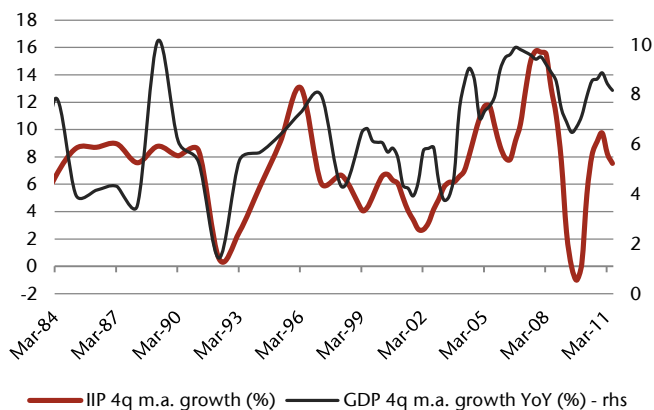
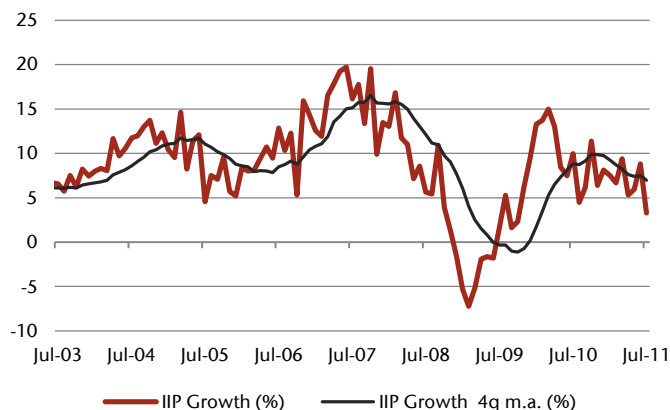


Exhibit 29: IIP growth is on a downtrend



Note: Annual data till 1999, 4q m.a. from then onwards; Source: CMIE, Jefferies

The correlation of IIP growth with GDP growth is much stronger than other indicators at 58%. IIP growth in the first four months of the fiscal year stood at just 5.8% compared to 10% last year during the same period. A change in the composition of IIP renders comparison with 2008 somewhat superfluous. That said, as long as the average growth in IIP series stays above 7-8%, the overall economy could be claimed to be on at least a stable path. Any sudden decline in this series will be the single biggest negative for the reported GDP.

Exhibit 30: IIP growth above 2008-10 average

Period	IIP 4q m.a. growth (%)			GDP growth (%)		
	Max	Min	Average	Max	Min	Average
2004-07	12.9	7.8	9.9	9.9	7.1	8.8
2008-10	13.0	-1.0	4.8	8.9	6.5	7.5
Current			7.5			8.2

Source: CMIE, Jefferies

The GDP growth implied by the current level of IIP growth is just 6.6% if one looks at the past six months.

Exhibit 31: Implied GDP growth is just 6.6%

	Implied GDP growth (%)	Actual
IIP 6m growth (%)	6.6	7.8
IIP 4q m.a. growth (%)	6.9	8.2

Source: CMIE, Jefferies

Weak growth in inflation adjusted income tax does not augur well for consumption stability.

Indicator 6 – Income tax growth and GDP

The Indian government makes available individual income tax receipts data on a monthly basis. Advanced income tax payments in India are deducted from the monthly salaries for salaried employees and have to be paid before specific dates for self-employed personnel. A weak income tax collection is a proxy for likely weak income growth for consumers and a harbinger for weakening consumption trends in the months ahead.

Exhibit 32: Income tax correlation with GDP growth is 33%

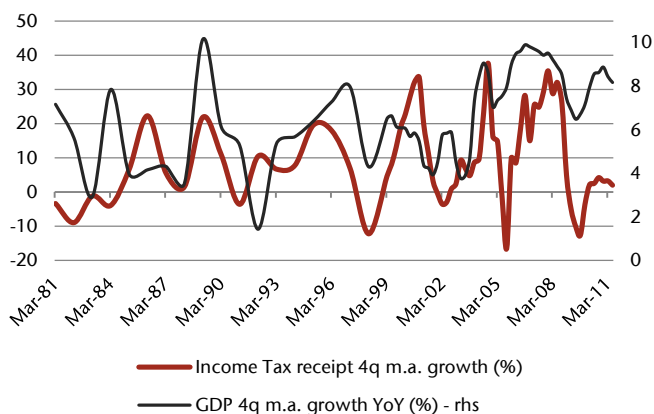
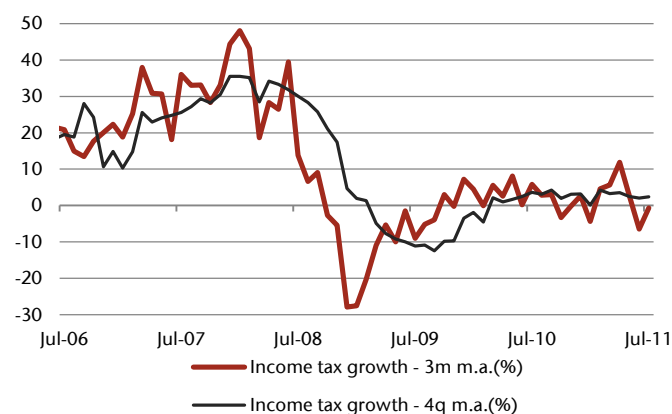


Exhibit 33: Income tax collection growth has turned negative



Note: Income tax growth is for receipt deflated by CPI-IW; Annual data till 1999, 4q m.a. from then onwards; Source: CMIE, Jefferies

Note: Income tax growth is for receipt deflated by CPI-IW; Source: CMIE, Jefferies

The correlation of income tax receipt growth with GDP growth is 33%. Income tax growth in the first four months of the fiscal year stood at just 8% half of last year's 16% growth. Real income tax growth has actually de-grown by 1%.

Exhibit 34: Income tax growth below 2008-10 average

Period	Income Tax receipt 4q m.a. growth (%)			GDP growth (%)		
	Max	Min	Average	Max	Min	Average
2004-07	37.6	-16.6	14.9	9.9	7.1	8.8
2008-10	32.0	-12.7	4.2	8.9	6.5	7.5
Current			2.0			8.2

Note: Income tax growth is for receipt deflated by CPI-IW; Source: CMIE, Jefferies
Income tax growth currently is lower than the average growth in the 2008-10 period. The GDP growth implied by the current level of income tax growth is just 6.7% if one looks at the past six months.

Exhibit 35: Implied GDP growth is just 6.7%

	Implied GDP growth (%)	Actual
Income Tax receipt 6m growth (%)	6.7	7.8
Income Tax receipt 4q m.a. growth (%)	6.4	8.2

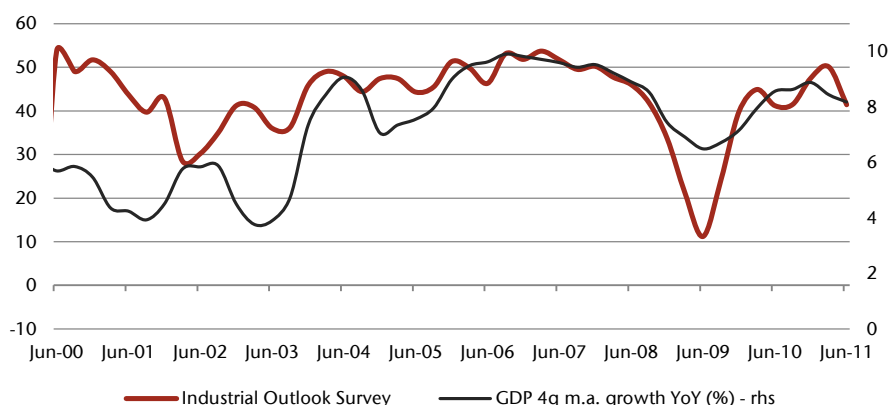
Note: Income tax growth is for receipt deflated by CPI-IW; Source: CMIE, Jefferies

Industrial outlook survey is showing only mild decline so far

Indicator 7 – Industrial Outlook survey and GDP

RBI conducts a quarterly Industrial Outlook survey which serves as a proxy for the health and the outlook of the corporate sector. This gives an estimate of the GDP growth which is dependent on the corporate sector. Narrow range charted by the series in most times lead to weak correlation with GDP growth in the past – for example, a reading around 50 were observed historically even when growth was below 5% and at other time when growth was above 10%. The outlook is turning weaker of late, but the weakness is far milder compared to what happened at the depth of 2008 crisis as well as in 2002.

Exhibit 36: Industrial Outlook survey has a correlation of 40% with GDP growth



Source: CMIE, RBI, Jefferies

The correlation of Outlook survey with GDP growth is 40%. The outlook has fallen in the recent quarter to below the low seen in 2004-07 period.

Exhibit 37: Industrial Outlook has fallen below the lows of 2004-07 period

Period	Industrial Outlook			GDP growth (%)		
	Max	Min	Average	Max	Min	Average
2004-07	53.7	44.3	48.6	9.9	7.1	8.8
2008-10	46.0	11.2	32.8	8.9	6.5	7.5
Current			41.4			8.2

Source: CMIE, RBI, Jefferies

The GDP growth implied by the current level of Outlook is one closest to the reported numbers at 7.6%

Exhibit 38: Implied GDP growth is just 7.6%

	Implied GDP growth (%)	Actual
Industrial Outlook current level	7.6	7.8

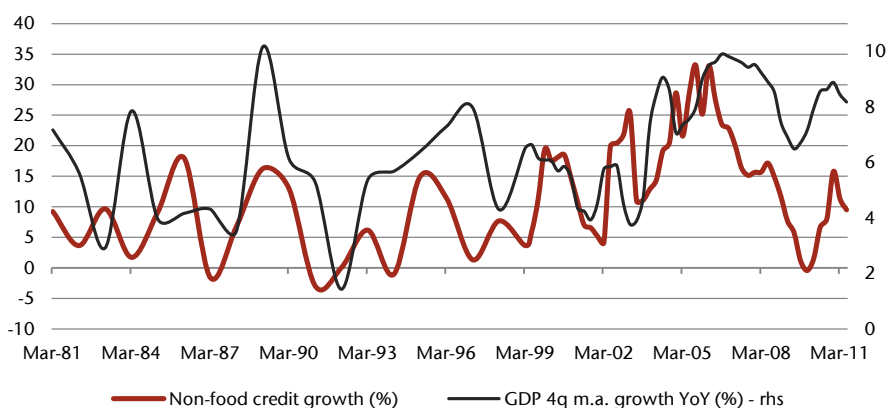
Source: CMIE, Jefferies

Our most preferred alternate growth indicator, inflation-adjusted non-food credit growth, is at a level that points to much weaker growth of the levels seen in the eighties and nineties

Indicator 8 – Non-food credit and GDP

RBI publishes the non-food credit outstanding on a fortnightly basis. This is our favourite alternate growth indicator, as it provides a proxy to the overall level of activity across the economy. Real non-food credit growth is now in a range that was generally seen in the eighties and nineties when GDP growth was far lower than in the mid-2000s. Given the negative cash flow nature of fast growing Indian infrastructure sector, the weakness in this indicator is the single biggest concern from growth viewpoint, in our eyes.

Exhibit 39: Non-food credit growth correlation with GDP growth is 39%



Note: Non-food credit growth is for credit deflated by CPI-IW; Annual data till 1999, 4q m.a. from then onwards; Source: CMIE, Jefferies

The correlation of non-food credit growth with GDP growth is 39%. Non-food credit growth currently stands at 20% similar to last year's level. In terms of real numbers, the growth stands at 9.5%.

Exhibit 40: Non-food credit growth close to 2008-10 average

Period	Non-food credit growth (%)			GDP growth (%)		
	Max	Min	Average	Max	Min	Average
2004-07	33.2	19.2	25.3	9.9	7.1	8.8
2008-10	17.2	-0.4	7.4	8.9	6.5	7.5
Current			9.5			8.2

Note: Non-food credit growth is for credit deflated by CPI-IW; Source: CMIE, Jefferies
Real non-food credit growth currently is currently at similar to the average growth in 2008-10 period. The GDP growth implied by the current level of non-food credit growth is just 6.5% if one looks at the past six months.

Exhibit 41: Implied GDP growth is just 6.5%

	Implied GDP growth (%)	Actual
Non-food credit 6m growth (%)	6.5	7.8

Note: Non-food credit growth is for credit deflated by CPI-IW; Source: CMIE, Jefferies

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New project announcements are extremely important for the sustainability of GDP growth. They are down, in our eyes, not because of high interest rates but due to the broken investment decision model in light of corruption investigations as well as expensive cost of equity funds

Indicator 9 – Project announcements and GDP

Project announcement data is collected by CMIE via quarterly survey. These provide a proxy for the likely investment activity in the economy, which forms 35% of the GDP. Typically, as we discuss later in the note, sustainability of India's economic growth is constrained by the availability of capacity and not by latent, unfulfilled demand. Investment weakness, in our eyes, is not be a reflection of dim view on demand or high cost of debt. This is largely a function of the broken investment decision model in light of a slew of corruption scandals as well as more difficult equity capital raising environment. Without a revival in this series, there is a risk of more inflation and weak growth ahead.

Exhibit 42: Project announcement correlation with GDP is 41%

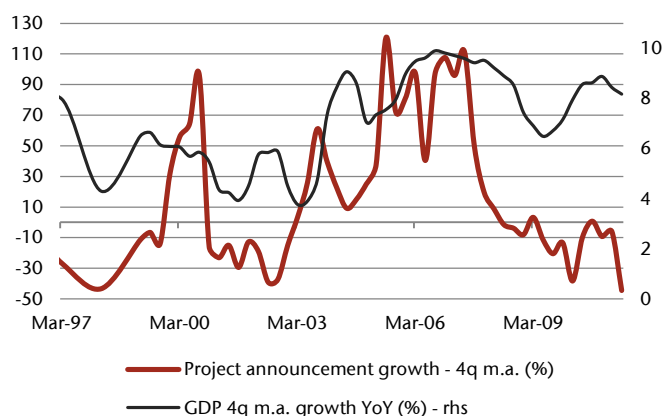
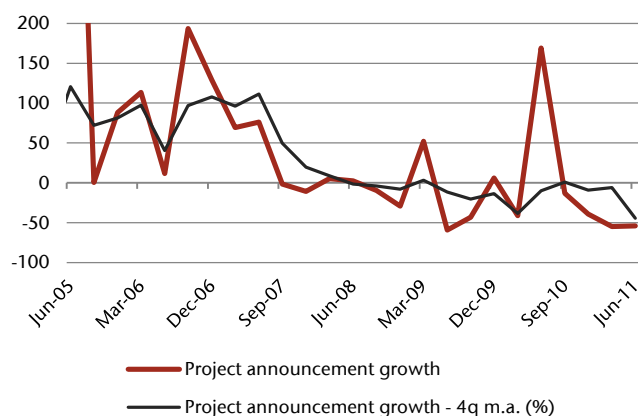


Exhibit 43: Project announcements have slowed down sharply



Note: Project announcement data is deflated by CPI-IW; Annual data till 1999, 4q m.a. from then onwards; Source: CMIE, Jefferies

Note: Project announcement data is deflated by CPI-IW; Source: CMIE, Jefferies

Predictably, the series has weak visible correlation with concurrent GDP growth although the statistical correlation is still relatively better 41%. Notwithstanding the invisible linearity, we believe in the strong logical importance of this series on future growth. Project announcements have halved during the first quarter of the year compared to last year. Real growth stood at highly worrying -58%.

Exhibit 44: Project announcement growth worse than 2008 lows

Period	Project announcement 4q m.a. growth (%)			GDP growth (%)		
	Max	Min	Average	Max	Min	Average
2004-07	120.6	9.2	66.6	9.9	7.1	8.8
2008-10	3.3	-38.3	-11.7	8.9	6.5	7.5
Current			-44.5			8.2

Note: Project announcement data is deflated by CPI-IW; Source: CMIE, Jefferies

Project announcement growth currently is lower than the lows seen in 2008-10 period. The GDP growth implied by the current level of announcement growth is just 5.9% if one looks at the past six months.

Exhibit 45: Implied GDP growth is just 5.9%

	Implied GDP growth (%)	Actual
Project announcement 6m growth (%)	5.9	7.8
Project announcement 4q m.a. growth (%)	6.1	8.2

Note: Project announcement data is deflated by CPI-IW; Source: CMIE, Jefferies

Weak railway traffic growth, and worryingly from a helpful base effect

Indicator 10 – Railway goods traffic and GDP

In India, a significant portion of the goods transport is through railways. As a result, railways good traffic provides a good proxy for the economic activity in the country and this is borne out well in the chart below. Railway publishes this data on a monthly basis. Lacklustre growth in the series indicates that the slowdown is not just possibly in urban centres and/or limited to corporates. Rather, for one reason or the other, the slowdown is likely affecting all types of regions across the country. More importantly, many of the declines in the series previously were partly statistical because of the high base – something which is surely not the case now.

Exhibit 46: Railways good traffic correlation with GDP is 40%

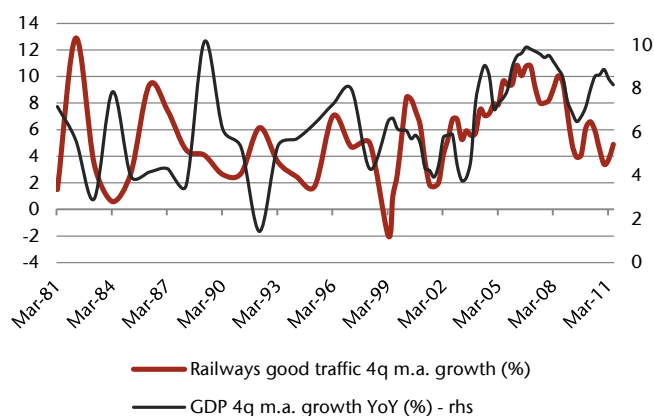
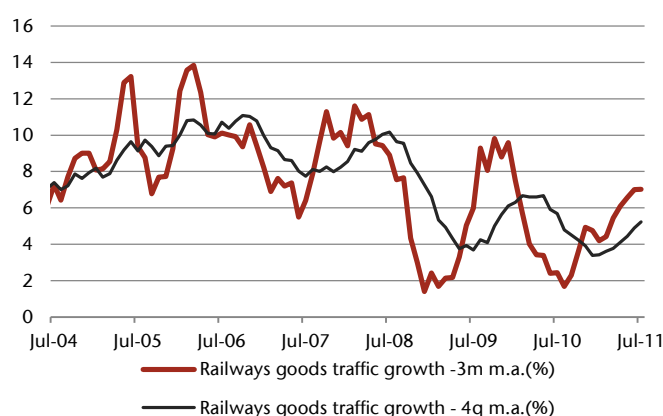


Exhibit 47: Railway goods traffic growth still below historical average



Note: Annual data till 1999, 4q m.a. from then onwards; Source: CMIE, Jefferies

The correlation of railways good traffic growth with GDP growth is 40%. Railways goods traffic growth in the first five months of the fiscal year stood at just 6%.

Exhibit 48: Goods traffic growth close to 2008-10 low

Period	Railways goods traffic 4q m.a. growth (%)			GDP growth (%)		
	Max	Min	Average	Max	Min	Average
2004-07	10.8	7.1	9.2	9.9	7.1	8.8
2008-10	10.0	3.9	6.6	8.9	6.5	7.5
Current			4.9			8.2

Source: CMIE, Jefferies

Goods traffic growth currently is lower than the average growth in the 2008-10 period and close to the lows during that period. The GDP growth implied by the current level of Railways goods traffic growth is 6.8% if one looks at the past six months.

Exhibit 49: Implied GDP growth is just 6.8%

	Implied GDP growth (%)	Actual
Railways goods traffic 6m growth (%)	6.8	7.8
Railways goods traffic 4q m.a. growth (%)	6.5	8.2

Source: CMIE, Jefferies

Inflation-adjusted corporate sales growth is one of the two series analysed in the report with healthy and accelerating trend

Indicator 11 – Corporate sales growth and GDP

Indian corporate sales growth is an important indicator of the economic activity in the country and works as a good proxy for the GDP growth. This – inflation-adjusted revenue growth – is one of the two series that we have examined that is not close to the low range of the last eight years. In fact, the growth is not only good but still rebounding. For sustainable growth – like in 2004-07 – real corporate sales growth should stay consistently high at around 15%.

Exhibit 50: Sales growth correlation with GDP is 41%

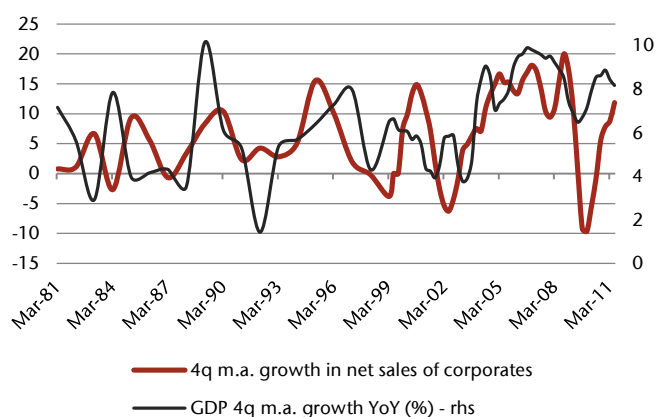
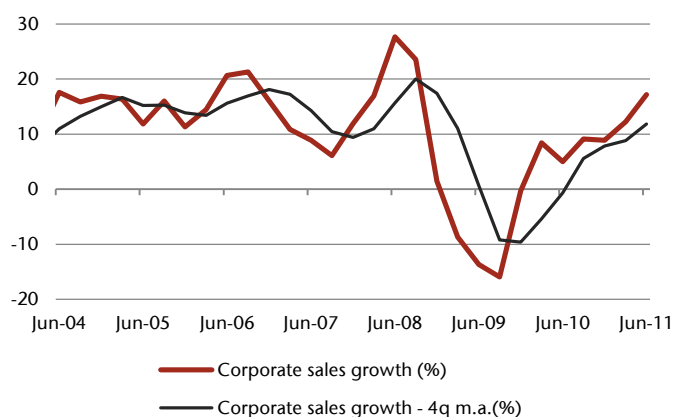


Exhibit 51: Corporate sales growth is still on uptick



Note: Corporate sales growth is for sales deflated by CPI-IW; Annual data till 1999, 4q m.a. from then onwards; Source: CMIE, Jefferies

Note: Corporate sales growth is for sales deflated by CPI-IW; Source: CMIE, Jefferies

Sales growth in the first quarter of the fiscal year stood at 27% while real sales growth stood at 17%. Sales growth has been the one indicator which has actually seen an improvement in recent quarters.

Exhibit 52: Sales growth in mid-range

Period	Corporate sales growth 4q m.a. growth (%)			GDP growth (%)		
	Max	Min	Average	Max	Min	Average
2004-07	18.1	10.9	15.1	9.9	7.1	8.8
2008-10	20	-9.6	5.1	8.9	6.5	7.5
Current			11.9			8.2

Note: Corporate sales growth is for sales deflated by CPI-IW; Source: CMIE, Jefferies
Sales growth currently is in mid-range of its historical values. The GDP growth implied by the current level of corporate sales growth is close to the reported numbers at 7.7% if one looks at the past six months.

Exhibit 53: Implied GDP growth is similar to reported at 7.7%

	Implied GDP growth (%)	Actual
Corporate sales growth 6m growth (%)	7.7	7.8
Corporate sales growth 4q m.a. growth (%)	7.3	8.2

Note: Corporate sales growth is for sales deflated by CPI-IW; Source: CMIE, Jefferies

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Absolute growth in 2-wheeler sales is still strong but history says that the kind of inflexion we have witnessed in the series have always wrought more slowdown

Indicator 12 – Two-wheeler sales growth and GDP

Two-wheeler (2-W) sales data is available from the industry monthly. This along with CV and PV provide an indication of the consumer demand in the country and are a proxy for consumption. The series is a better reflection of discretionary consumption than four-wheelers or passenger vehicles because of the far wider purchases of vehicles in this category. In absolute terms, the latest readings are healthy but the declining trend is worrying because of the auto-correlation observed in the series in the past. The 25+ year history of the series clearly shows that once the decline starts, it continues for a while.

Exhibit 54: 2-W sales correlation with GDP growth is 25%

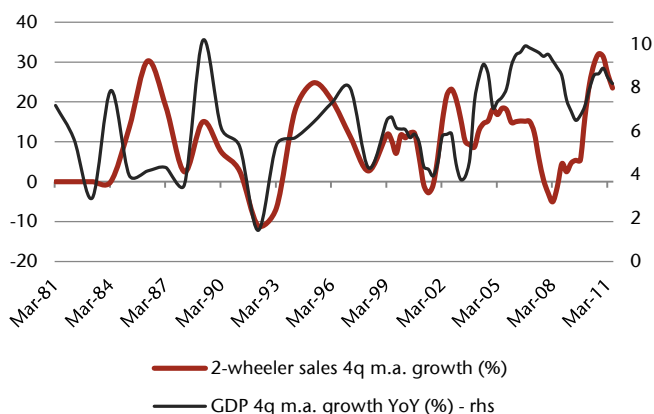
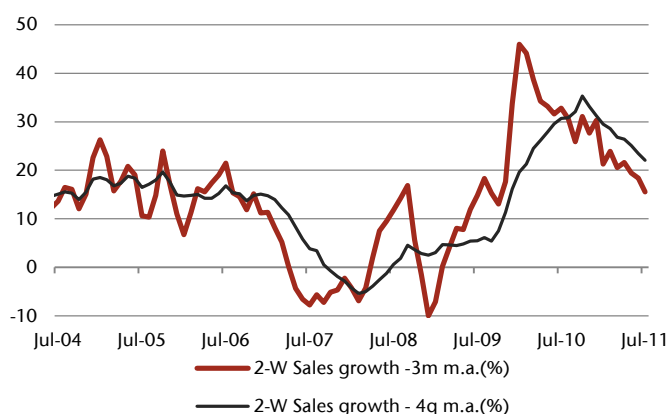


Exhibit 55: 2-W sales growth is falling sharply



Note: Annual data till 1999, 4q m.a. from then onwards; Source: CMIE, Jefferies

The correlation of 2-W growth with GDP growth is 25%. 2-W growth in the first five months of the fiscal year though strong at 18% has come down from last year's level of 30% during the same period.

Exhibit 56: 2-W sales growth near the top growth in past 6 years

Period	2-W Sales 4q m.a. growth (%)			GDP growth (%)		
	Max	Min	Average	Max	Min	Average
2004-07	18.4	12.2	15.7	9.9	7.1	8.8
2008-10	24.5	-1.3	7.7	8.9	6.5	7.5
Current			23.5			8.2

Source: CMIE, Jefferies

2-W sales growth while near historical highs has seen a sharp slowdown in recent months. The GDP growth implied by the current level of 2-W sales growth is just 7.2% if one looks at the past six months.

Exhibit 57: Implied GDP growth is just 7.2%

	Implied GDP growth (%)	Actual
2-W Sales 6m growth (%)	7.2	7.8
2-W Sales 4q m.a. growth (%)	7.4	8.2

Source: CMIE, Jefferies

The main economic problem currently is not inflation, fiscal deficit or current account deficit but something amiss on economic growth

Unless there is an acceptance of a slowdown, it is unlikely that policy support for growth will emerge

The current slowdown is unlikely to end on its own in our eyes

Many existing issues could worsen and other risks could emerge if the economy is to settle on a lower growth trajectory

Five non-consensus, critical arguments on the nature of India's long-term growth

Long-term: Need a new growth driver

Different economic problems assume high priority in different times. To these authors, fiscal deficit was the most pressing concern around end-2008. Inflation toppled that in early-2010 when the authors believed that it was a macro and not a micro issue. Current account deficit have bothered us a lot at various times and will do so again in future.

The main problem now in our eyes is economic growth: the growth story is losing shine and this is not just a cyclical issue. More importantly, it is difficult to point to something as a strong growth driver in recent times compared to deregulation driven release of investment appetite in mid-90s, outsourcing driven income and savings growth in late 90s, and fiscal turnaround and wealth effect driven investment boom of mid-2000s.

The need to admit there is a slowdown and the need to search for solutions

The purpose of the previous section was to show that current growth is at one of the lowest levels since the beginning of the high growth period in 2004. Unless a large section of policymakers and experts believe that the economy is not growing well, the search for solutions cannot even begin.

Many see the ongoing slowdown as mild, cyclical and due to the global factors. The implicit assumption is that the Indian economy will return to the desired growth once a few things beyond Indian policymakers' control stabilize and/or with the passage of time. This is partially true, but in addition we would contest in this section that:

- 8%+ growth requires a lot of hard work, some substantial drivers and some luck. A return to the level is not a right but an effort.
- It's not that the economy has to grow at 8% or more. Even a relatively lower 5-6% is also extremely good and respectable. But a transition to the lower level is fraught with other economic and political risks.
- Growth stabilization/recovery is most important economic problem in our eyes as without this one or two other major economic worries (inflation and fiscal deficit) will likely become worse and not better.

So what could create an 8% medium-term annual economic growth for India? How will it be different from 5-6% growth path? We do not know the answers but we discuss the following five somewhat contentious/counter-consensus points to show what is perhaps required to get the economy back on a higher growth trajectory and why this is needed.

1. **Demographics do not create any particular level of growth:** At best, India's young population is a good to have parameter.
2. **Ability to consume or latent consumption demand does not create stable, high growth:** Overconsumption is the root of problems like inflation and current account deficit. The problem worsens when consumption growth is supported by wealth effect or fiscal transfers rather than income effect.
3. **Sustained growth is created by producing what can be consumed:** Savings and conversion of productive savings in to investment are the key for sustained, non-inflationary growth.
4. **Broken investment model is not due to interest rates alone but primarily due to other factors:** Lower cost of capital will help but a revival in investments need risk-taking entrepreneurs reinvigorated. This requires reforms, better market prospects and radical change in business approval/facilitation processes where authorities are involved.
5. **Revival in investment cycle amid global turmoil, less capital flows and local uncertainties is difficult:** This is where India needs some help from factors beyond its control.

The role of demographics needs a revisiting to appreciate what is needed to stay on the right growth course from policymakers, markets and society in general

Population age is definitely not a sufficient factor for high growth based on India's own history

1. Demographics: A non-factor

It is easier to write an incorrect program than understand a correct one – Alan Perlis

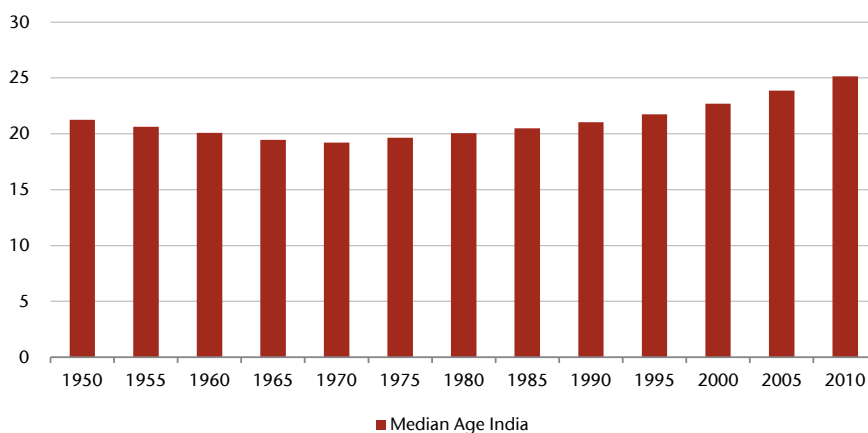
In good growth times, a lot of arguments are presented to explain the reasons behind strong growth. Some of those post-facto explanations appear so compelling, turn so widely accepted and communicated so frequently/passionately/beautifully that they turn into indisputable “truths” with each new citing. India's young population and high consumption-to-GDP ratios are two such arguments in our view.

In good growth times, it does not much matter even if these arguments are somewhat erroneous. After all, demographics statistics are so comprehensive that they lend to some of the best presentation material for marketing purposes. In a Western world where youth is scarce and population is turning older, demographic arguments – while attracting investments – make a compelling diversification point.

Misguided beliefs, in the time of slowing growth, lead to erroneous conclusions and costly policy errors. A strong belief in demographics– something that is unlikely to change much for the next few decades – as the economic growth driver could lead one to conclude that a high level of growth, say 7-8%, is almost assured simply due to the presence of this parameter. Any slowdown would then be attributed to some temporary factors with a strong belief in a somewhat automatic mean reversal over time.

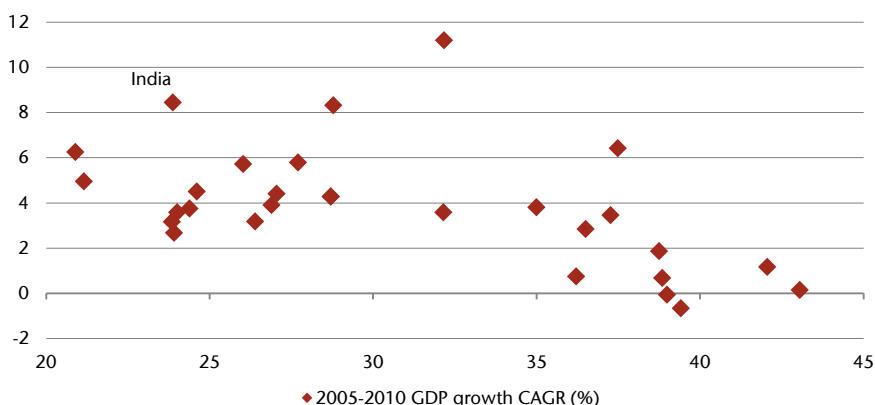
As the following chart shows, India's median population age has been in a narrow, low range for over sixty years – decades that have seen secular growth rate at various times around 3%, 6% as well as 8%. History proves that the age of the population cannot prevent the economy from sliding to a lower growth trajectory

Exhibit 58: India's median age has moved in a narrow band of 6 decades



Source: IMF, UNPD, Jefferies

The following chart on the scatter of a select group of countries' population age versus last five year economic growth also shows that population age is not a necessary factor either for good growth at least in any 5- or 10-year period.

Exhibit 59: Median age not representative of growth

Source: IMF, UNPD, UNSD, Jefferies

Favourable demographics, like democracy and diversity, are good to have societal parameters in the eyes of these authors. They certainly have extreme influence on many political, social and economic factors but theoretically or practically an extremely slow-changing parameter like population age profile cannot have any meaningful impact on rapidly moving variable parameter like economic growth over any relatively short period of a decade or less.

2. Consumption: Low enough?

The difficulty lies not so much in developing new ideas as in escaping from old ones – John Maynard Keynes

India's high consumption-to-GDP is often seen as a great positive in a world searching for new consumers

Latent consumption demand exists in all low income countries but that does not make them all high growth candidates

Helicopter throwing goods can cause consumption-led growth but otherwise latent demand is another good to have parameter only

A single, simple chart shows that India started achieving sustainable high growth when consumption began falling as a percentage of GDP

The global economy is continuously on the lookout for some more consumers of last resort since the financial crisis and slowdown in the developed world consumption in 2008. India's relatively high consumption-to-GDP ratio is often promoted as a great growth positive from this viewpoint.

Is consumption – by itself – really difficult?

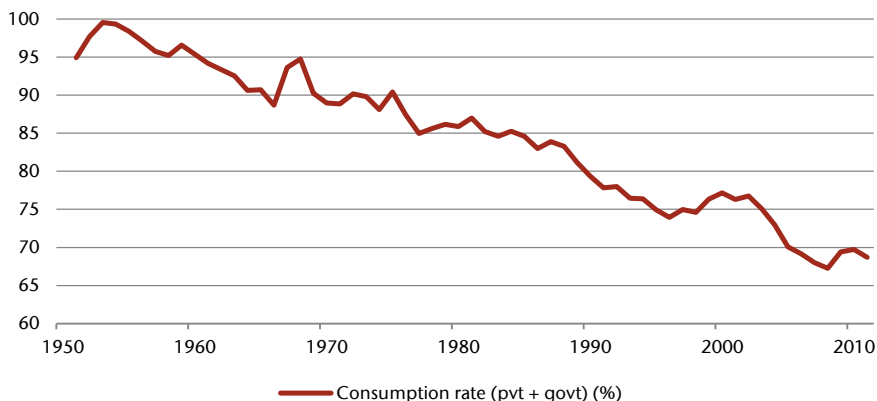
We regard consumption as instant gratification, possible to actualize in any society that is not already consuming at some hypothetical saturation point. Many countries in Africa, Latin America and Asia have far less per capita consumption of almost all goods – starting from food, electricity, financial services to cars, gadgets and all sorts of discretionary items – than the developed or advanced emerging nations. If latent consumption demand was truly a growth driver, all such countries would be candidates for high growth until their income and consumption levels had reached far higher levels.

In other words, talking about likely growth from the starting point of relatively low current consumption compared to other countries could be erroneous. Such data comparisons only prove the presence of latent demand. They imply that if goods are available magically, say because of some helicopter (could we ever move away from another reference to this analogy?) distributing them in millions to everyone or other nations selling their goods on apparently free/cheap credit, there could be a great growth simply on the back of consumption and associated increase in productivity.

Higher growth became possible once consumption lagged overall GDP

In the absence of freebies, India's growth story – extremely simplistically – has been a story of rising savings and falling consumptions (as a percentage of GDP) in the last couple of decades. There were many justifiable reasons for relatively high consumption-to-GDP in the low income Indian society in prior decades. But until consumption started growing at a slower pace compared to the rest of the economy, there were just not sufficient savings to permit more capacity creation. More about this in the next section

Exhibit 60: India's consumption to GDP has been on a downtrend for decades: in other words, the more consumption growth lagged GDP, the higher was the potential for sustainable growth



Source: CSO, CMIE, Jefferies

When consumption begins to grow in excess of incomes or GDP, it implies demand growing ahead of supply. In India's full-capacity economy, it leads to a combination of the following three pressures:

- As supply becomes a constraint in meeting demand, beyond a point, both overall GDP and consumption face downward pressure
- Inflation
- Current account deficit if supply creation and higher demand are being funded by external funds and goods.

Critical to understand what caused demand to outstrip supply in recent years

Non-inflationary, largely internally-funded, stable growth requires contained consumption and adequate savings (next section). Some of the factors that contain demand to outpace supply or consumption to rise faster are:

- Misguided policy support that focuses on boosting demand through fiscal transfers or monetary policies rather than recognize that the bottleneck in India is supply/investments
- Extraordinary notional wealth effect due to sharply rising asset/land prices – something that caused consumption to outpace income or GDP in recent years, in our view apart from the forces unleashed by some fiscal measures. For example, high growth in the five year period ending 2005 was accompanied by 60million additional jobs according to an NSSO statement recently. This boosted income during the period. In the following five years, it is reported that job creation stalled at only a million new jobs – which supports our belief that wealth effect was a far larger factor in the growth of consumption and overall GDP in recent years
- Sudden collapse in investments or capacity creation

India's basic economic problems – twin deficits, inflation, external capital dependency and cyclicity in growth – are fundamentally tied to consumption-investment balance. As a result, any time wealth-effect driven consumption is trumpeted, or fiscal benefit driven demand boost is provided, or lack of reform caused stalled investments is permitted, we are sowing the seeds of medium-term economic instability.

Until policymakers recognize the factors that caused excessive demand and inadequate supply creation in recent years, growth, inflation and deficits would remain at risk

Nearly jobless growth of recent years is an indirect proof of the role played by wealth effect in both consumption and investments

Most basic economic problems' are linked to not being able to maintain the right consumption-income balance

Simple economic relations that show how lower fiscal deficit and lower consumption aid higher non-inflationary GDP growth in a full-capacity economy like India's

3. Savings: Increasingly non-productive?

Theory-free science makes about as much sense as value-free politics - Stephen Jay Gould

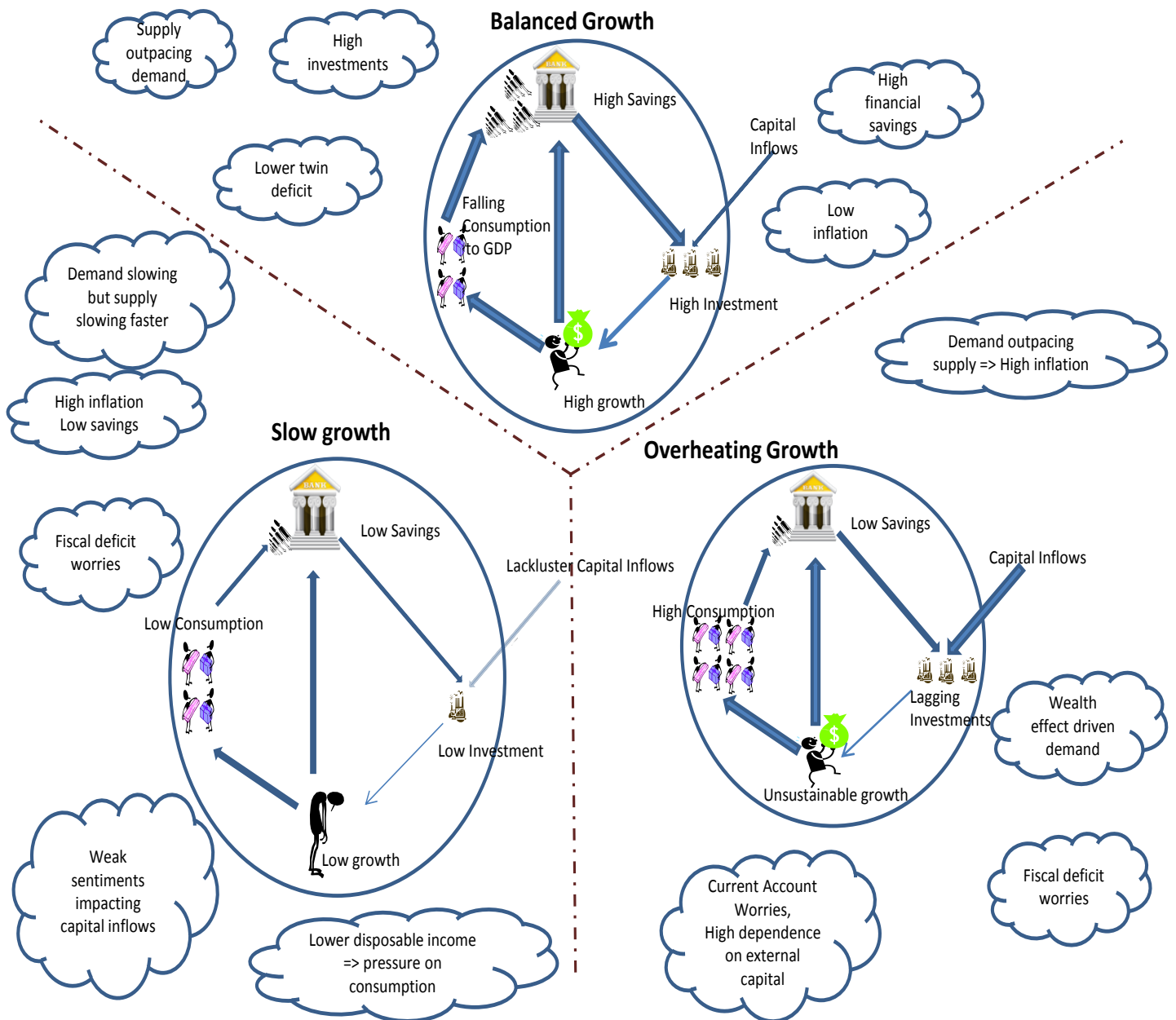
Our primary conclusion in the previous section is that India's growth driver is not demand by itself, but creation of supply that meets this demand.

Economic relations to arrive at the needed savings rate

The following theoretical economic equations should provide an ideal starting point the necessary savings rate as well as ideal consumption rate for a sustainable, high level of economic growth:

- Higher level of GDP growth requires higher level of investment-to-GDP in an economy without much spare capacity
- Higher level of investment-to-GDP requires higher level of financial savings-to-GDP (or current account deficit rises, raising the dependence on volatile external capital)
- Higher level of financial savings to GDP needs higher level of savings from the government (ie, less deficit on the revenue balance of public sector spending as a percentage of GDP)
- And/or higher level of financial savings to GDP needs higher level of household and corporate savings as a result of less private sector consumption.

Exhibit 61: Different growth dynamics and impact on various economic parameters



Source: Jefferies

Required level of savings rate is difficult to calculate where a recent central bank report provides a good helping hand

Schemas like above are easy but the quantification is extremely tricky given the interrelations amongst all the variables. These authors had made their own calculations on the required level of savings rate a while ago. However, we have a higher authority in the RBI with some detailed calculations in a recently published report (which completely tie in with what these authors have believed in):

Calculations suggest that aggregate saving and investment rates need to be stepped up from 33.7 per cent and 36.5 per cent of GDP in 2009-10, in order to achieve GDP growth of 9.5 per cent, envisaged for the Twelfth Five-Year Plan. An investment rate of around 38-39 per cent with an ICOR of around 4.1 (as was envisaged for the Eleventh Five Year Plan) would be required. Thus, the investment rate needs to be stepped up by 2.5-3.0 percentage points. The gross domestic saving rate needs to be augmented to 37 per cent or more. This underscores the importance of at least attaining the high levels of private corporate and public sector savings reached in the past. Furthermore, there is a need for stepping up of household savings, which have stagnated in recent years, largely reflecting the reallocation of savings between financial and physical

assets as well as the near synchronous movement of changes in financial assets and financial liabilities. (From RBI Annual Report 2011)

We summarize the situation differently and using some approximate numbers of our own:

Domestic savings need to be boosted by 2-3% of GDP to reduce dependence on volatile external capital at constant investment rate

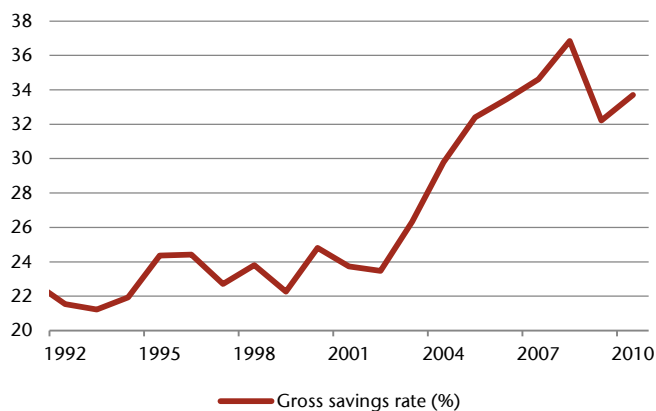
And investment rate too needs a boost of over 3% of GDP for higher sustainable growth rate

Implying an ideal 5-7% of GDP equivalent savings rate boost needed through reduction in government deficits and consumption

- India has domestic saving-investment deficit of around 5% of GDP. About a half of it is met through remittances of non-residents. One must note that remittances are growing at a slower pace compared to India's own GDP and hence savings demands.
- India's investment rate should rise by around 2.5-3% for sustainable growth. Given the decline in investments in recent quarters which is not evident in the latest FY10 numbers used by RBI above, ideally investment rate needs to rise by about 5% of GDP from current levels over the next few years.
- For lesser dependence on external capital, India's savings rate should rise by at least 5-7% of GDP in the coming few years from where it is now. This requires associated combined decline of same extent in governments' deficits and household consumption.

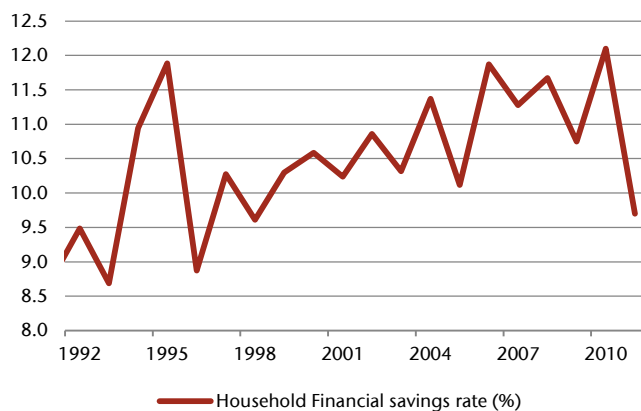
Ideally savings rate should be increasing, but in reality it has stagnated since 2006. More worryingly, households' financial savings rate has declined to near a 15-year low in recent times with an increasing proportion of savings taking non-productive form like investments in gold and possibly land. The increase in governments' dissaving rate (a result of higher public sector deficit) has further worsened the situation, offsetting any gains arising from a continuously higher corporate saving rate.

Exhibit 62: India's gross savings rate has stagnated lately



Source: CMIE, Jefferies

Exhibit 63: Household financial savings have fallen to a 13-year low



Source: CMIE, RBI, Jefferies

Long gestation investments, critical for sustainable growth, are the activities that need maximum policy or market support

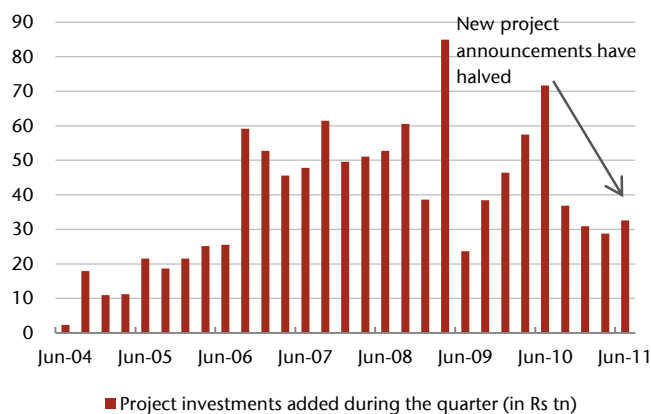
4. Investments: Missing the mojo

It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest – Adam Smith

Allow us to repeat: consumption is instant gratification. It is normally easy to do for consumers that are not sated. Even investments in the production of consumer goods is a relatively easy for the corporates involved as time required to start earning returns on the money invested is short and regulation uncertainties are few.

Large scale investment decisions where cash flow is negative for extended period are difficult for the opposite reasons. To understand what has caused investment cycle to collapse (as shown in the following two charts), it is important to understand what caused investments to boom at various times in the past two decades

Exhibit 64: New Project announcements have halved



Source: CMIE, Jefferies

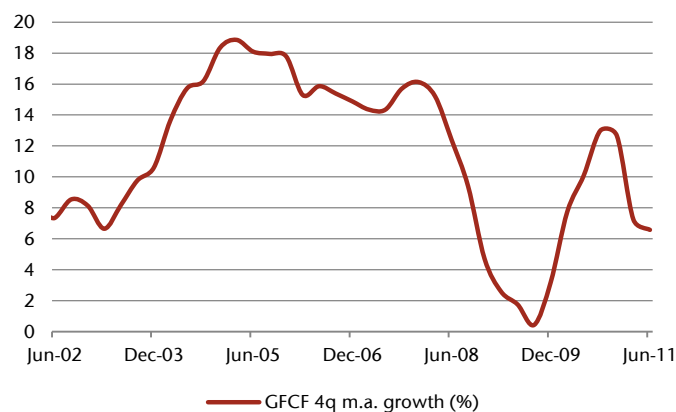
Savings and latent demand do not automatically generate investments. Something more is needed on top to generate investment boom

Investment growth accelerates when all of a sudden reforms lead to more certainty around long-term incomes, or reduction in costs, better/cheaper cash raising avenues

Or investments boom when asset markets begin providing quick, at least notional wealth returns to proprietors committing themselves to long gestation projects – like in India in 2004-07

Or investments happen when the state undertakes massive projects by monopolizing the use of savings and without many concerns about long-term profits for other national gains

Exhibit 65: GFCF growth is at its ex-crisis low levels



Source: CMIE, Jefferies

Investments happened in 90s due to reforms and in 00s due to wealth effect

Availability of savings alone does not give rise to an automatic investment cycle (think Japan) although they help. For example, domestic savings can begin to seek returns outside the nation, as has started to happen in small ways with corporate India too in recent quarters. (According to RBI, Indian companies' foreign investment grew 144% in FY11 to \$44bn.)

Similarly existence of latent demand also does not cause a capacity creation cycle even though that too helps. These two are simply good necessary conditions as without them a prospective investor will either face a steep, unviable cost of capital or prospects of insufficient returns. But they are not sufficient.

Investments normally transpire when one or more of the following three factors are also present:

- Income certainty:** Reforms, of the kind witnessed in the '90s, raised the certainty around expected returns once projects were completed after years of fund infusion with better regulations. They also lowered the cost of investments by reducing bureaucracy and allowing more operations of market forces. They also opened avenues for easier fund raising from a far wider group of domestic and foreign investors.
- Wealth effect:** To these authors, the key driver for the boom in 2004-07 was the near-term rewards that many infrastructure investors were obtaining in financial markets on mere announcements or initial executions of projects. In those years of extreme hope, ever higher multiples that financial instruments around investment projects were commanding led to many projects starting with highly untenable product pricing and funding plans. The period also caused corporates with little relevant experience to announce substantial plans in completely new sectors because the core competency required for execution appeared to be the ability to raise money at cheap cost from financial investors and the ability to obtain the best deals from the bureaucracy.
- Government funded investments:** Most other high growth countries of East Asia had large-scale infrastructure investments sponsored/facilitated by the state where the objectives were rarely around the generation of profits. The governments in the country had various mechanisms to force high savings rate and suppress consumption. On the other hand, export competitiveness enhancing investments were made by funnelling the savings to projects deemed important – at times sponsored by the state-led institutions or state-favoured business groups that focussed more on efficient execution and rarely on profits.

A cleaner system will require different type of investors and investments that will take years to emerge in the best case

But what about the interim?

US\$95bn of negative investment cash flow for Indian listed, non-financial companies as of FY11

There are other drivers that can cause investments to surge like external aid/capital/investments or low interest rates but they are largely minor helpful factors and not necessarily for a long period in an economy as large as India's, in our view.

Corruption scandals and the broken existing investment model

In a completely clean, market-driven capex environment, large projects will be undertaken by entities with huge execution experience and competitive advantage in the business area. In such a system, project viability will be decided on the back of long-term risk adjusted income prospects and not wealth. Projects will not be undertaken by entrepreneurs whose sole strengths are their ability to obtain funds from financial investors and in their ability to deal with the bureaucracy at all levels.

While the Indian economy should try to move towards this idealistic environment, the transition from where it is will take years. If the corruption scandals simply push out many risk-taking businessmen that were leading investments in the last decade or so, the wait for the emergence of a new breed of investors could be long even with the best reform process. In the interim, further deterioration in investment cycle could worsen fiscal deficit and inflation and substantially raise banking sector asset quality risks.

In our eyes, apart from a new long-term investment model created by new reforms, the economy needs short-term solutions. They could be in the form of a stepped up public sector investments, which could be difficult given the fiscal constraints. Or they may need to take the form of public-private partnerships to implicitly guarantee reduced bureaucracy and litigation risk. Or the existing private sector would need convincing about the official support on the non-funding parts of risks.

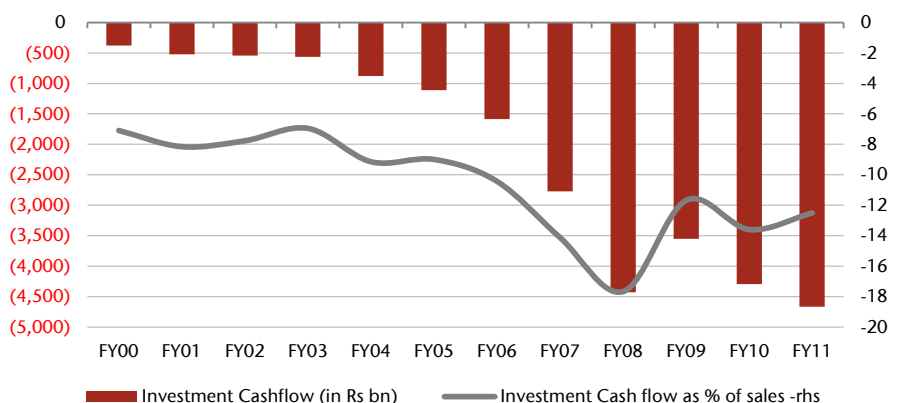
5. Funding: Policy, markets and global factors

A global economy is characterized not only by the free movement of goods and services but, more important, by the free movement of ideas and of capital – George Soros

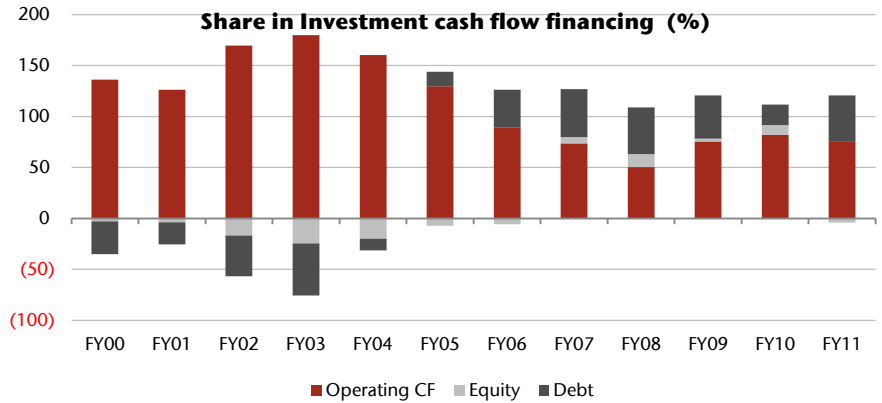
It all starts with this: Corporate India has cash flow deficit and the nation as a whole has saving-investment deficit.

Our calculations show that listed Indian corporates (not including banks) have substantially negative investment cash flow requirement on an annual basis. It amounted to INR4.6 trillion or roughly US\$95bn at the current exchange rate in FY11. Operating cash flow of the same corporates can at best meet three-quarters of the need.

Exhibit 66: Investment cash flow requirement exceeds US\$90bn



Note: Calculations are for BSE500 & NSE500 non-financial stocks; Source: CMIE, Jefferies

Exhibit 67: Investment cash flows increasing financed by non-operating cash flows

Note: Calculations are for BSE500 & NSE500 non-financial stocks; Source: CMIE, Jefferies

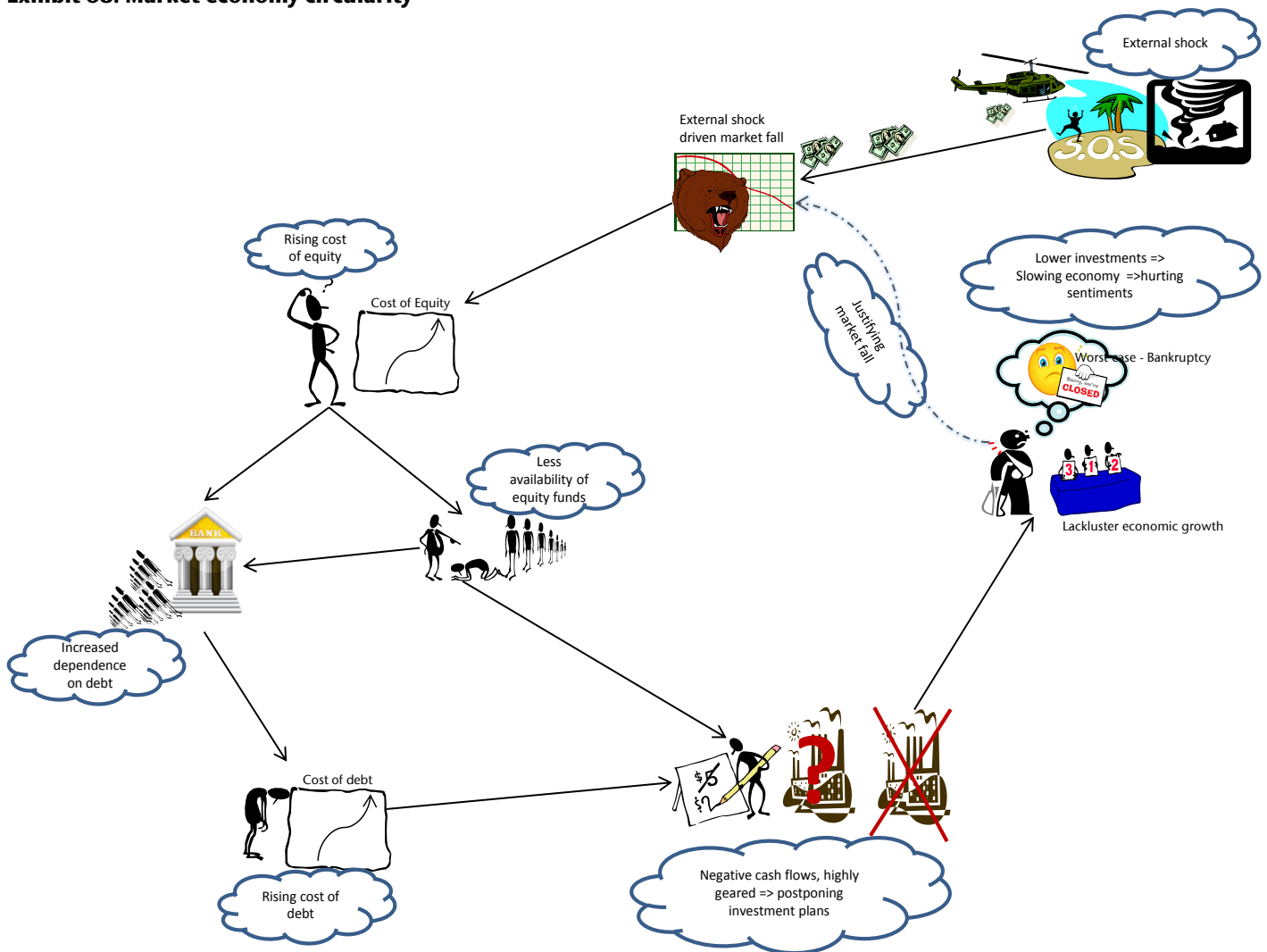
Not just about monetary policy

Additional funding of the tune of US\$20-25bn is not substantial by itself. However, when funding costs are high, businessmen may simply delay existing investment activities or stop thinking about new projects rather than raise more expensive funds. And as explained above in the driver of investment decisions, more important than cost of debt is cost of equity or valuations at which risk-taking investors can issue equity to financial investors.

In other words, reduced cost of debt by itself – through easier monetary policy – may not cause the required turnaround in corporates embarking on new ventures. Equity market sentiments play a crucial role in the activity levels of private sector India. What starts as a correlation driven equity market de-rating begins to impact investment decisions and economic fundamentals. These authors have talked about the market-economy circularity for years and have noticed that the argument is well-accepted by most policymakers and participants now than in 2008.

In whether to execute an ongoing project or delay/cancel, a key decision variable are valuations at which equity funds can be raised, possibly more than cost of debt funding

Exhibit 68: Market economy circularity



Source: Jefferies

Sharply easing monetary and fiscal policy will help India relatively but a stable world needed for absolute performance

Coupling risk can only be reduced and not eliminated

In conclusion, best reforms and policy easing may not yield the necessary economic results if the global markets remain extremely weak. India’s economic coupling with the rest of the world (which exists on capital dimension as against trade dependence for many East Asian economies) is a fundamental risk that can only be mitigated with the willingness to run easier fiscal and monetary policies even amid worries of current inflation or fiscal deficit. We would rephrase for the sake of clarity: sharp interest rate cuts or more public sector investments will make Indian economy and markets a better relative story but for absolute positives, India would need a somewhat stable world.

Our recipe for cleaner, higher, longer growth

A nation cannot prosper if its members are not fully aware of the fact that what alone can improve their conditions is more and better production. And this can only be brought about by increased saving and capital accumulation – Ludwig von Mises

Only a crisis – actual or perceived – produces real change. When that crisis occurs, the actions that are taken depend on the ideas that are lying around. That, I believe, is our basic function: to develop alternatives to existing policies, to keep them alive and available until the politically impossible becomes the politically inevitable – Milton Friedman

One set of possible policy support needed and not our forecast

Growth revival needs to become the main priority

Cost of capital reduction needed for capacity creation to avoid inflation negative spiral

Differential monetary policy that suppresses wealth effect and consumption while providing support to investments and savings should be encouraged

There are other positives that could help the economy find a better growth path...

It is perhaps apt to conclude the above long discourse of our views on the nature of growth with what we would ideally look for – based on our notions and ideas. Clearly, we could be substantially wrong in our thinking of the problem. More importantly, people far better than us in understanding the economy, economics, politics and policy options could easily come up with much better set of response than what we can imagine.

To us, growth revival is the most pressing economic need. Once the problem is given the due priority, policymakers should be able to find the suitable policy mix to steer the economy in the right direction. Our list of the type of policy required below is theoretical, likely to be disagreeable to anyone else in full and hardly useful in making investment decisions because in the end it is just another wish-list on a piece of paper. Still, here it goes:

In the short term

- Admission that economic slowdown as the most pressing economic problem and driver of other problems like inflation and fiscal deficit. The admission will help various arms of policymaking come together on what needs to be addressed.
- A realization that investment or capex revival needs confidence amongst Indian risk-taking entrepreneurial class. Even as the investigations into the corruption scandals continue, the business class as well as policy-implementing bureaucrats must be strongly encouraged to continue all the clean work to revive investments absolutely immediately.
- We have been a strong believer of the notion that too fast consumption growth has been the main inflation cause for the last two years. If too much growth was the inflation driver in last two years, the central bank also must remember that too slow a growth induced by insufficient capacity creation also caused inflation for a few decades in India prior to mid-90s. Revival of supply needs lowering of cost of capital for infrastructure related sectors, even though we also believe that this is one of the lesser reasons behind investment slowdown.
- All efforts to mitigate the impact of global factors possibly through higher than otherwise government/public sector involvement in large project investments

In the long term

- Active discouragement of any fiscal policy that could substantially boost overall consumption or induce substantial wealth effect. The focus should be more on the containment of revenue deficit rather than the overall deficit alone.
- More focused monetary policy rather than a wide-brush, single tool interest rate policy – one that is aimed at preventing abnormal wealth effect driven consumption, one that smoothens credit driven consumption expansion and one that focuses on channelizing capital flows towards investment related sectors.
- Continuous reforms that encourage investments in critical infrastructure sectors of all kind. Reforms must include financial market deregulations, clearer long-term return guarantees, reduction in bureaucracy amongst others to encourage long-gestation investment projects etc
- Policies to encourage higher savings rate. At extreme, some forced savings from the entire income-earning population that can be used for certain types of investments and social security.
- At extreme, state-sector investments in critical projects that do not attract sufficient private sector flows

The above wish list misses many oft-repeated “cures” heard on the street. For example, for years on, many have pinned hopes on sudden, one-shot return of the supposed

5 October 2011

...but one that relies less on chance and more on own efforts need to take the form of more creation of capacity that can meet all the latent consumption needs

illegitimate money stashed outside. Some others wish for magical reduction in waste in sectors like food and power simply through administrative efforts to eliminate the chronic under-supply. Then there are others who dream an overnight arrival of corruption-free businesses and politics as the panacea. Some others wait for huge investments from the world on account of “reallocation” because of India’s better growth prospects. And of course, all of us wait for gains from reduced global commodity prices but in an environment where there are no offsetting losses from the wealth destruction effects.

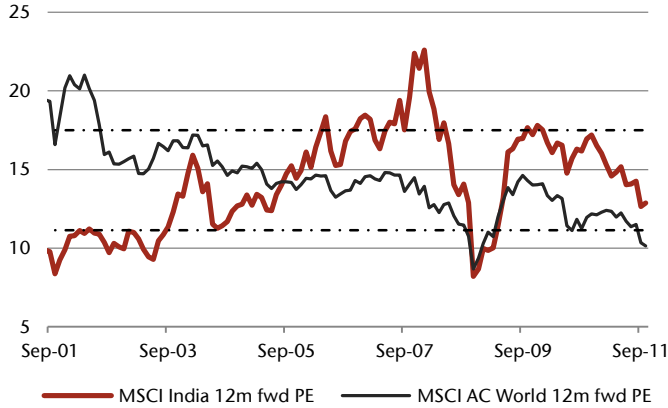
All above and many other positive drivers could emerge if the nation as one raises savings rate, encourages investments and stays away from the traps of credit/consumption driven growth binge. To end, consumption is important and it will grow rapidly and sustainably but only if the production to satisfy the consumption needs rises sustainably and for the right reasons.

Market conclusions: watch policy

In the world where value is abundant...

The way equities have fallen around the world, value is abundant. It's quite clear that the markets might be supported at some valuation level (although it does not have to be anyway linked to 2008 bottom), but the eventual bottoming is dependent on global growth stabilization, not valuation level.

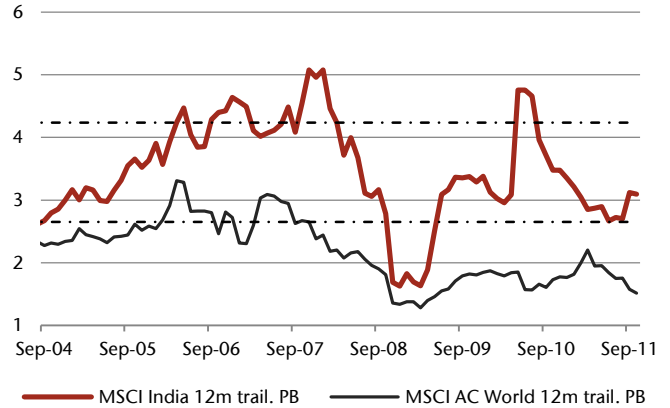
Exhibit 69: India valuations at six year low ex-2008



Source: Datastream, I/B/E/S estimates, Jefferies

We need to separate high-beta led rebound from a sustainable market rise and outsized returns in high beta stocks

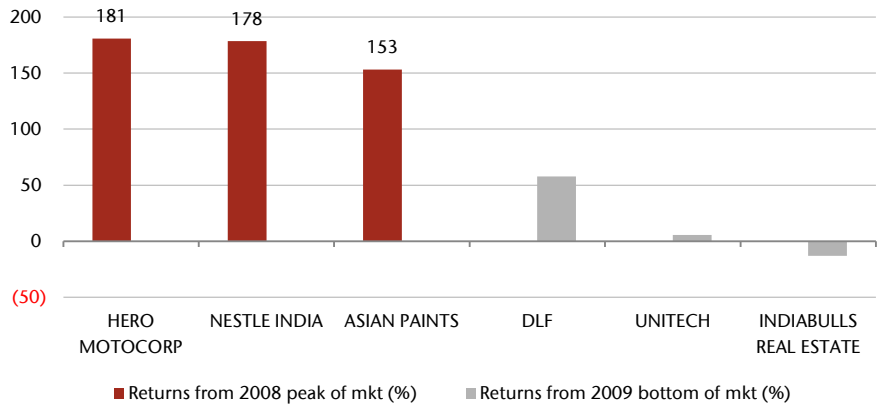
Exhibit 70: Valuation gap with World widening



Source: Datastream, I/B/E/S estimates, Jefferies

As and when markets bottom, from the bottom, all high-beta stocks should rebound substantially. However, take a look at a simple chart below:

Exhibit 71: Consumers have outperformed real estate even with timing difference



Source: Bloomberg, Jefferies

Long-term investors failed to benefit from some high-beta even after getting 2008 bottom totally right

The above chart shows a curious, relatively under-appreciated performance fact: investors who got the bottom of 2008-09 market collapse right, did not make as much returns by holding on to many high-beta names despite the market nearly doubling from the bottom as investors who wrongly invested at the time of 2008 market peak but chose to invest in some supposedly low-beta consumer stocks.

For short-term stability, all that is needed is global growth stability

'These things will become clear to you,' said the old man gently, 'at least,' he added with slight doubt in his voice, 'clearer than they are at the moment.' - Douglas Adams

There are many concerns in India: inflation, fiscal deficit, growth slowdown, rising political uncertainties, continuous earnings downgrade etc but one does not need any

Jefferies global strategist Sean Darby does not see a quick end to global macro troubles

Wealth destruction caused economic risks could fundamentally matter more even in India, offsetting gains from lower global commodity prices

Until the economy returns on a stable, high growth path, we recommend avoiding financials, industrials and other cyclical sectors

proof to claim that the market's only preoccupation, even in India, are global (particularly European) macro events and their possible after-effects.

Jefferies' global strategist Sean Darby does not see any quick end to this quagmire. There are possible fixes in the form of rescue packages and interest rate cuts, but both European politics and investor scepticism are such that the fixes may not work quickly. As we have seen in the past, the vicious cycle will end at some point. From then on, all global equities/risk assets will soar together, the way they are falling together at present.

Sean Darby said it well in his latest note about market risks from the event driven world: *"To many investors, equities are considered to be a claim on a firm's future profits. In reality, equity investors have the last claim on a company's assets if it were ever liquidated. During long periods in an economic cycle, equities trade as if they are warrants on growth. Under these circumstances, the company produces enough cash flow to meet its debt obligations and has a competitive position that allows it to maintain a satisfactory level of profits. However, there are periods in a cycle when investor anxiety over a looming credit crunch or banking crisis forces equities to trade as proxies on overall liquidity. A good example was at the height of the 2008 financial crisis when many companies were producing sufficient cash-flow to buy back their debt yet were trading as if they would be forced into insolvency."*

From our viewpoint, fear-driven market falls would have been a straightforward buying opportunity if they were not impacting Indian economic fundamentals in any negative way. Alas, this is not the case: fundamental risks from wealth destruction will rise – a la 2008 – in India's negative cash flow, geared economy if the global market plunge takes more severe turns. Once again a la 2008, falling commodity prices and inflation, along with lower interest rates, might not be able to offset the losses created by wealth destruction forces for a while either for the economy or for corporate India.

As a result, the near-term market stabilization rests primarily on the extent to which the global markets fall. The prospects are not bright at least for the next few months although sharp bear market rallies are certainly likely almost every quarter.

For long-term returns, we need more than global stability

The future comes one day at a time. – Dean Gooderham Acheson

Our focus on this document is clearly on long-term, absolute growth and returns that are less dependent on global events and more on India's own fundamentals.

Let's Sensex has returned 5% CAGR in the last five years (from the mid-cycle market point in Sep-2006), substantially lower than inflation or return on bonds in India. Returns are also lower than 16.3% CAGR in nominal GDP growth over the last five years. While one can find faults with the possible different market cycle points in the numerator and denominator of this low performance calculation, five years should be a long enough time in a high growth economy like India's for valuation de-rating to not matter so much.

Investing in high, stable growth vs cyclical growth

For outsized, let's say 20%+ index return CAGR, over any five years, we need the economy to be on a less cyclical, more sustainable, high growth rate. As this growth becomes more feasible, so will the market returns be. Sector preference for long-term investors should be different if the economy get on to a less cyclical, high stable growth as against a weak, cyclical growth:

- 1> Sectors to prefer in the core long-term portfolio for the believers of stable, high growth: In our view, they should be investment related sectors including financials, construction companies, capital goods, real estate and possibly metals and other commodities.
- 2> Sectors to prefer for the believers of cyclical, weak growth: Consumers, telecom and stable earning companies at least for a few more quarters until the expectations adjust which may take a few more quarters.

The above growth-driven sector preference not only is logical but also had worked practically in the previous periods of outsized market returns in 1998-2000 as well as mid-2003-2007.

Exhibit 72: Investment related-sector perform in outsized returns market

	MSCI India	Financials	Energy	IT	Utilities	Cons. Stap.	Cons. Disc	Healthcare	Materials	Industrials	Telecom
Nov1995 - Nov1998	-13.8	-39.1	-22.6	-63.3	-9.0	117.1	-41.7	28.4	-38.8	-52.9	
Nov1998 - Feb2000	133.6	410.9	54.9	696.3	26.4	30.3	24.4	183.4	111.6	59.3	58.7
Feb 2000 - Apr 2003	-41.9	28.5	11.8	-77.0	18.1	-27.8	-53.7	-10.9	-26.9	-20.7	-70.2
Apr 2003 - Jan 2008	541.8	944.3	907.7	206.9	784.3	158.3	449.6	132.0	731.7	1535.5	439.0
Jan 2008 - Oct 2011	-27.3	-38.2	-39.8	38.8	-57.9	34.2	68.4	47.7	-39.5	-43.7	-89.9

Source: Bloomberg, Jefferies

Three medium-term paths and our base case

Putting this together, there are three broad paths the economy and markets can take from here:

Base case: slow-moving local policy, uncertain global macro and hence continuation of defensive bias in recommended sector weights with expectation of more negative returns

For less global-market dependent India story to emerge, policy needs to change. We do not see this imminent as of now.

Indian equities will easily outperform if economic growth were to stably settle at 5-6% as against the current expectation of 8%+

- 1> Our base case is for slow-moving local policy amid uncertain global economy: we would expect market to remain on a downward trend with tremendous volatility and occasional periods of relative outperformance. Under this scenario, we would stay with our current recommended low-beta strategies.
- 2> Slow moving local policy but recovering global markets because of massive liquidity infusion and/or regulation changes (a la 2009): At some point, our base case could morph in to this scenario although we do not expect this immediately. As and when this scenario begins to unfold, we would expect high beta sectors to begin outperforming with substantial absolute performance for the overall market too from the bottom. Given our global strategists' views of the global environment, we expect this to be at least a few months away.
- 3> Substantially altered, growth-centred local policy making not just in the form of monetary and fiscal easing but with measures focussed at reviving investments: Under this environment, we would advocate a complete turnaround in stock and sector selection in the core portfolio. For fundamental, long-term investment, we await this scenario but do not see this as likely at present.

Maintain OW on relatively secure sectors and companies

In other words, we remain unenthused about the market despite much better average valuations, much more downbeat expectations and likelihood of some policy easing in the near-term. We maintain our OW on sectors like consumer staples, telecom, two-wheelers and stable earning companies from sectors like power, gas etc for the time being. We maintain our UW on financials, capital goods, real estate and other cyclical sectors. We are neutral on IT/software.

Vicious cycle risks if growth stays unsupported

5-6% long-term growth would be consistent with India's current savings and investment rate. Such a level of growth will not only be quite good in absolute terms, but will remain outstanding on a relative scale in the global economy. As a result, even this growth rate will be sufficient for Indian market to outperform the world medium-term once expectations are adjusted and stability at a lower growth rate is attained.

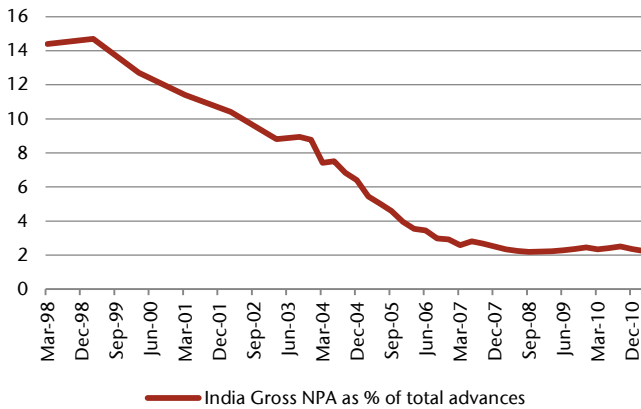
The legit question here is that if this is the medium-term worst case, why should one worry about the next few quarters in equity markets?

Our concerns are over the transition phase. The economy is unlikely to quietly settle into a lower growth state. The transition could involve heightened political/policy risks with widespread electorate disappointment. It could also involve disappointments over

apparent policy failures as efforts will be made to revive the economy to 2004-07 growth rate and a lower level of growth will be deemed as a failure for policy.

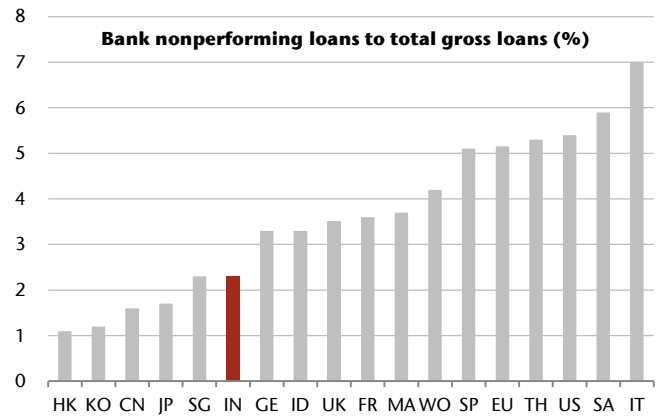
Most importantly, the transition process could contain a large-scale change in Indian corporate world with more pains for many investment sector leaders of the last ten years. Such companies' steady decline could lead to asset quality issues for banks as well where the current non-performing loan ratios and expectations are now below the world average.

Exhibit 73: A secular trend that should not mask the possible cyclical risks



Source: RBI, CMIE, Jefferies

Exhibit 74: Hardly any downside potential, but certainly upside risks



Note: NPA's are for 2009; Source: World Bank, Jefferies

Lastly, a change in medium-term growth rate would also need changes in investor expectations. And as we have seen often in the past, downward adjustments to any expectations almost always involve undershoots in both expectations and valuations.

Appendix

The following screens are from our global strategists Sean Darby, Dodo Cheng and Kenneth Chan based on the methodologies they have been applying uniformly for various countries in their strategy reports.

Exhibit 75: Cash rich firms in India

BB Code	Company Name	Sector	Price (INR)	Rating	Mkt. Cap. US\$m	12M FL NCMC, %	Further 12M FL NCMC, %	12M FL FCFY, %	Further 12M FL FCFY, %
STLT IN	STERLITE INDUSTRIES	Materials	114	NC	7,802	38.4	55.5	12.1	23
SCS IN	SATYAM COMPUTER	IT	70	NC	1,692	33.2	42.2	7.3	9
COAL IN	COAL INDIA	Energy	333	NC	42,974	28.7	35	6.5	7.6
ONGC IN	OIL & NATURAL GAS CORP	Energy	266	NC	46,486	9.8	11.7	8.1	9.5
BJAUT IN	BAJAJ AUTO	Cons. Discretionary	1,536	Buy	9,075	14.7	18	6.3	7.2
ACEM IN	AMBUJA CEMENTS	Materials	149	NC	4,659	13.8	18.8	5.8	7
INFO IN	INFOSYS	IT	2,533	NC	29,699	15.7	19.1	5.4	6.4
WPRO IN	WIPRO	IT	341	NC	17,100	8.9	11.7	6.6	7.4
HMCL IN	HERO MOTOCORP	Cons. Discretionary	1,942	Buy	7,917	12.1	13.5	5.9	7.1
ACC IN	ACC	Materials	1,099	NC	4,211	10.8	15.6	6	7.5
HCLT IN	HCL TECHNOLOGIES	IT	409	NC	5,763	4.2	6	6.8	8.5
MSIL IN	MARUTI SUZUKI INDIA	Cons. Discretionary	1,083	Hold	6,389	19.1	18.4	3	7
Z IN	ZEE ENTERTAINMENT	Cons. Discretionary	118	NC	2,348	6.5	9.8	5.6	6.6
SUNP IN	SUN PHARMACEUTICAL	Health Care	463	NC	9,726	9	11.8	4.3	5.1
TCS IN	TATA CONSULTANCY SVCS	IT	1,037	NC	41,455	5.3	7.4	5	5.9

Note: 12M FL = 12-month forward looking, NCMC = Net Cash/Market Cap, FCFY = Free Cash Flow Yield, NC = Not Covered. Companies appeared on the screen are the ones expected to be in net cash with positive free cash flow generated in the coming 12 months. Source: Company Data; Companies are sorted in descending order with best combined NCMC and FCFY z-scores (column H and J) at the top; closing prices as of 04/10/11; Source: Bloomberg, I/B/E/S, Jefferies

Exhibit 76: Margin of safety screen

BB Code	Company Name	Sector	Price (INR)	Rating	Mkt Cap, US\$m	12M FL PE		12M FL PB	
						Current	5Y Z-Scr, sd	Current	5Y Z-Scr, sd
NTPC IN	NTPC LTD	Utilities	168	NC	28,226	13.2	-1.74	1.8	-1.69
STLT IN	STERLITE INDUSTRIES	Materials	114	NC	7,802	5.3	-1.69	0.7	-1.57
SBIN IN	STATE BANK OF INDIA	Financials	1911	NC	24,779	7.3	-1.5	1.2	-1.29
AXSB IN	AXIS BANK LTD	Financials	1019	NC	8,578	9.4	-1.36	1.7	-1.37
SESA IN	SESA GOA LTD	Materials	201	NC	3,559	4.5	-1.18	1	-1.47
UNTP IN	UNITED PHOSPHORUS LTD	Materials	138	NC	1,297	7.7	-1.36	1.3	-1.27
RELI IN	RELIANCE INFRA.	Utilities	373	NC	2,039	5.6	-1.36	0.4	-1.27
TPWR IN	TATA POWER CO LTD	Utilities	100	NC	4,838	7.8	-1.2	1.4	-1.39
LT IN	LARSEN & TOUBRO LTD	Industrials	1358	NC	16,942	14.9	-1.36	2.7	-1.25
IDFC IN	INFRASTRUCTURE DEV FINANCE	Financials	111	NC	3,311	10.4	-1.15	1.3	-1.31
RIL IN	RELIANCE INDUSTRIES	Energy	808	NC	54,047	10.8	-1.11	1.4	-1.33
UNSP IN	UNITED SPIRITS LTD	Con. Staples	796	NC	2,125	16.6	-1.31	2	-1.15
RCAPT IN	RELIANCE CAPITAL LTD	Financials	315	NC	1,581	12.1	-1.28	0.8	-1.16
JPA IN	JAIPRAKASH ASSOCIATES	Industrials	73	NC	3,159	11.6	-1.01	1.2	-1.16

Note: 12M FL = 12-month forward looking, FY1/2 = coming/next fiscal year, NoA = Number of Analysts, NC = Not Covered; Companies are sorted in descending order with best combined ie, lowest in -ve NCMC and FCFY z-scores at the top; closing prices as of 04/10/11; Source: Bloomberg, I/B/E/S, Jefferies

Exhibit 77: Low Beta screen

BB Code	Company Name	Sector	Price (INR)	Rating	Mkt Cap US\$m	Beta Versus Market	
						6M	2Y
APNT IN	ASIAN PAINTS LTD	Materials	3,158	NC	6,181	0.4	0.3
DABUR IN	DABUR INDIA LTD	Cons. Staples	103	NC	3,663	0.5	0.4
ONGC IN	OIL & NATURAL GAS CORP LTD	Energy	266	NC	46,486	0.6	0.4
HMCL IN	HERO MOTOCORP LTD	Cons. Discretionary	1,942	Buy	7,917	0.6	0.5
BPCL IN	BHARAT PETROLEUM CORP LTD	Energy	648	NC	4,782	0.6	0.2
HUVR IN	HINDUSTAN UNILEVER LTD	Consumer Staples	341	NC	15,029	0.6	0.4
PIHC IN	PIRAMAL HEALTHCARE LTD	Health Care	358	NC	1,221	0.6	0.3
LPC IN	LUPIN LTD	Health Care	474	NC	4,325	0.6	0.3
UTCEM IN	ULTRATECH CEMENT LTD	Materials	1,142	NC	6,388	0.7	0.4
Z IN	ZEE ENTERTAINMENT ENTERPRISE	Cons. Discretionary	118	NC	2,348	0.7	0.8
GAIL IN	GAIL INDIA LTD	Utilities	411	NC	10,634	0.7	0.4
ACC IN	ACC LTD	Materials	1,099	NC	4,211	0.7	0.5
SUNP IN	SUN PHARMACEUTICAL INDUS	Health Care	463	NC	9,726	0.7	0.6
CIPLA IN	CIPLA LTD	Health Care	281	NC	4,613	0.7	0.5
PWGR IN	POWER GRID CORP OF INDIA	Utilities	98	NC	9,307	0.7	0.5

Note: NC = Not Covered, Companies appeared on the screen are the ones that with 6-month beta below 1; closing prices as of 04/10/11; Source: Bloomberg, I/B/E/S, Jefferies

Exhibit 78: Long-term growth screen

BB Code	Company Name	Sector	Price (INR)	Rating	Mkt. Cap.	Past 12M EPSG, %	12M FL EPSG, %	Further 12M FL EPSG, %	5Y EPS CAGR, %
SESA IN	SESA GOA LTD	Materials	201	NC	3,559	13.5	-0.8	7.9	117.1
RPWR IN	RELIANCE POWER LTD	Utilities	77	NC	4,396	-2.3	48.7	65	88.1
IIB IN	INDUSIND BANK LTD	Financials	262	NC	2,498	N/A	25.7	28.9	53.8
MSEZ IN	MUNDRA PORT AND SEZ	Industrials	164	NC	6,723	35.6	39.2	34.2	51
ABNL IN	ADITYA BIRLA NUVO LTD	Industrials	913	NC	2,116	74.7	14.3	N/A	47.4
ADE IN	ADANI ENTERPRISES LTD	Industrials	527	NC	11,832	29	28.5	37.4	41.5
TTAN IN	TITAN INDUSTRIES LTD	Cons. Discretionary	209	NC	3,788	47.6	29.1	24.6	37.6
BJAUT IN	BAJAJ AUTO LTD	Cons. Discretionary	1,536	Buy	9,075	31.6	10.9	10.8	33
JSP IN	JINDAL STEEL & POWER	Materials	506	NC	9,655	10.2	15	24.5	31.8
SIEM IN	SIEMENS LTD	Industrials	838	NC	5,821	27.6	19.6	N/A	31
AXSB IN	AXIS BANK LTD	Financials	1,019	NC	8,578	24	21.8	23	30.3
DRRD IN	DR. REDDY'S LAB.	Health Care	1,483	NC	5,130	28	19.1	13.9	28.8
SHTF IN	SHRIRAM TRANSPORT FINANCE	Financials	612	NC	2,829	22.7	15.3	13.9	28.8
APNT IN	ASIAN PAINTS LTD	Materials	3,158	NC	6,181	11.1	21.4	22	24.9
LICHF IN	LIC HOUSING FINANCE	Financials	212	NC	2,050	16.3	18	25.4	24.3

Note: NC = Not Covered, Companies appeared on the screen are the ones that with 5Y EPS CAGR above 20% (market at 15%). EPS CAGR is calculated by default using 2 actual & 4 forecast EPS. Alternatively, 3 actual and forecast EPS are used; closing prices as of 04/10/11; Source: Bloomberg, I/B/E/S, Jefferies

Exhibit 79: Cyclical on weak growth screen

BB Code	Company Name	Sector	Price (INR)	Rating	MC, US\$m	Past 12M EPSG, %	12M FL EPSG, %	Further 12M FL EPSG, %
TATA IN	TATA STEEL LTD	Materials	415	NC	8,135	122.8	-10.2	16.9
SESA IS	SESA GOA LTD	Materials	201	NC	3,559	13.5	-0.8	7.9
TTMT IS	TATA MOTORS LTD	Cons. Discretionary	156	Buy	8,576	47.9	3	6.2
RIL IN	RELIANCE INDUSTRIES LTD	Energy	808	NC	54,047	14.5	7.6	9.8
ACEM IN	AMBUJA CEMENTS LTD	Materials	149	NC	4,659	0.8	10.3	16.1
Z IN	ZEE ENTERTAINMENT ENT.	Cons. Discretionary	118	NC	2,348	8.7	10.5	16
MSIL IN	MARUTI SUZUKI INDIA LTD	Cons. Discretionary	1,083	Hold	6,389	-5.7	10.8	12.3
BJAUT IN	BAJAJ AUTO LTD	Cons. Discretionary	1,536	Buy	9,075	31.6	10.9	10.8
ONGC IN	OIL & NATURAL GAS CORP	Energy	266	NC	46,486	18.3	12.5	6.9
HUVR IN	HINDUSTAN UNILEVER LTD	Consumer Staples	341	NC	15,029	4.9	13	17
UTCEM IN	ULTRATECH CEMENT LTD	Materials	1,142	NC	6,388	-12.5	14.1	17.1
HN DL IN	HINDALCO INDUSTRIES LTD	Materials	131	NC	5,139	-11.8	14.2	8.6
HMCL IN	HERO MOTOCORP LTD	Cons. Discretionary	1,942	Buy	7,917	1	14.5	13.2
MM IN	MAHINDRA & MAHINDRA	Cons. Discretionary	805	NC	10,089	12.5	15.8	16.1
BPCL IN	BHARAT PETROLEUM CORP	Energy	648	NC	4,782	7.8	16.7	9.7

Note: NC = Not Covered, Companies appeared on the screen are the ones that with 12M FL EPSG and further 12M FL EPSG below 20% (market at 24% and 25%). Companies are sorted in ascending order in 12M FL EPSG (column I) and with weakest growth names at the top; closing prices as of 04/10/11; Source: Bloomberg, I/B/E/S, Jefferies

Exhibit 80: Asia Pacific Country relative valuation

	12M FL PE						12M FL PB					
	Current	5Y Max	5Y Min	5Y Avg	5Y Z-Scr, sd	Further 12M	Current	5Y Max	5Y Min	5Y Avg	5Y Z-Scr, sd	Further 12M
Australia	12.6	45.7	7.5	15.0	(0.80)	11.0	1.86	14.42	1.09	2.80	(0.65)	1.66
China	8.9	43.1	5.6	15.9	(1.20)	7.5	1.44	5.78	0.92	2.65	(1.15)	1.25
Hong Kong	13.8	32.6	7.4	17.0	(1.03)	12.0	1.82	5.18	0.95	2.44	(1.18)	1.69
India	14.3	32.9	7.5	17.9	(0.41)	11.3	2.86	7.38	1.58	3.65	(0.60)	2.38
Indonesia	12.5	25.1	4.8	13.7	(0.23)	10.9	3.73	6.59	1.55	3.80	(0.20)	3.25
Japan	14.8	79.7	9.6	19.8	(0.52)	12.4	1.08	2.89	0.73	1.77	(0.87)	0.99
Korea	9.6	33.3	5.9	12.3	(0.81)	8.1	1.43	3.54	0.86	1.85	(0.81)	1.22
Malaysia	14.5	23.0	8.5	14.8	(0.34)	12.9	3.17	4.83	1.77	2.97	(0.18)	2.97
New Zealand	15.4	22.4	11.8	16.0	(0.17)	13.9	1.65	3.99	1.23	2.07	(0.60)	1.58
Philippines	14.1	23.6	8.0	15.0	(0.09)	12.5	2.44	3.54	1.17	2.19	0.29	2.18
Singapore	13.2	29.6	6.7	14.9	(0.66)	11.4	1.61	12.43	1.03	2.40	(0.90)	8.92
Taiwan	12.3	51.4	7.2	15.8	(0.36)	10.5	1.70	3.41	0.97	1.92	(0.66)	1.61
Thailand	9.6	18.5	5.5	11.4	(0.58)	8.6	2.61	3.84	1.04	2.21	0.08	2.39

Source: Bloomberg, I/B/E/S, Jefferies

Exhibit 81: India sector valuation

	12M FL PE						12M FL PB					
	Current	5Y Max	5Y Min	5Y Avg	5Y Z-Scr, sd	Further 12M	Current	5Y Max	5Y Min	5Y Avg	5Y Z-Scr, sd	Further 12M
Consumer Discretionary	15.2	30.1	7.6	19.5	(0.03)	13.1	5.07	7.60	1.87	4.24	0.48	3.86
Consumer Staples	23.4	33.4	13.9	23.4	0.58	19.8	9.99	15.34	5.84	9.61	0.23	10.34
Energy	10.8	19.1	5.5	11.7	(0.42)	9.9	2.11	3.37	1.01	1.93	(0.67)	1.80
Financials	10.5	29.2	6.9	15.5	(0.95)	8.7	1.43	6.29	1.02	2.70	(0.77)	1.24
Health Care	18.3	31.9	10.2	18.7	0.05	16.1	3.09	6.15	1.66	3.72	(0.64)	2.64
Industrials	15.3	59.8	7.6	25.3	(0.69)	11.1	2.83	10.29	1.25	4.04	(0.80)	2.20
Information Technology	14.5	24.9	6.0	16.4	(0.46)	12.5	3.61	7.86	1.60	4.36	(0.51)	2.97
Materials	10.8	23.5	4.6	12.1	(0.21)	9.2	2.15	6.10	1.18	2.90	(0.84)	1.82
Telecommunication Serv.	10.8	28.5	5.4	14.9	(0.71)	7.9	0.36	5.63	0.36	2.17	(1.06)	0.35
Utilities	21.8	59.2	10.9	27.9	(0.88)	10.7	1.37	7.19	1.15	2.67	(1.18)	1.17

Source: Bloomberg, I/B/E/S, Jefferies

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Other Companies Mentioned in This Report

- Bajaj Auto Limited (BJAUT IN: INR1,493.60, BUY)
- DLF Limited (DLFU IN: INR200.50, UNDERPERFORM)
- Hero MotoCorp (HMCL IN: INR1,961.45, BUY)
- Housing Development & Infrastructure Ltd (HDIL IN: INR89.90, UNDERPERFORM)
- Indiabulls Real Estate Limited (IBREL IN: INR70.10, UNDERPERFORM)
- Maruti Suzuki India Limited (MSIL IN: INR1,107.85, HOLD)

- Tata Motors (TTMT IN: INR146.70, BUY)
- Unitech Limited (UT IN: INR25.15, HOLD)

Distribution of Ratings

Rating	Count	Percent	IB Serv./Past 12 Mos.	
			Count	Percent
BUY	728	53.90%	35	4.81%
HOLD	549	40.70%	33	6.01%
UNDERPERFORM	73	5.40%	2	2.74%

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