

March 2010

Research
India

Economics Chartbook

India Economics

Growth Is Strong, but Watch Out for Inflation and Trade Deficit Risks

Growth recovery has been faster than expected: Various economic indicators have been surprising on the upside, confirming that the pace of the recovery has been stronger than we had expected. Industrial production growth has turned around, accelerating to 16.7% YoY in January 2010 compared to a trough of -0.2% YoY in December 2008.

Better policy traction and a quick revival in global risk appetite at play: The key driver to this acceleration in growth has been stronger-than-expected traction of the government's policy measures. Moreover, the quick revival in global risk appetite also meant that the Indian corporate sector could easily access risk capital from international capital markets.

Transitioning from policy-driven to private sector-driven growth in F2011: We expect GDP growth to rise to 8.5% in F2011 compared to 7.2% in F2010. In F2011, even as the policy makers gradually withdraw the monetary and fiscal policy support, we expect the recovery trend to be sustained.

Watch out for risk of inflation pressures picking up and widening in trade deficit: Non-food inflation shot up to 6.2% YoY in February 2010 from 2.6% in December 2009. Similarly, the three-month trailing trade deficit widened sharply to 10.2% of GDP, annualized as of January 2010, from the trough of 3.2% of GDP, annualized as of April 2009. If the Central Bank does not lift policy rates quickly, this will increase the risk of non-food inflation rising and trade deficit widening to levels higher than policy markers' comfort zones.

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For important disclosures, refer to the Disclosures Section, located at the end of this report.

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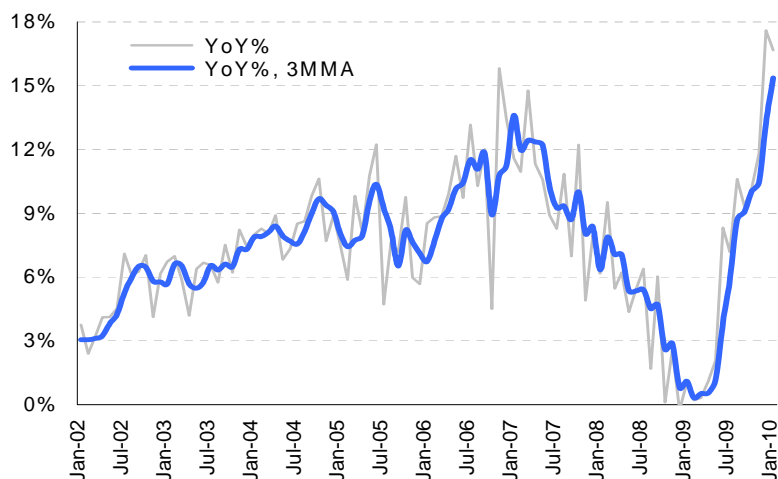
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I. Where Are We Now?

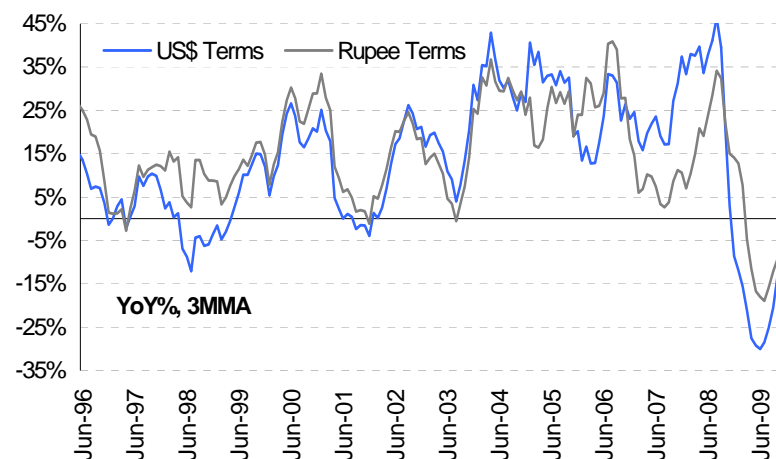
IP Growth Has Recovered Close to Peak Levels Driven by Domestic Demand

Industrial Production – Near V-Shaped Recovery



Source: CSO, CEIC, Morgan Stanley Research

Export Growth Moves Back into Positive Territory

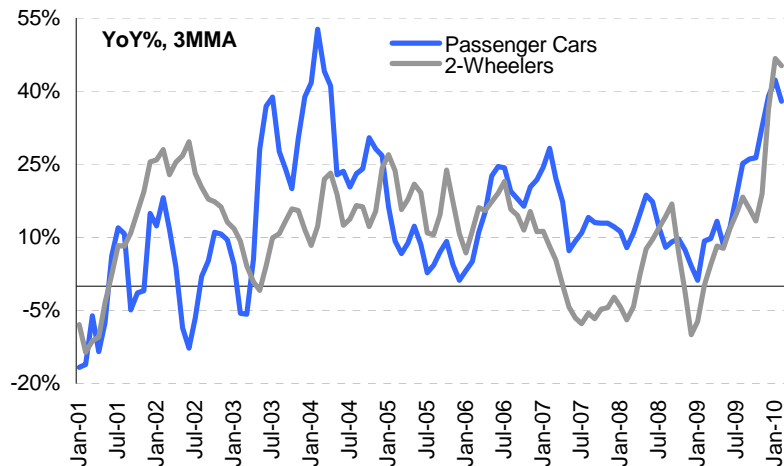


Source: Ministry of Commerce, Morgan Stanley Research

- Robust rise in domestic demand has pulled IP growth close to a 20-year high:** Industrial production growth has turned around, accelerating to 16.7% YoY in January 2010 compared to a trough of -0.2% YoY in December 2008. This rebound in IP growth has been driven largely by a sharp acceleration in domestic demand. Although exports have also been improving, the contribution of exports has been relatively small so far.

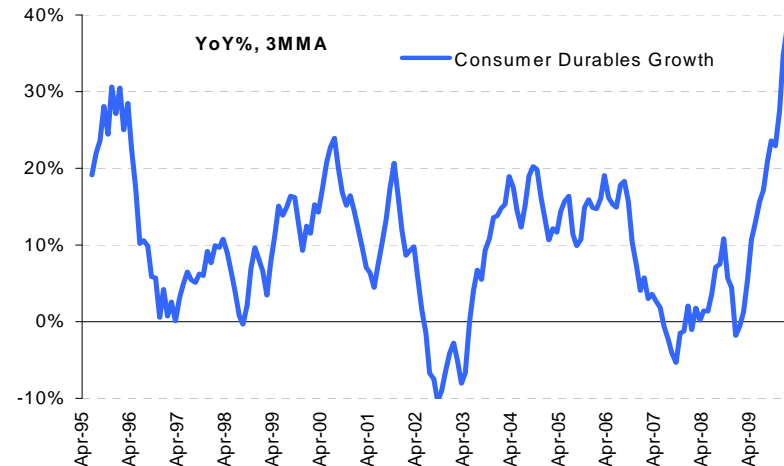
Discretionary Consumption Leads the Way

Discretionary Consumption Spending Improving – Auto Sales and ...



Source: Bloomberg, Morgan Stanley Research

... Consumer Durables Production



Source: CSO, Morgan Stanley Research

- Household spending, a key driver of growth, is improving:** Urban consumption has climbed back very sharply. Passenger car and two-wheeler sales growth accelerated to an average of 38% YoY and 45.2% YoY during the three months ended February 2010 (vs. 9.2% YoY and 0.2% YoY during the same period last year). Similarly, consumer durables production growth accelerated to the high of 38.6% YoY during the three months ended January 2010 compared with -0.6% during the same period last year. As is evident from these data, it is not just the base effect that is behind this growth acceleration.

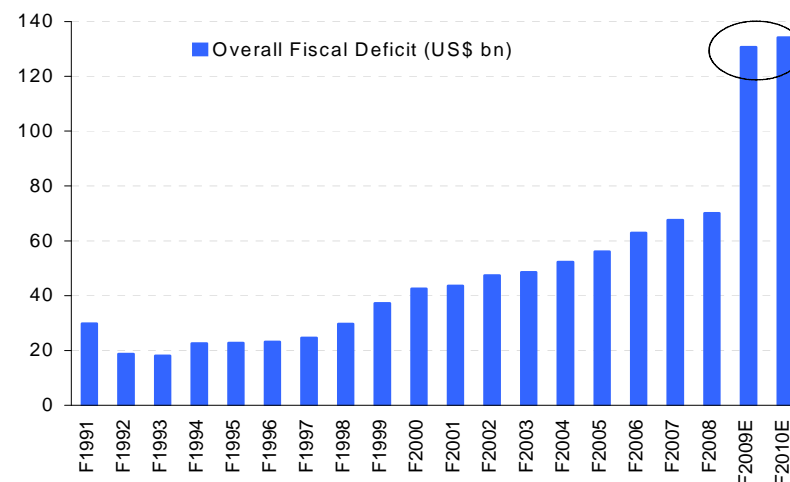
II. Strong Growth Momentum to Be Sustained

Lagged Impact of Fiscal Policy ...

India's Consolidated Fiscal Deficit

(As % of GDP)	F2008	F2009E	F2010E	F2011E	F2012E
Central Fiscal Deficit	2.6%	6.0%	6.7%	5.5%	4.8%
State Fiscal Deficit	1.4%	2.6%	3.2%	2.6%	2.5%
Sub-total	4.0%	8.6%	9.9%	8.1%	7.3%
Inter-government adjustments	-0.1%	-0.1%	-0.1%	0.0%	0.0%
Combined Headline Deficit	3.9%	8.5%	9.8%	8.1%	7.3%
<i>Major Off-budget expenditure items</i>	1.9%	2.2%	0.4%	0.8%	0.9%
Overall Fiscal Deficit	5.7%	10.8%	10.2%	9.0%	8.2%

Deficit Trend (US\$ billion)



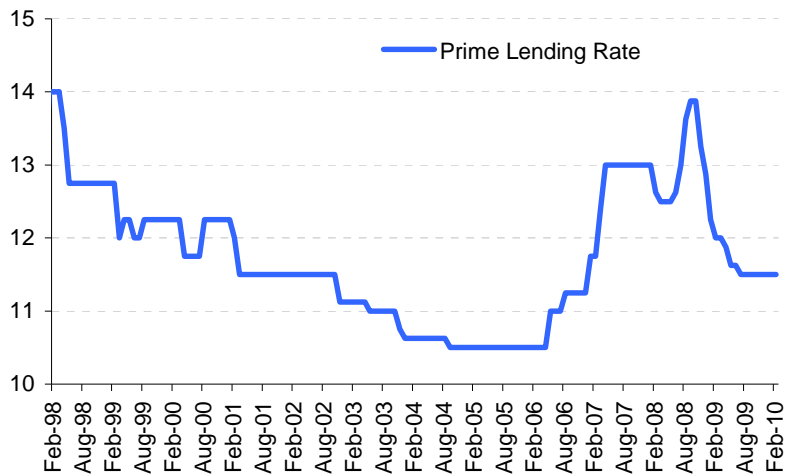
Note: *Here the off-budget items include expenditure on food, fertilizer and oil. E = Morgan Stanley Research estimates. Source: RBI, Economic Survey, Ministry of Finance, Morgan Stanley Research

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- Government policy response supporting domestic demand recovery:** The consolidated fiscal deficit (including off-budget expenditure) increased to 10.8% of GDP in F2009 and 10.2% of GDP in F2010 compared with 5.7% of GDP in F2008. In absolute terms, the government deficit increased to US\$131 billion in F2009 and US\$134 billion in F2010 vs. US\$70 billion in F2008. Although we expect fiscal deficit to decline in F2011, the bulk of this decline is due to higher tax and non-tax revenues. Expenditure to GDP will remain high. Indeed, 9.0% consolidated fiscal deficit in F2011 is still expansionary, in our view.

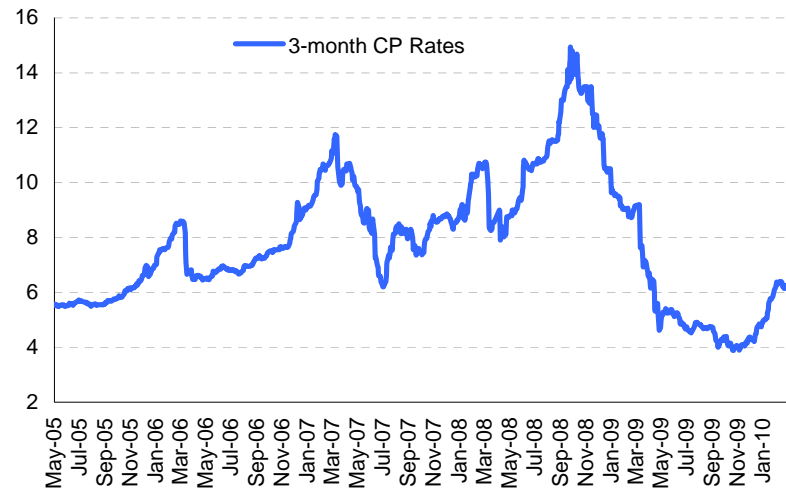
... and Monetary Policy

Prime Lending Rate



Source: CEIC, Morgan Stanley Research

Three-month Commercial Paper Rate

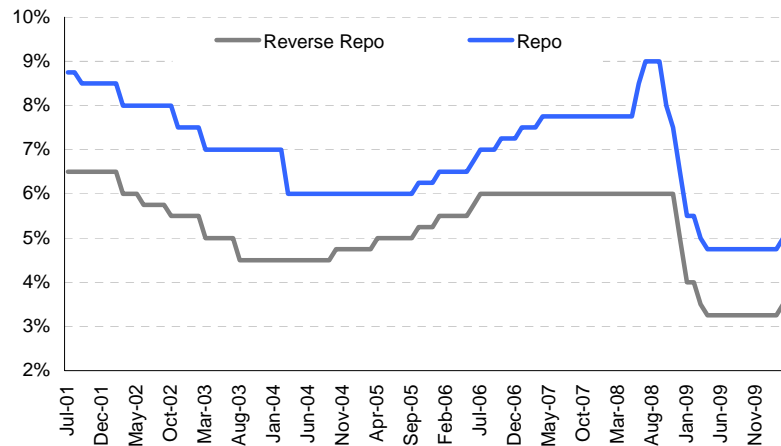


Source: Bloomberg, Morgan Stanley Research

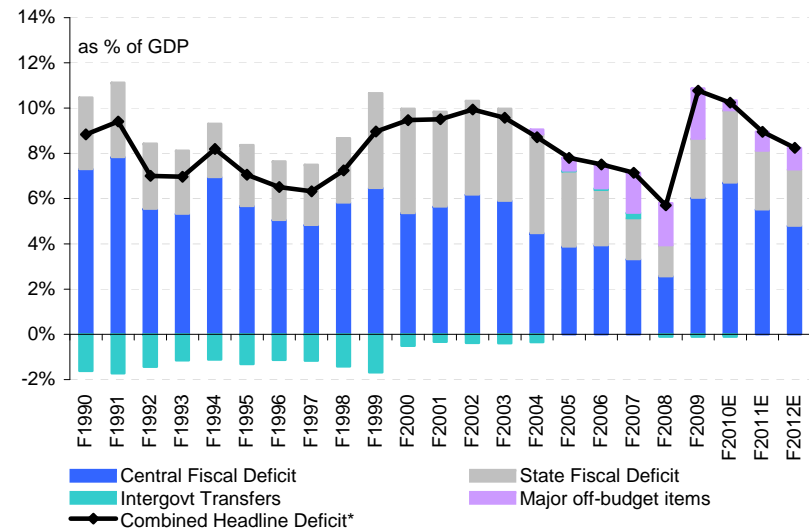
- Monetary policy traction also supporting recovery in discretionary consumption:** The aggressive monetary policy measures by the Reserve Bank of India (RBI) are also beginning to gain traction. Although initially banks were reluctant, the cost of borrowing is now close to all-time lows.

Reversal in Monetary and Fiscal Policy to Result in Moderation in Discretionary Consumption

Policy Rates to Rise



Fiscal Deficit to Shrink



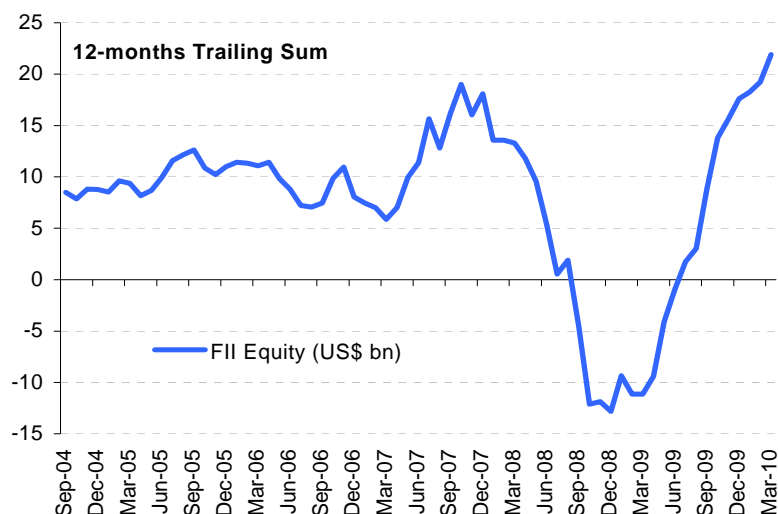
Note: *Here the off-budget items include expenditure on food, fertilizer and oil. E = Morgan Stanley Research estimates. Source: RBI, Economic Survey, Ministry of Finance, Morgan Stanley Research

Source: RBI, Morgan Stanley Research

- Reversal in monetary policy ahead:** We believe that the economy is in a fast recovery mode and that the RBI will need to lift policy rates toward normalized levels. Building in our higher growth and inflation forecasts, we expect the RBI to hike the repo rate by a cumulative 100bp in 2010. We expect 91-day T-bill, which represents market-oriented short-term rates, to rise by a cumulative of 125-150bp in 2010.
- Consolidation of public sector deficit:** The government took the first step toward reducing the deficit to more sustainable levels in the February 2010 budget. For F2011, the government announced a fiscal deficit target of 5.5% of GDP. This compares with 6.7% of GDP registered in F2010 (revised estimates). Hence, the combined deficit, including off budget items, stood at 9% of GDP in F2011 compared with 10.2% of GDP in F2010.

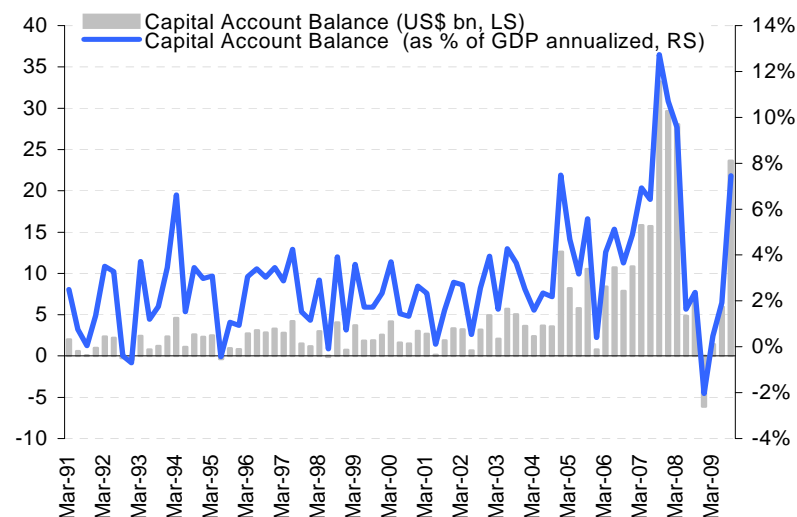
But Increased Access to Global Capital Markets,...

Access to Equity Flows Improving



Source: SEBI, Morgan Stanley Research

Capital Account Balance (Quarterly)

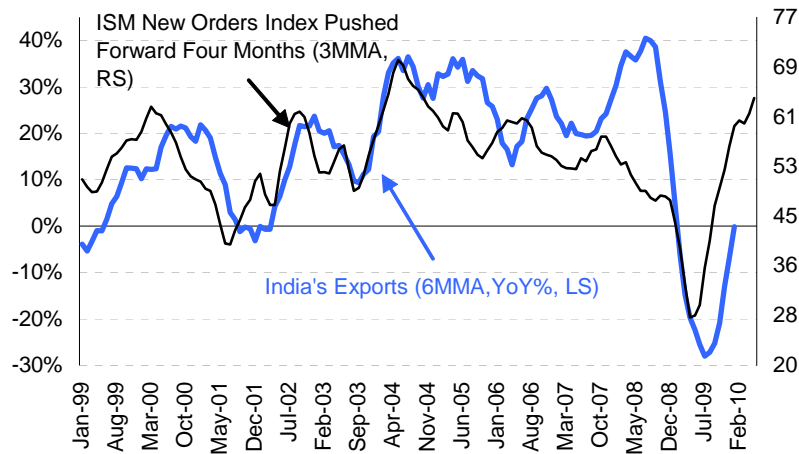


Source: CEIC, Morgan Stanley Research

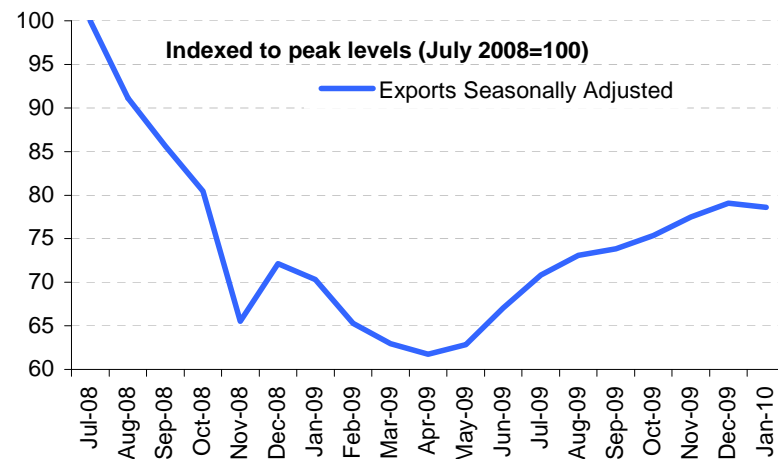
- Improving equity issuances:** With improving liquidity and the growth environment in the developed world, equity flows have rebounded. In fact, India received US\$3bn of equity flows till date and US\$17.6bn in 2009 compared to the US\$12.8bn of equity outflows witnessed in 2008. This quick revival in global risk appetite means that the Indian corporate sector could access risk capital from international capital markets easily. This is helping the corporate sector repair their balance sheets faster, thus reducing the risk of harmful feedback of large non-performing loans in the banking system, increased risk aversion and slower growth.
- Capital flows also rising sharply:** Total capital inflows into India increased to US\$23.6 billion during the quarter ended September 2009 compared with inflow of US\$6 billion during the quarter ended June 2009 and US\$1.4 billion during the quarter ended March 2009. Currently, we are building in total capital flows to rise by US\$30 billion over the remaining six months of F2010.

Revival in Exports, ...

India's Exports vs. US ISM New Orders Index



Exports, SA (Indexed to Peak Levels)



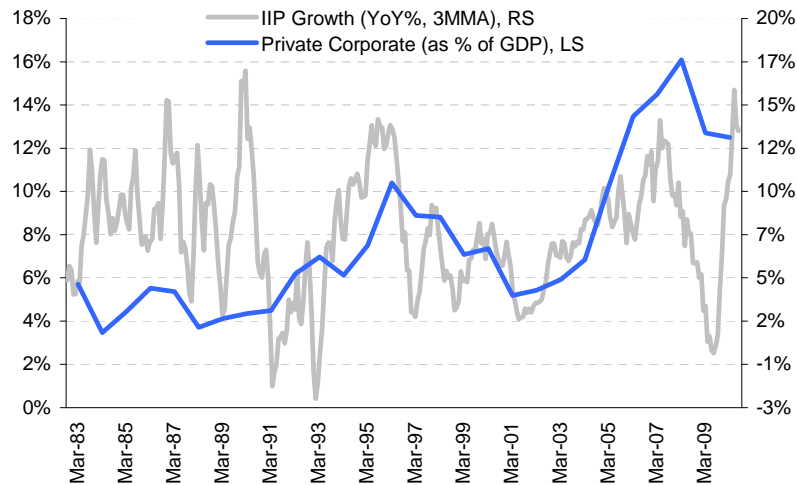
Source: Ministry of Commerce, Bloomberg, Morgan Stanley Research

Source: Ministry of Commerce, Morgan Stanley Research

- Exports are beginning to recover rapidly:** After the initial gradual recovery, over the last four months seasonally adjusted exports have recorded a cumulative increase of 6.5%. Considering the trend in US ISM News Orders Index (three-month moving average), which leads India's exports by about four months, we believe that exports will sustain steady acceleration over the next six months. We believe that this exports recovery will mean even faster improvement in capacity utilization.

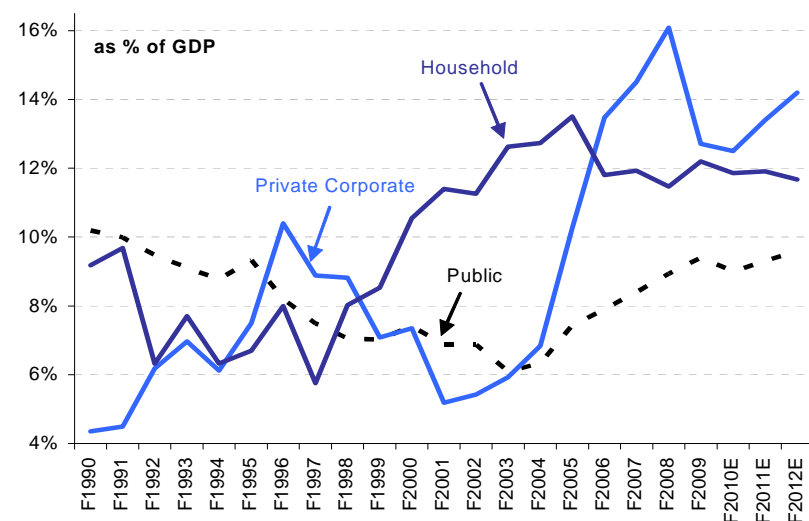
... And Rise in Investments Will Be the Offsetting Factors

Private Corporate Capex and Industrial Production



Note: Private Corporate Capex forecasts for F2010 and IP growth forecasts post November 2009 are Morgan Stanley Research estimates; Source: CSO, CEIC, Morgan Stanley Research

Private Capex to Drive Overall Investments



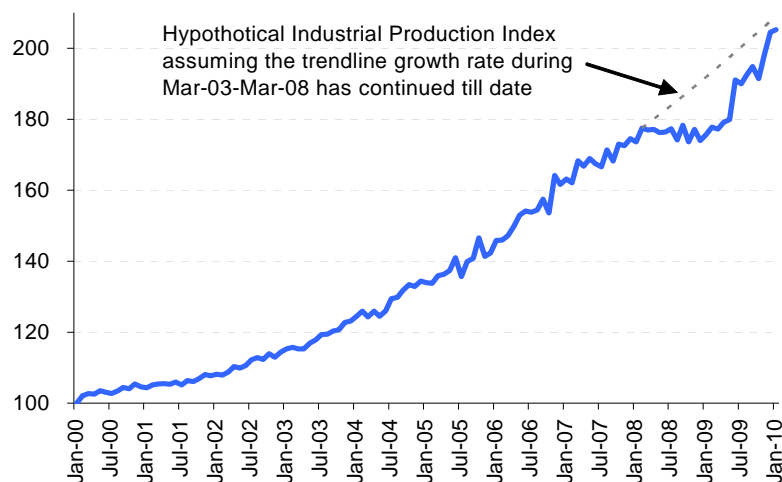
E = Morgan Stanley Research estimates
Source: RBI, CSO, Morgan Stanley Research

- Investments to start recovering in F2011:** We expect the aggregate investment (including household, corporate and government) to recover to 35.6% and further to 36.5% of GDP in F2011 and F2012, respectively, compared to the bottom of 34.4% of GDP in F2010 (our estimates). We expect private corporate capex to lead overall investment growth. Private corporate sector capex is estimated to increase to 13.4% of GDP in F2011 and further to 14.2% of GDP in F2012 compared with the trough of 12.5% of GDP in F2010 (our estimates).
- Capacity utilization is rising fast:** Private corporate capex to GDP is estimated to decline to 12.5% as of F2010 from 16.1% in F2008. However, a V-shaped recovery in IP growth since June 2009 has meant capacity utilization is rising fast. Hence, we believe that while the corporate sector will commence the investment cycle from quarter ended March 2010, meaningful improvement will likely only be seen in F2011.

III. Watch Out for Inflation Risks and Widening Trade Deficit

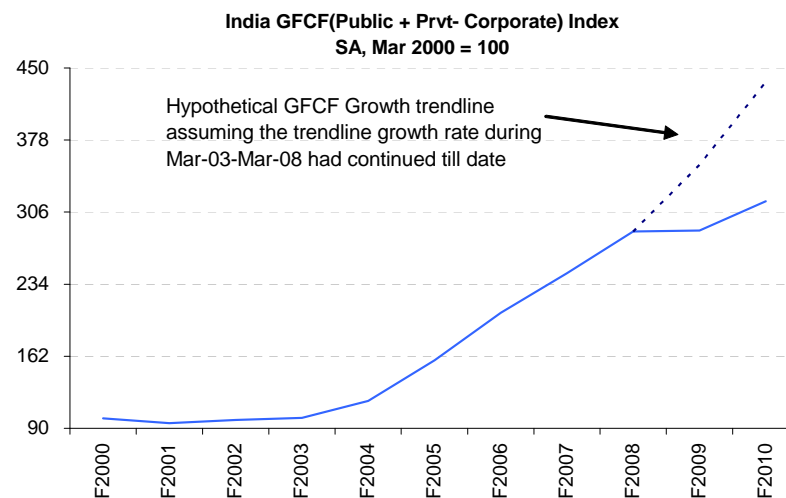
Capacity Utilization Rates Closer to Full

Seasonally Adjusted IIP (January 2000 = 100)



Source: Morgan Stanley Research

Investment Pickup Has Been Slow

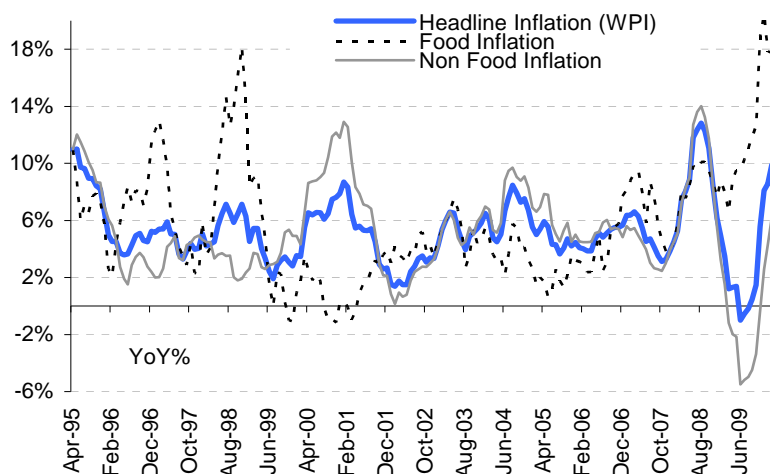


Source: CEIC, Morgan Stanley Research

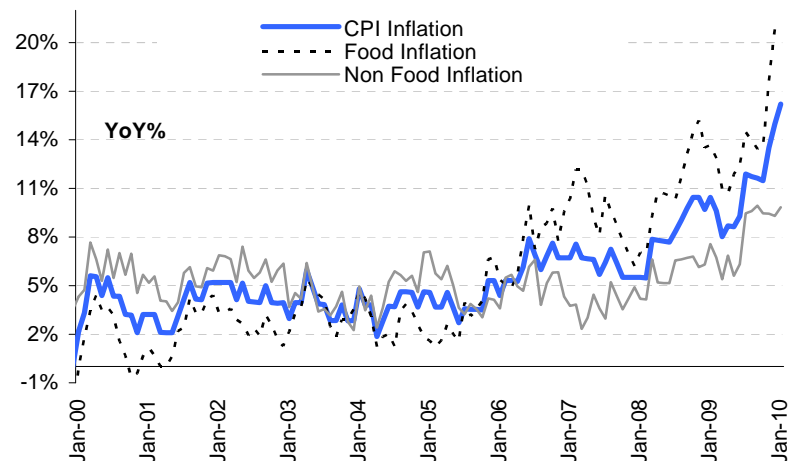
- Capacity utilization rates closer to full:** Unlike in the previous cycle, when the recovery in growth gradually allowed adequate time for the private corporate sector to initiate capex plans, in the current cycle, the recovery in growth has been sharp and the business investment cycle has been hit badly. The transition from low capacity to close to full capacity utilization is occurring in a much shorter period. For instance, in the current cycle the seasonally adjusted IP index has risen 16% cumulatively in 10 months from the trough whereas in the previous cycle, the seasonally adjusted IP index took around 26 months to rise to close to 16% cumulatively from the trough. Moreover, exports recovery will mean even faster improvement in capacity utilization.
- Capacity creation has been slow:** We tried to assess the recovery in IP compared to the hypothetical trend in IP assuming that there was no credit crisis impact. Interestingly, actual IP has now recovered close to its likely levels had there been no credit crisis. However, the capex (private plus public) recovery has been significantly slower in comparison.

Non-Food Inflation Is Spiking Up

Inflation (WPI): Headline, Food and Non-Food



Inflation (CPI): Headline, Food and Non-Food



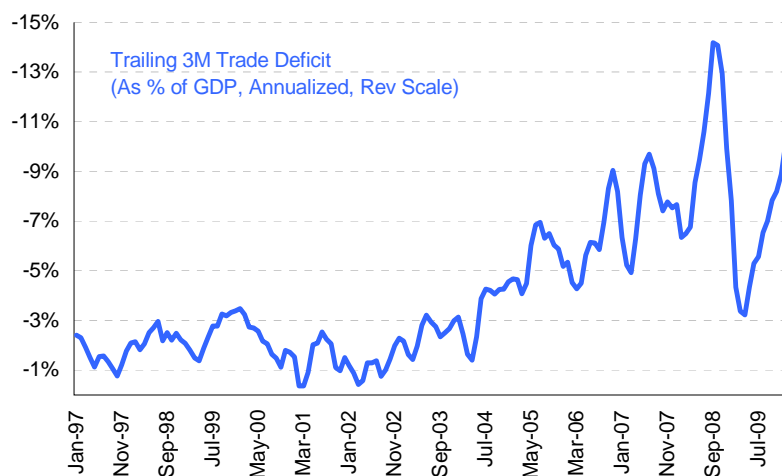
Source: CIEC, Morgan Stanley Research

Source: CEIC, Morgan Stanley Research

- Non-food inflation is spiking up:** The headline Wholesale Price Index (WPI) accelerated to 9.9% YoY in February 2010, after touching a low of -1% YoY in June 2009. While food inflation remains high, the non-food WPI inflation has also started picking up sharply. Non-food inflation accelerated to 6.2% YoY in February 2010, above the RBI's comfort zone of 5%. Similarly, higher food prices have kept CPI-Industrial Workers (CPI-IW) in the 8-16% range over the last 19 months. While we expect food inflation to moderate over the coming months, non-food inflation is likely to remain high on domestic demand pressures. Also corporate pricing power is coming back against a backdrop of tighter capacity utilization and rising global oil and commodity prices. If the Central Bank does not lift policy rates quickly, we believe non-food inflation could emerge as a key risk.

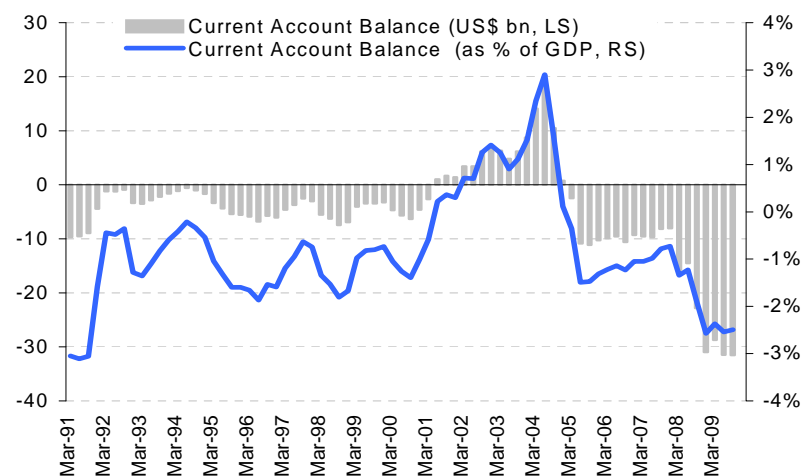
Trade Deficit Is Widening Too

Trade Deficit (3-months Trailing)



Source: CEIC, Morgan Stanley Research

Current Account Balance (4-quarters Trailing)



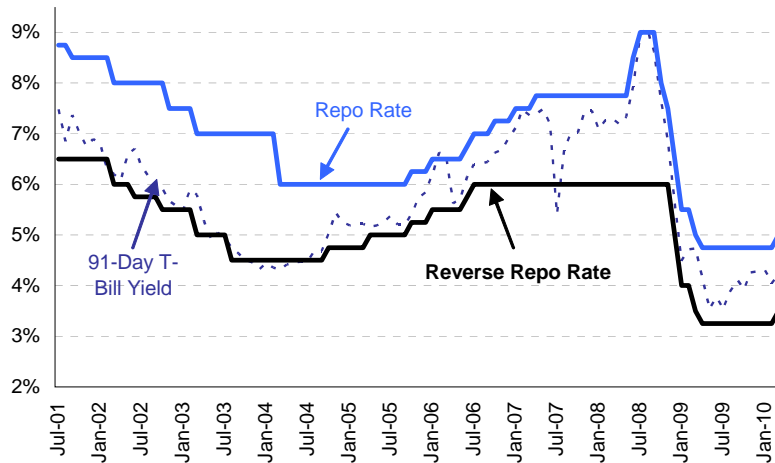
Source: CEIC, Morgan Stanley Research

- Risk of widening in trade deficit is rising:** Over the last four months, while seasonally adjusted exports have risen by a cumulative 6.5%, seasonally adjusted imports have risen by a cumulative 41.5% over the same period. Excluding oil, seasonally adjusted imports have risen at an even faster rate of 51% during the last four months. The three-month trailing trade deficit widened sharply to 10.2% of GDP, annualized as of January 2010, from the trough of 3.2% of GDP, annualized as of April 2009. The peak of 14.2% of GDP came in September 2008, when oil prices had shot up over US\$140/bbl in July 2008 (impact comes with a lag). With oil prices currently at US\$82/bbl, the trade deficit already appears quite high. We believe the underlying current account deficit is already close to 2.5% of GDP. Any further widening in the trade deficit could put the current account deficit at vulnerable levels. If the current account deficit widens to 3.5-4.5% of GDP, risk of currency weakness will increase significantly. Any decline in capital inflows or sharp rise in oil above US\$100/bbl will cause exchange rate depreciation – only adding to inflation pressure.

IV. More Policy Rate Hikes Coming

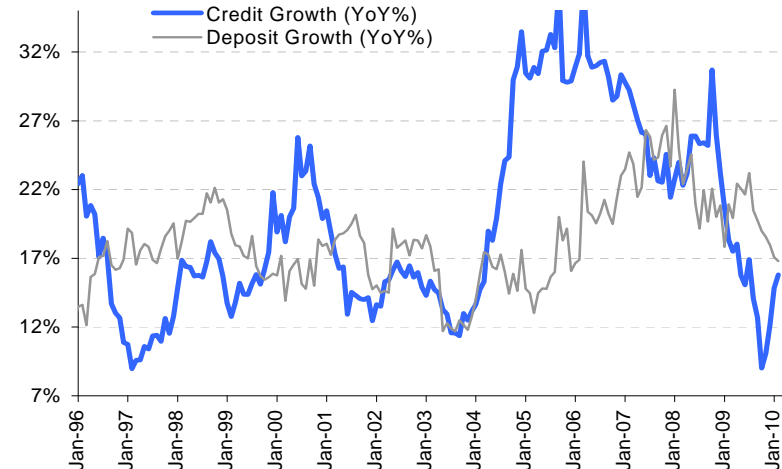
Market is Leading the RBI

Short-term Policy Rates and 91-day T-bill Yields



Source: RBI, Bloomberg, CEIC, Morgan Stanley Research

Credit & Deposit Growth (YoY %)



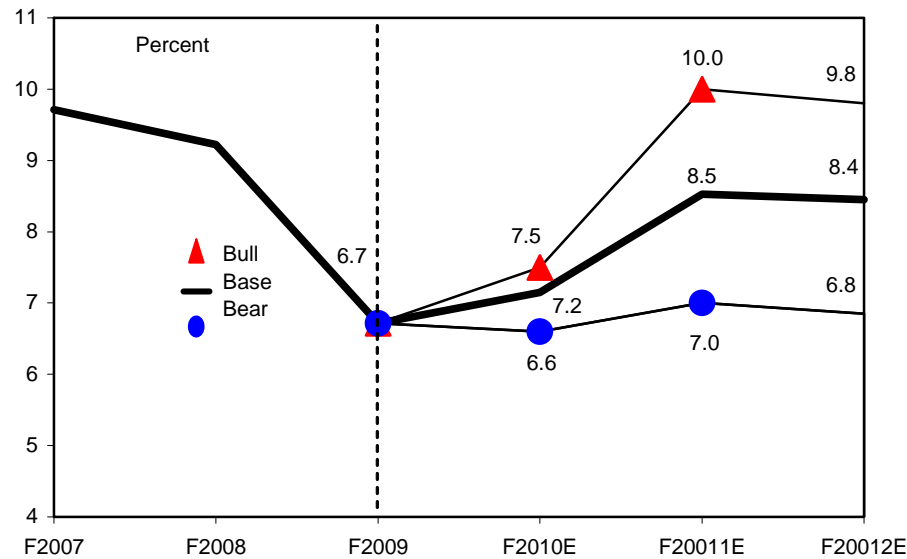
Source: RBI, Morgan Stanley Research

- **RBI lifts short-term rates:** The RBI recently announced an inter-meeting 25bp hike in the repo rate (the rate at which RBI infuses liquidity) and reverse repo (the rate at which RBI absorbs liquidity) rate to 5% and 3.5%, respectively.
- **More policy rate hikes coming:** We expect the RBI to maintain this tightening path, lifting policy rates by another 25bp on April 20, when it is scheduled to meet next. We maintain our estimate of a cumulative repo rate hike of 100bp in 2010. We expect 91-day T-bill, which represents market-oriented short-term rates, to rise by a cumulative of 125-150bp in 2010.

V. Upside and Downside Risks to Our Estimates

Key Risk Factors: Global Growth and Pace of Structural Reforms

India's Real GDP Growth – Bull-, Base-, and Bear-case Scenario



E = Morgan Stanley Research estimates; Source: Morgan Stanley Research

- Bull-Bear Scenarios:** We believe there are two key factors that will influence India's growth outlook in F2011 and F2012. The most important amongst them will be the global growth trend. This will be reflected in global risk appetite and capital inflows in the country, as well as external demand. Second, we believe the pace of structural reforms from the government can also swing the investment growth outlook. In our base case, we expect F2011 and F2012 GDP growth of 8.5% and 8.4%, respectively. The upside and downside risks to India's GDP growth estimates will likely depend on the influence of these two factors. Based on this framework, we see bull-case scenario growth for India at 10% in F2011 and 9.8% in F2012 and the bear case at 7% in F2011 and 6.8% in F2012.

Macro Themes in Focus

Theme I: Budget F2011: It Was All About Fiscal Consolidation

Summary

We have summarized the five key themes to track in terms of the potential policy actions.

- **Theme #1 Fiscal Consolidation – Near Term:** The government took the first step toward reducing the deficit to more sustainable levels in the February 2010 budget. For F2011, the government announced a fiscal deficit target of 5.5% of GDP. This compares with 6.7% of GDP registered in F2010 (revised estimates). Hence, the combined deficit, excluding off budget items, stood at 8.1% of GDP in F2011 compared with 9.8% of GDP in F2010.
- **Theme #2 Fiscal Consolidation – Medium Term:** The government has also accepted in principle the recommendation by the 13th Finance Commission for a fiscal roadmap for fiscal deficit (FD) and revenue deficit (RD) for the period F2010-15. In line with the commission's recommendations, the budget includes the following medium-term fiscal consolidation plan: (a) The government has committed to cut the fiscal deficit to 4.8% of GDP in F2012 and further to 4.1% of GDP in F2013. (b) This will enable the government to reduce the public debt to GDP to 48% of GDP by March 2013 from an estimated 51.5% in March 2010.
- **Theme #3 Divestment Program Gets Boost:** The budget has confirmed that the government will initiate a meaningful divestment program targeting the collection proceeds. The budget targets to raise Rs400 billion (US\$8.7 billion, 0.6% of GDP) from divestments in F2011 compared with an estimated Rs250 billion (US\$5.4 billion, 0.4% of GDP) in F2010.
- **Themes #4 Tax Reforms:** The budget confirmed government plans to implement the consolidated nationwide goods and services tax (GST) system from April 1, 2011. The budget also confirmed a plan to implement the direct tax reforms as recommended in the direct reforms code (DTC) in F2012. These reforms aim to broaden the tax base and will minimize exemptions.
- **Theme #5 Social/Rural Sector Push:** Higher allocation toward the social and rural sectors has been the key feature of the UPA government over the last few years. The government gave a big rural sector push under the National Rural Employment Guarantee Act (NREGA) with spending under this scheme increased to US\$8.7 billion (0.6% of GDP, budget estimate) in F2011 from US\$8.1 billion in F2010. Similarly, the spending under Bharat Nirman programme was increased to US\$10.4 billion (0.7% of GDP, budget estimate) in F2011 from US\$9.4 billion in F2010.

Theme I: Budget F2011: It Was All About Fiscal Consolidation

Debating the Numbers

- **Oil subsidy figures:** After the recent hike in excise duty on crude and petroleum products, our estimates indicate that the current weighted average realization of oil products in the domestic market implies an average crude oil price of US\$60/bbl (WTI) versus the current international market price of US\$81/bbl. The budget appears to have assumed implementation of Kirit Parikh committee recommendations. The government in the budget has accounted for only Rs149.5bn for subsidy in F2010 (paid Rs120bn in cash to date) and Rs31bn in F2011. We believe that oil subsidy assumptions are unrealistic.
- **SOE divestment collections:** The budget targets to raise Rs400 billion (US\$8.7 billion, 0.6% of GDP) from divestments in F2011 compared with an estimated Rs250 billion (US\$5.4 billion, 0.4% of GDP). As per our estimate, the value of the government's stakes in the listed state-owned enterprises is about US\$300 billion. If we include the unlisted companies, the total value would be approximately US\$450 billion. Although the target for F2011 divestments appears high compared to the past trend, we believe this is achievable.
- **3G collections:** The government has earmarked collections from the auction process for 3G as well as Broadband Wireless Access in the budget along with revenue share-based license fee payments totaling Rs498 billion (US\$10.8bn) in F2011. Although the individual breakdown has not been given, our Telecom analyst, Vinay Jaising, estimates that the government expects Rs332 billion from the auction process as against the minimum stipulated amount of Rs192.5 billion. We believe this number could be even higher at Rs415 billion (US\$9bn) due to the scarcity of spectrum.
- **Tax collections:** The budget assumes a rise in gross tax revenue to GDP to 10.8% in F2011 compared with 10.3% in F2010. We believe the tax revenue assumptions are realistic and achievable. Out of the delta of 0.5% of GDP in gross tax revenue in F2011, 0.3% of GDP is expected to come from higher tax rates and balance from buoyancy in growth. Indeed, during normal growth period of F2007 to F2009, when GDP growth averaged 8.6%, gross tax to GDP was 11.3%. In F2011, we estimate GDP growth of 8.5% and hence, we believe the gross tax to GDP of 10.8% assumed in the budget appears conservative to us.
- **Expenditure growth:** The government will cut expenditure to GDP by 0.5ppt in F2011. The budget is targeting expenditure growth (excluding oil subsidy) of 9.8%, which is significantly lower than the estimated nominal GDP growth of 12.2%. This compares with expenditure growth (excluding oil subsidy) of 14.2% in F2010 and 30.4% in F2009. We believe the key reason for lower growth is the absence of any major one-off expenditure items such as government employees' wage hike or fresh stimulus measures in F2011 and therefore the government estimates are not optimistic.

Theme I: Central Government Accounts (as % of GDP)

	F2002	F2008	F2009	F2010RE	F2011BE
I] Revenue Receipts (a+b)	8.8%	11.0%	9.7%	9.4%	9.9%
(a) Tax Revenue (Net to Centre)	5.9%	8.9%	8.0%	7.5%	7.7%
-- Gross tax revenue	8.2%	12.0%	10.9%	10.3%	10.8%
Of Which:					
Indirect Taxes	5.2%	6.0%	5.1%	4.1%	4.7%
-- Customs	1.8%	2.1%	1.8%	1.4%	1.7%
-- Excise	3.2%	2.5%	1.9%	1.7%	1.9%
-- Service Tax	0.1%	1.0%	1.1%	0.9%	1.0%
Direct Tax	3.0%	6.0%	5.7%	6.2%	6.1%
-- Corporation tax	1.6%	3.9%	3.8%	4.1%	4.4%
-- Personal Income tax	1.4%	2.1%	1.9%	2.0%	1.7%
-- Less Share of States	2.3%	3.1%	2.9%	2.7%	3.0%
(b) Non -Tax Revenue	3.0%	2.1%	1.7%	1.8%	2.1%
-- Interest Receipts	1.6%	0.4%	0.4%	0.3%	0.3%
-- Dividends & Profits	0.8%	0.7%	0.7%	0.8%	0.7%
II] Revenue Expenditure	13.2%	12.0%	14.2%	14.7%	13.9%
Of Which:					
-- Interest payments	4.7%	3.5%	3.4%	3.6%	3.6%
-- Non-Interest Revenue Expenditure	8.5%	8.6%	10.8%	11.1%	10.3%
III] Revenue Deficit (II minus I)	4.4%	1.1%	4.5%	5.3%	4.0%
IV] Capital Receipts (ex-borrowings)	0.9%	0.2%	0.1%	0.5%	0.7%
-- Recoveries of Loans	0.7%	0.1%	0.1%	0.1%	0.1%
-- Disinvestment Proceeds	0.2%	0.1%	0.0%	0.4%	0.6%
V] Capital Expenditure	2.7%	1.7%	1.6%	1.9%	2.2%
VI] Total Expenditure	15.9%	13.7%	15.9%	16.6%	16.0%
Of Which:					
-- Plan Expenditure	4.4%	4.1%	4.9%	5.1%	5.4%
-- Non Plan Expenditure	11.5%	9.6%	10.9%	11.5%	10.6%
VII] Fiscal Deficit (VI - I - IV)	6.2%	2.6%	6.0%	6.7%	5.5%
VIII] Primary Deficit (VIII - Interest Payments)	1.5%	-0.9%	2.6%	3.2%	1.9%

RE = Government Revised Estimates, BE= Government Budget Estimate Note: *Disinvestment Proceeds in F2008 has been adjusted for one time transfer by RBI of the proceeds on account of transfer of its stake in SBI to Government of India Source: RBI, Budget Documents, Morgan Stanley Research.

Theme I: Central Government Accounts (Rs billion)

	F2002	F2008	F2009	F2010RE	F2011BE
I] Revenue Receipts (a+b)	2,013	5,419	5,403	5,773	6,822
(a) Tax Revenue (Net to Centre)	1,335	4,395	4,433	4,651	5,341
-- Gross tax revenue	1,871	5,931	6,053	6,331	7,467
Of Which:					
Indirect Taxes	1,183	2,976	2,858	2,530	3,248
-- Customs	403	1,041	999	845	1,150
-- Excise	726	1,236	1,086	1,020	1,320
-- Service Tax	33	513	609	580	680
Direct Tax	688	2,956	3,195	3,801	4,219
-- Corporation tax	366	1,929	2,134	2,551	3,013
-- Personal Income tax	320	1,026	1,060	1,250	1,206
-- Less Share of States	528	1,518	1,602	1,648	2,090
(b) Non -Tax Revenue	678	1,023	969	1,122	1,481
-- Interest Receipts	355	211	207	192	193
-- Dividends & Profits	173	345	386	520	513
II] Revenue Expenditure	3,015	5,944	7,938	9,064	9,587
Of Which:					
-- Interest payments	1,075	1,710	1,922	2,195	2,487
-- Non-Interest Revenue Expenditure	1,940	4,234	6,016	6,869	7,101
III] Revenue Deficit (II minus I)	1,002	526	2,535	3,291	2,765
IV] Capital Receipts (ex-borrowings)	200	96	67	302	451
-- Recoveries of Loans	164	51	61	43	51
-- Disinvestment Proceeds	36	45	6	260	400
V] Capital Expenditure	608	839	902	1,152	1,500
VI] Total Expenditure	3,623	6,784	8,840	10,215	11,087
Of Which:					
-- Plan Expenditure	1,012	2,051	2,752	3,152	3,731
-- Non Plan Expenditure	2,611	4,733	6,087	7,064	7,357
VII] Fiscal Deficit (VI - I - IV)	1,410	1,269	3,370	4,140	3,814
VIII] Primary Deficit (VII - Interest Payments)	335	-441	1,448	1,945	1,327

RE = Government Revised Estimates, BE= Government Budget Estimate Note: *Disinvestment Proceeds in F2008 has been adjusted for one time transfer by RBI of the proceeds on account of transfer of its stake in SBI to Government of India Source: RBI, Budget Documents, Morgan Stanley Research.

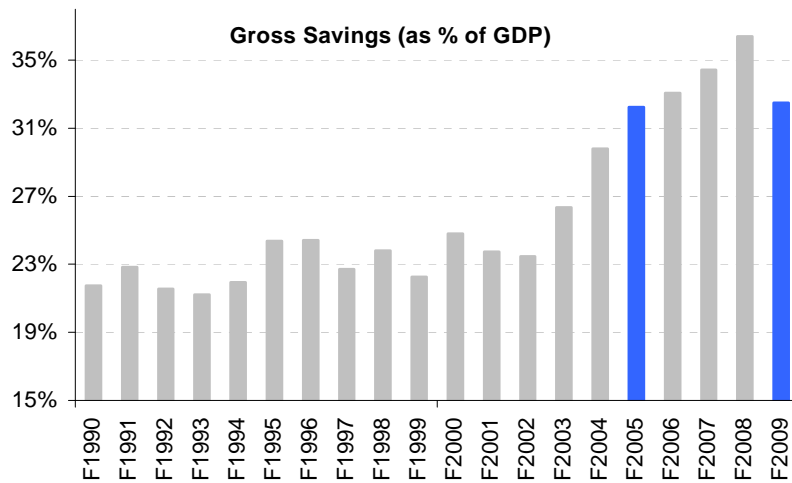
Theme II: Tracking Savings and Investment Trend

Key Points

- **The government recently released final savings and investment data for F2009**, which indicated a significant downturn in the trend. While the savings:GDP ratio declined to 32.5% in F2009 from a peak of 36.4% in F2008, investment:GDP declined to 34.9% from 37.7% in F2008. The drop was largely in line with our expectations.
- **What caused this decline in savings and investments?** The key reason for the fall in savings is the government's aggressive increase in revenue expenditure — subsidies and wage hike. Corporate savings also suffered from the impact of the credit crisis on aggregate demand and profits. The credit crisis, funding constraints, and weak business confidence hit private corporate capex the most.
- **Has savings and investment troughed?** We believe the savings and investment trend will start to recover from the quarter ended March 2010, but we do not expect meaningful improvement to be seen until F2011. Corporate profit growth has already started to recover, and we believe the government's revenue deficit has peaked. Moreover, rising capacity utilization, improved capital market environment, and low bank lending rates should ensure a recovery in capex.
- **Structural story remains intact:** Over the next 12 months, we expect structural forces to take charge again. The interplay of demographics, globalization, and reforms should support a virtuous cycle of faster growth in productive job creation → income growth → savings → investments → higher growth.
- **Pace of reform is key:** India has the advantage of a growing working-age population, but this needs to be converted into a virtuous loop of creating productive jobs for its expanding work force, which is then translated into higher savings, investment and growth. Hence, we believe that the pace of implementation of reforms will be key to ensure improved utilization of the working-age population, a key resource.

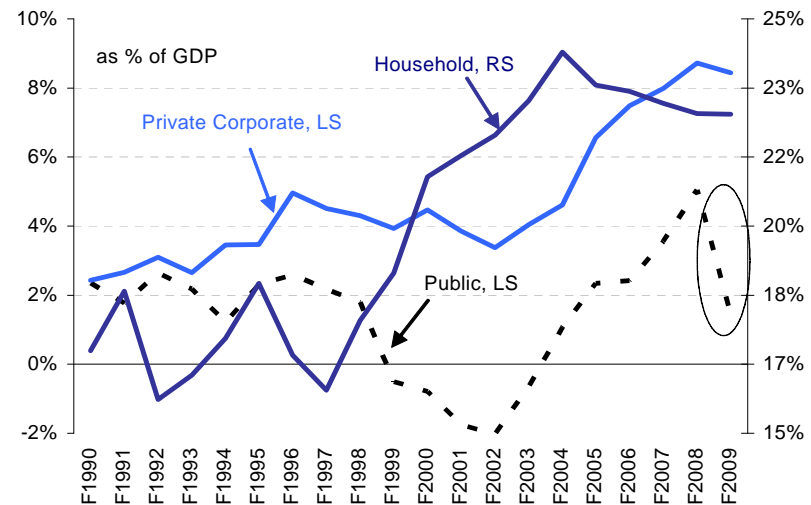
Theme II: Sharp Fall in Savings in F2009

Savings: Back to F2005 Levels



Note: Data post F2005 corresponds to 2004-2005 base year; Source: CSO, CEIC, Morgan Stanley Research

Blame It on Government Dis-savings

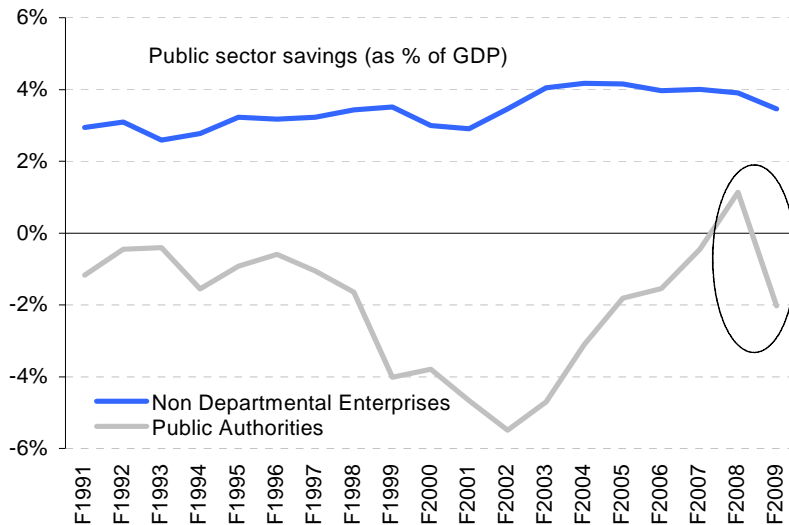


Note: Data post F2005 corresponds to 2004-2005 base year; Source: CSO, CEIC, Morgan Stanley Research

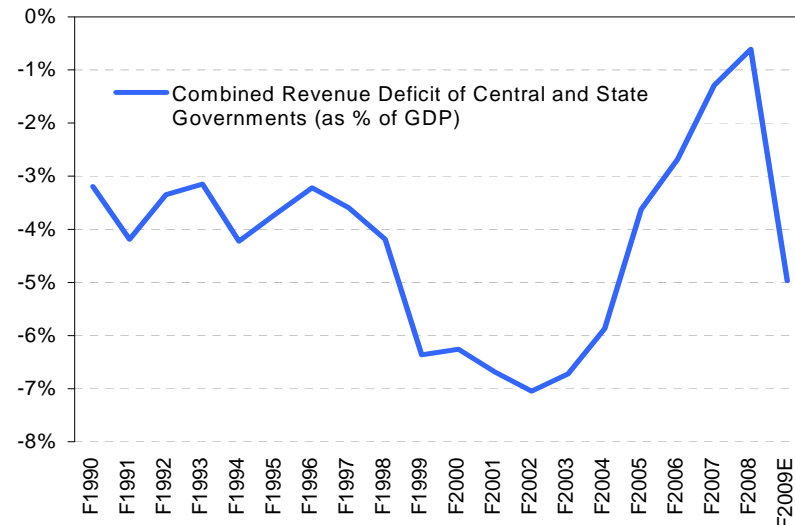
- **Sharp decline in savings in F2009:** Savings to GDP declined to 32.5% in F2009 from a peak of 36.4% in F2008 (revised from 37.7% previously). Looking at the sub-components, the public sector savings declined sharply to only 1.4% of GDP in F2009 from the peak of 5% of GDP in F2008. The household saving ratio remained largely stagnant at 22.6% of GDP in F2009 while private corporate savings declined to 8.4% of GDP in F2009 from 8.7% of GDP in F2008.

Theme II: Government Dis-savings - Key Reason for Overall Decline in Savings

Largely Due to Dis-savings by the Public Authorities



Trend in Consolidated Revenue Deficit (as % of GDP)



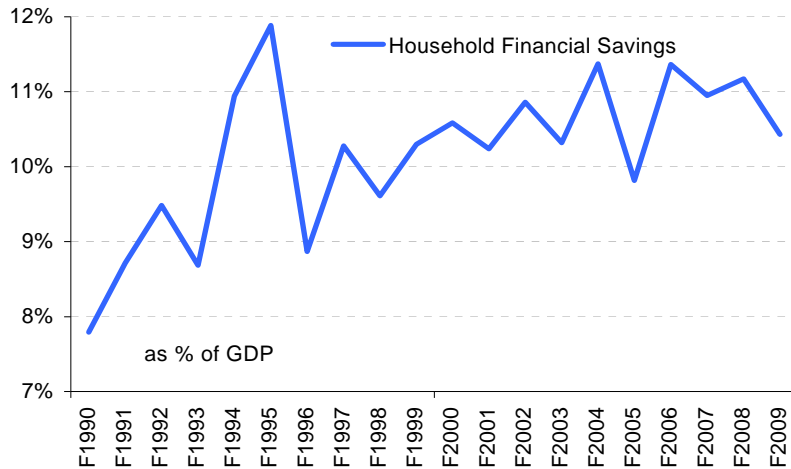
Note: Data post F2005 corresponds to 2004-2005 base year; Source: CSO, CEIC, Morgan Stanley Research

E = Morgan Stanley Research estimates; Source: RBI, CEIC, Morgan Stanley Research

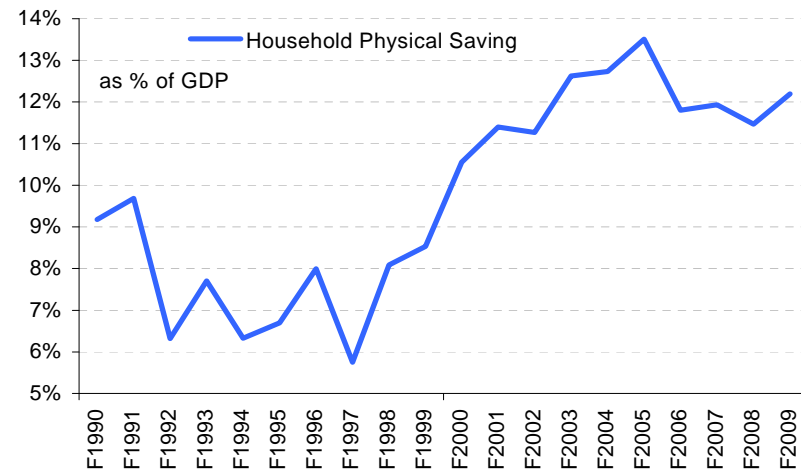
- Government dis-savings is the key reason for overall decline in savings:** Looking at the breakdown of public sector savings, while non-departmental enterprises savings declined slightly to 3.5% of GDP in F2009 from 3.9% of GDP in F2008, public authorities' savings fell sharply to -2% of GDP in F2009 from 1.1% of GDP in F2008. The trend in public authorities savings seems to track revenue deficit. Aggressive increase in revenue expenditure — subsidies and wage hike by the government has resulted in increasing the consolidated revenue deficit to 5% of GDP in F2009, as per our estimates from 0.6% of GDP in F2008.

Theme II: Households Savings Held Steady

While Financial Savings Declined a Bit...



...Physical Savings Inched Up Slightly



Note: Data post F2005 corresponds to 2004-2005 base year; Source: CSO, CEIC, Morgan Stanley Research

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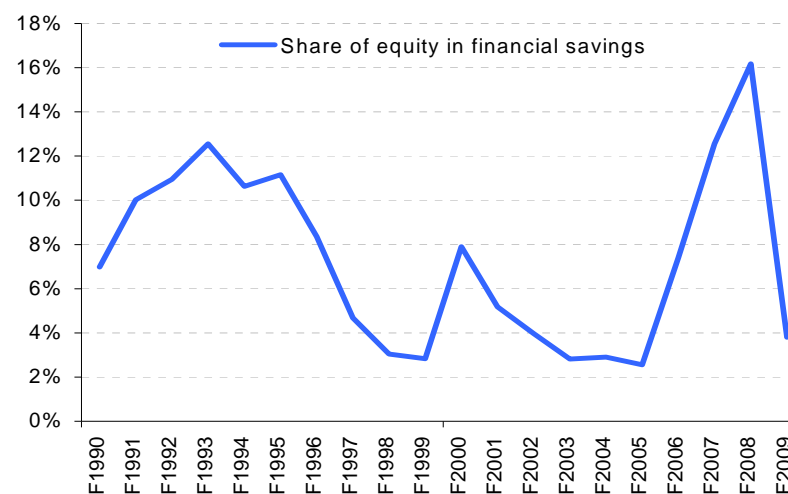
- **Household savings held steady at 22.6% of GDP in F2009:** While household financial savings slowed to 10.4% of GDP in F2009 from 11.2% of GDP in F2008, household savings in physical assets (including gold and property) increased to 12.2% of GDP in F2009 from 11.5% of GDP in F2008.

Theme II: Within Household Savings Share of Financial Savings Had Declined in F2009

Financial Savings (as % of GDP)

	as % of GDP			
	F2006	F2007	F2008	F2009
Financial Assets	16.1%	15.0%	14.3%	13.2%
Currency	1.4%	1.5%	1.6%	1.7%
Deposits	7.6%	7.3%	7.4%	7.6%
Contractual savings	3.9%	4.4%	4.0%	4.0%
Claims on the Govt.	2.4%	0.4%	-0.6%	-0.4%
Equities	0.8%	1.4%	1.8%	0.3%
Financial Liabilities	-5.0%	-4.0%	-3.3%	-2.7%
Trade Debt	0.0%	0.2%	0.2%	0.2%
Financial Liabilities	-4.9%	-4.1%	-3.5%	-3.0%
Net Financial Savings	11.2%	11.1%	11.0%	10.4%
as % of Total Household Savings	48.3%	48.3%	48.5%	46.1%

Share of Equity...



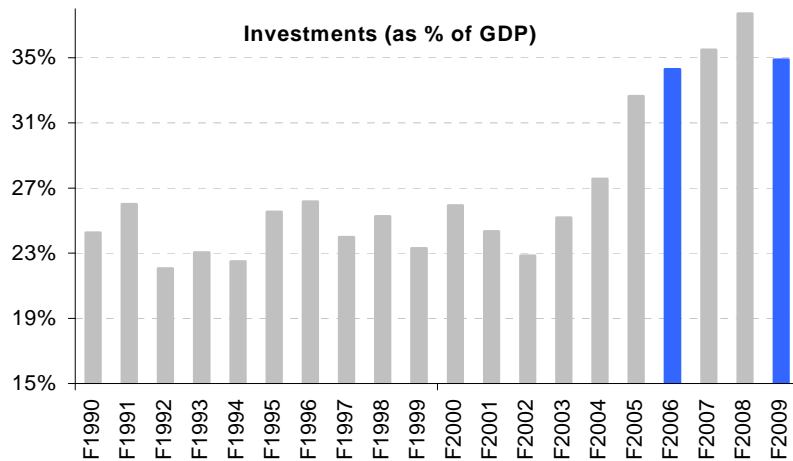
Source: RBI, Morgan Stanley Research

Source: RBI, Morgan Stanley Research

- **Share of financial savings came off slightly:** In total household savings, the share of financial savings declined to 46.1% in F2009 from 48.5% in F2008. Within financial savings, the share of equity collapsed to 3.8% in F2009 from the peak of 16.2% in F2008 reflecting the adverse impact of global credit crisis on equity market.

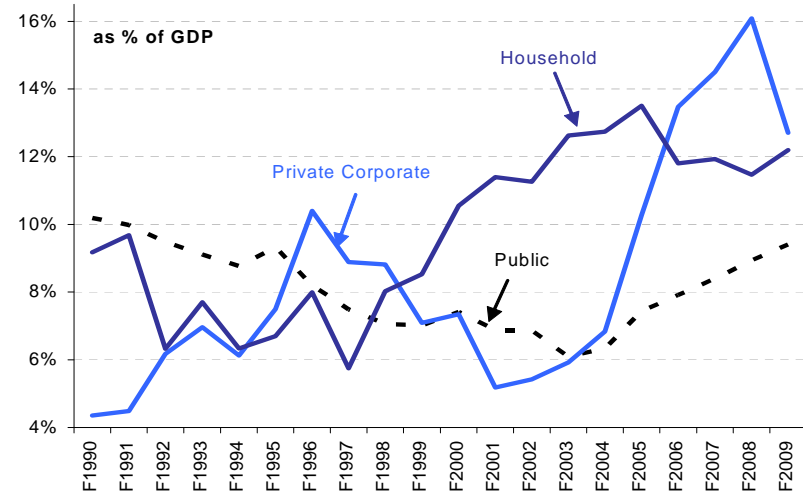
Theme II: Investments to GDP Suffered Due to Credit Crisis

Investment to GDP: Down to F2006 Levels



Note: Data post F2005 corresponds to 2004-2005 base year; Source: CSO, CEIC, Morgan Stanley Research

Private Corporate Capex Took a Big Hit

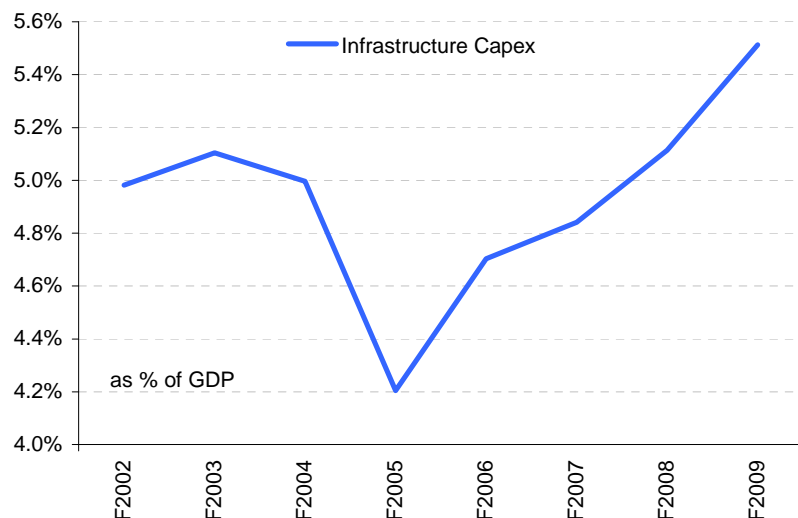


Note: Data post F2005 corresponds to 2004-2005 base year; Source: CSO, CEIC, Morgan Stanley Research

- Capex slowed to F2006 levels:** Aggregate investments (including household, corporate, and government) to GDP declined to 34.9% in F2009 from 37.7% in F2006 (revised downwards from 39.1% earlier). Private corporate capex, which was one of the main drivers of overall investment growth, took the biggest hit. Private corporate sector capex declined to 12.7% of GDP in F2009 from the peak of 16.1% of GDP in F2008. On the other hand, public sector investments increased to 9.4% of GDP in F2009 from 8.9% in F2008. Similarly, household investments increased to 12.2% of GDP in F2009 from 11.5% of GDP in F2008.

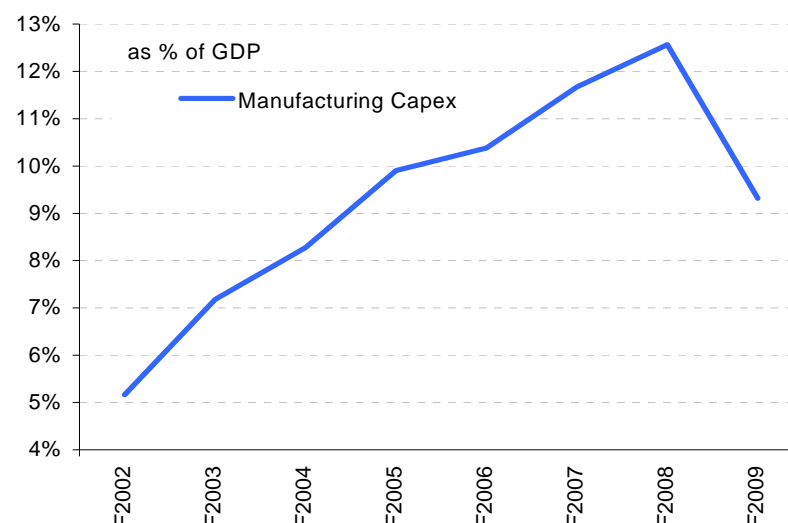
Theme II: Infrastructure Investments Held up but Manufacturing Suffered a Shock

Infrastructure Capex



Note: This data for infrastructure capex corresponds to Electricity, Gas & Water and Transport, Storage and Communication segments of GCF. Data post F2005 corresponds to 2004-2005 base year; Source: CSO, CEIC, Morgan Stanley Research

Manufacturing Capex

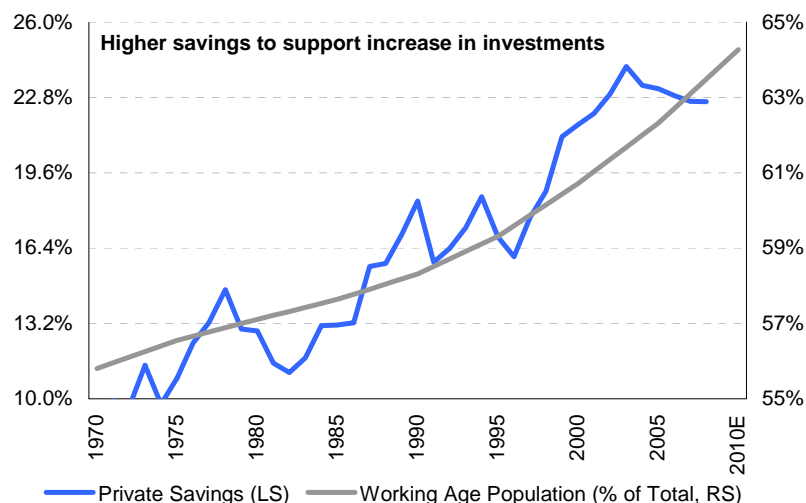


Note: Data post F2005 corresponds to 2004-2005 base year; Source: CSO, CEIC, Morgan Stanley Research

- Infrastructure investment held up:** Infrastructure capex increased to 5.5% of GDP in F2009 from 5.1% of GDP in F2008. The government's continued thrust toward increasing infrastructure spending despite funding constraints in F2009 underpinned this upward momentum.
- Manufacturing capex got hit in F2009:** In the last upcycle, the private corporate sector was far more aggressive in building capacity. The manufacturing capex increased to 12.6% of GDP in F2008 from the trough of 5.2% in F2002. However, weakness in domestic demand, owing to the rise in cost of capital and sharp deterioration in external demand in F2009 resulted in industrial production growth decelerating sharply to 0.7% YoY (average) during F2H09. This dissuaded the corporate sector from initiating any new manufacturing capex plans. As a result, the manufacturing capex declined to 9.3% of GDP in F2009 from 12.6% of GDP in F2008.

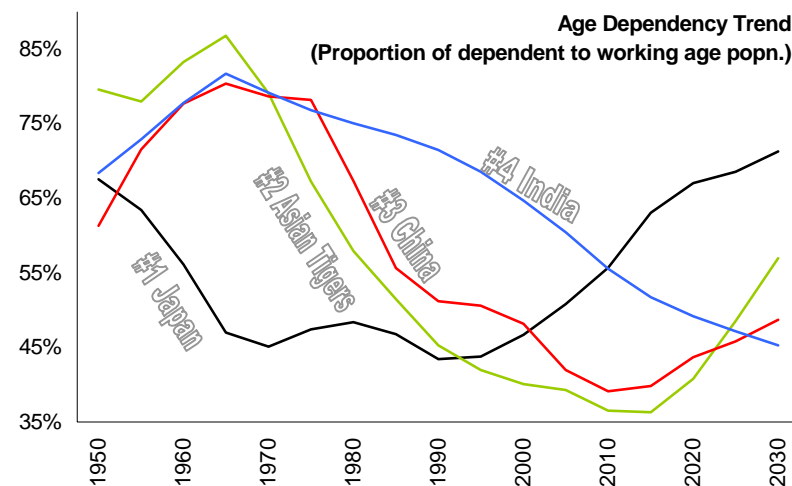
Theme II: Story of Structural Rise in Savings and Investments Still Intact

Private Savings Should Keep Rising, Driven by Improving Share of Working Age Population, ...



E = United Nations Research estimates; Source: CSO, UN, Morgan Stanley Research

India Is Asia's Fourth Demographic Wave

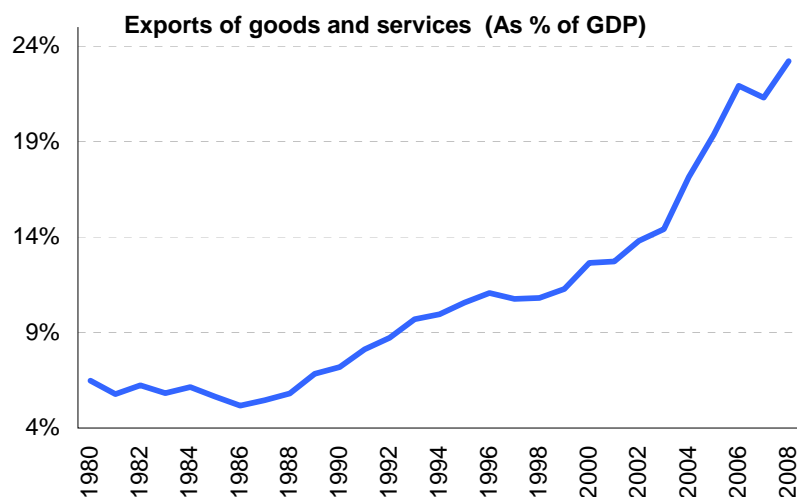


UE = United Nations Research estimates; Source: UN, Morgan Stanley Research

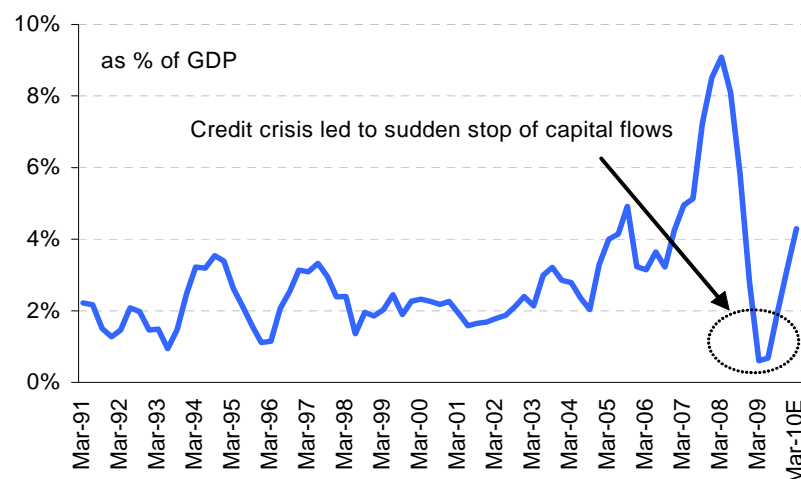
- **Structural story remains intact:** Over the next 12 months, we expect structural forces to take charge again. An interplay of demographics, globalization, and reforms should support a virtuous cycle of faster growth in productive job creation – income growth – savings – investments – higher growth.
- **Positive demographic cycle – a key component in the strong growth trend:** In India, age dependency has fallen (the share of the working population in the total has risen) since the late 1970s to 55.6% in 2010, as per UN estimates, from 71.5% in 1990. The UN expects age dependency in India to fall further to 49.2% by 2020.

Theme II: Story of Structural Rise in Savings and Investments Still Intact

... Higher Exports, and...



... Capital Flows (Trailing Four Quarters, as % of GDP)



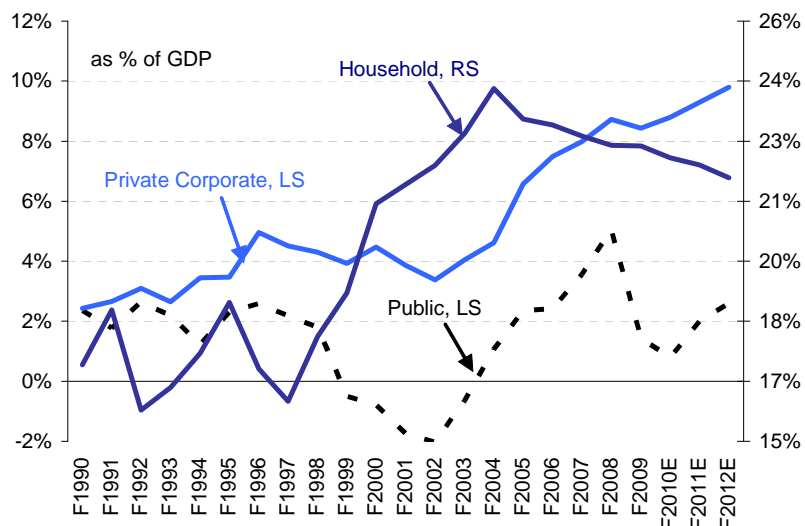
Source: WTO, Morgan Stanley Research

E = Morgan Stanley Research Estimates; Source: CEIC, Morgan Stanley Research

- **Globalization:** A backdrop of strong globalization has enabled growth in job opportunities to accelerate. India's exports rose to 23.2% of GDP as of 2008 from 12.6% as of 2000.
- **Reforms:** Structural reforms have improved the utilization of the working-age population, a key resource. A positive demographic trend may be a necessary condition for strong growth, but it is not a sufficient one. Favorable demographics need to be converted into a virtuous cycle. A critical step in this process is the opening up of productive job opportunities through reforms. The pace of such reforms has been gradual but progressive in India.

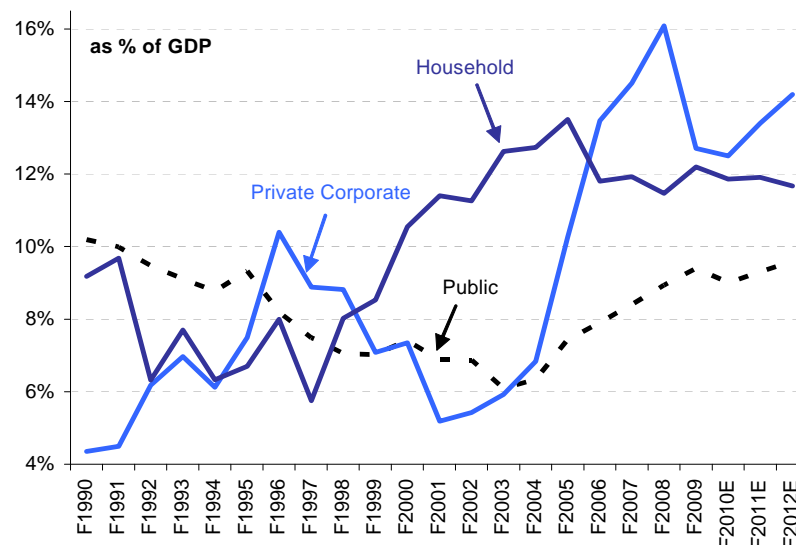
Theme II: Savings and Investments to Start Rising Back from F2011

Driven by Private Corporate and Public Sector Savings



E = Morgan Stanley Research Estimates; Note: Data post F2005 corresponds to 2004-2005 base year; Source: CSO, CEIC, Morgan Stanley Research

Private Corporate Sector Will Drive Overall Investments

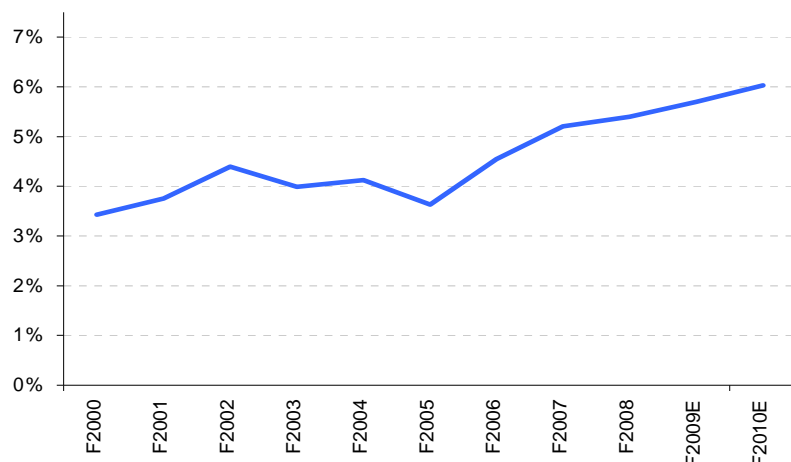


E = Morgan Stanley Research Estimates; Note: Data post F2005 corresponds to 2004-2005 base year; Source: CSO, CEIC, Morgan Stanley Research

- Savings and investments to start rising again in F2011:** We believe that the savings and investment trend will start recovering beginning with the quarter ended March 2010, but meaningful improvement will only be seen in F2011. Corporate profit growth has already started to recover, and we believe the government's revenue deficit has peaked. Moreover, rising capacity utilization, improved capital market environment, and low banks' lending rates should ensure a recovery in capex. We expect domestic savings to recover to 33.4% and further to 34.2% of GDP in F2011 and F2012, respectively, compared to 31.9% of GDP in F2010 (our estimates). Similarly we expect the aggregate investment (including household, corporate, and government) to recover to 35.6% and further to 36.5% of GDP in F2011 and F2012, respectively, compared to the bottom of 34.4% of GDP in F2010 (our estimates). We expect private corporate capex to lead overall investment growth. Private corporate sector capex is estimated to increase to 13.4% of GDP in F2011 and further to 14.2% of GDP in F2012 compared with the trough of 12.5% of GDP in F2010 (our estimates).

Theme III: Infrastructure Spending to Remain Supportive

India: Infrastructure Investment (% of GDP)



India: Projected Infrastructure Spending (US\$ billion)

Sector	F2006	F2007	F2008	F2009E	F2010E
Electricity, Gas and Water	18.5	22.2	27.9	29.4	32.7
Railways	3.5	4.0	5.9	6.3	6.8
Communication	7.4	11.6	17.4	17.3	19.2
Roads	5.4	5.8	7.8	7.6	8.0
Ports	1.3	1.8	1.9	2.1	2.1
Airports	0.5	1.1	1.5	1.7	2.1
Urban Infrastructure	1.6	2.9	3.9	4.7	5.5
Total	38.1	49.3	66.3	69.1	76.5
<i>As % of GDP</i>	<i>4.5%</i>	<i>5.2%</i>	<i>5.4%</i>	<i>5.7%</i>	<i>6.0%</i>

E = Morgan Stanley Research estimates; Source: Morgan Stanley Research

E = Morgan Stanley Research estimates; Source: Morgan Stanley Research

- Acceleration in infrastructure spending:** After steadily rising to 5.7% of GDP in F2009 from the trough of 3.6% in F2005, infrastructure spending remained largely lackluster over the last two years. We expect infrastructure spending to start rising in once again in F2011. Also, with credit markets improving and capital markets normalizing, private infrastructure spending in general should reaccelerate. We expect infrastructure spending to rise to 7.1% in F2012 from an estimated 6% of GDP in F2010.

**Theme III:
 Infrastructure Roads: On the Right Path**

Summary of National Highway Development Program (NHDP)

NHDP Phase	Total (Kms)	Project Details	Completed (Kms)*	Under Implementation (kms)*	Cost (US\$ bn) ¹	Expected Target Completion Date
I (Initiated in 1999)	5846	Golden Quadrilateral - Connecting four key metros	5,756	90	6.7	Dec-10
II (Initiated in 1999)	7300	Golden Corridors - Connecting four key metros via East-West and North-South roads	4,715	1,831	7.6	Dec-10
III A (Initiated in 2005)	4815	Widening and strengthening of highways other than those covered in NHDP I&II	1,293	3,577	4.9	Dec-10
IIIB	7294		-	-	12.1	Dec-13
IV	20000	Two-laning of roads not part of NHDP I,II and III	-	-	5.6	Dec-12
IV A	5000		-	-	1.5	Dec-12
V (Initiated in 2006)	6500	Six laning of high-traffic areas	148	1,083	9.2	Dec-12
VI	1000	Express Ways connecting major commercial and industrial townships	-	-	3.7	Dec-15
VII	700	Improving connectivity of national highways to cities	-	19	3.7	Dec-14

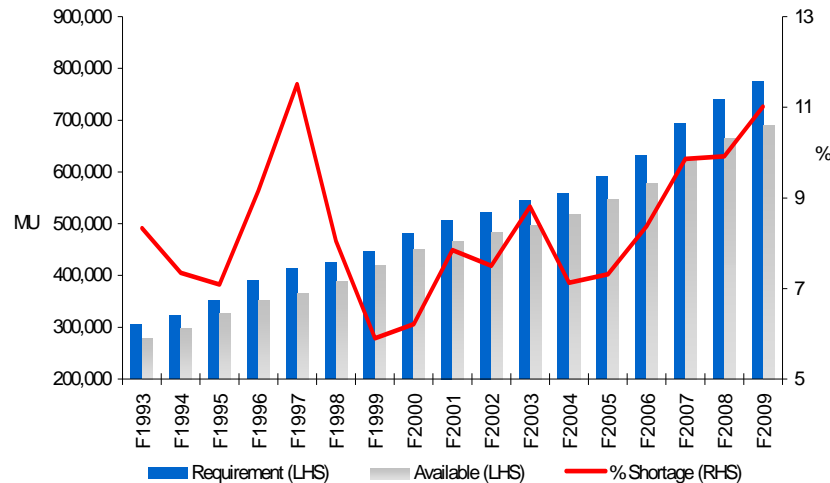
*As of January 2010; ¹ Here assumed USD/INR = 45

Source: Press Information Bureau - India, Ministry of Shipping, Road Transport & Highways, NHAI, Morgan Stanley Research

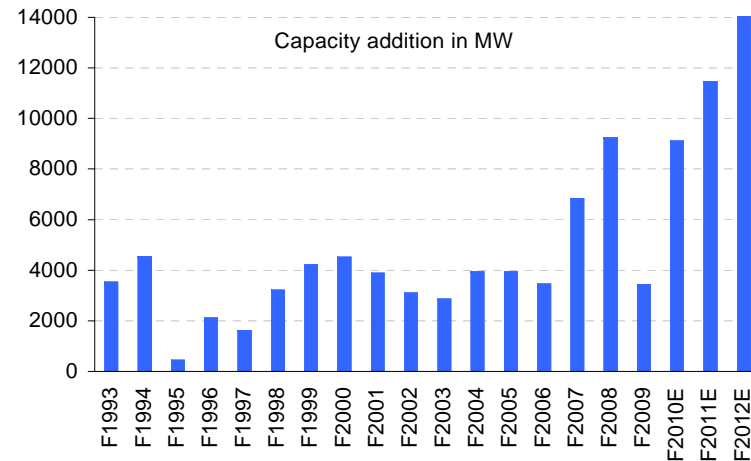
- Road development to gather pace:** We believe the government's effort to increase spending on roads will continue. The Ministry is targeting the building of 7,000 km of roads every year, implying 20 km of roads per day. We expect a meaningful increase in spending in the transportation sector (national highways). The Ministry of Transportation intends to award US\$20bn worth of road contracts on an annual basis over the next three and half years. Our infrastructure analyst, Akshay Soni, believes that the government will be able to issue contracts worth about US\$12-13bn over the next 12 months (the first year) compared with US\$6-8bn worth of contracts issued over the last 12 months.

**Theme III:
Infrastructure Power: Increased Private Participation Raises Hope**

India's Power Shortage



Power Generation Capacity



Source: CEA, Morgan Stanley Research

Source: Morgan Stanley Utilities Team; E = Morgan Stanley Research estimates

- Power generation capacity to increase significantly in the coming years:** India has always had a power deficit – currently, the total shortfall is 8%, and the peak shortfall is 13%. Given the shortfall in electricity generation, as well as strong economic growth, we believe there is significant potential on the generation side. The momentum in implementation of electricity projects is also likely to pick up further. Our Utilities team expects power generation capacity to increase significantly by about 45-50GW in 11th five-year plan compared to 21 GW capacity generated in the 10th five-year plan.

Theme IV: Long-term Growth Outlook: An Interplay of Three Macro Factors

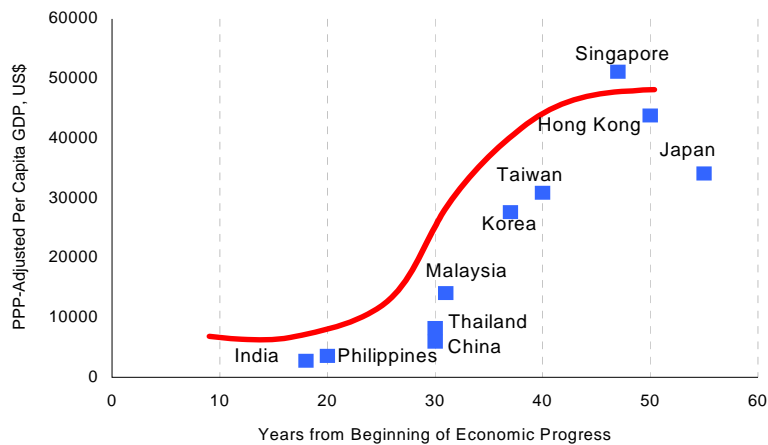
Long-term Growth Outlook: An Interplay of Three Macro Factors

- **Growth Driven by an Interplay of Three Macro Factors:** The interplay of three key macro factors – demographics, reforms, and globalization – justifies a gradual speeding up in India's pace of growth, in our view.
 - **Demographics:** The proportion of dependents in India's population fell from 64.7% in 2000 to 55.6% in 2010 (the working-age population proportion has risen), and is likely to continue to drop to 49.2% by 2010, according to forecasts from the United Nations.
 - **Reforms:** A positive demographic trend may be a necessary condition for strong growth, but it is not a sufficient one. Favorable demographics need to be converted into a virtuous cycle. The government's implementation of gradual but progressive reforms has improved the utilization of the working-age population, a key resource.
 - **Globalization:** A backdrop of strong globalization has enabled growth in job opportunities to accelerate. India's exports rose to 23.2% of GDP as of 2008 from 12.6% as of 2000.

This interplay of demographics, reforms, and globalization is crucial for the virtuous cycle of faster growth in productive job creation – income growth – savings – investments – higher growth.

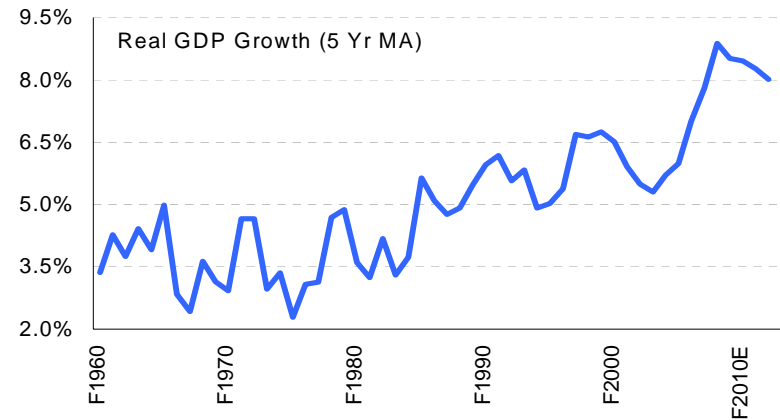
Theme IV: Long-term Growth Outlook: An Interplay of Three Macro Factors

S-curve for Income Growth in Asia



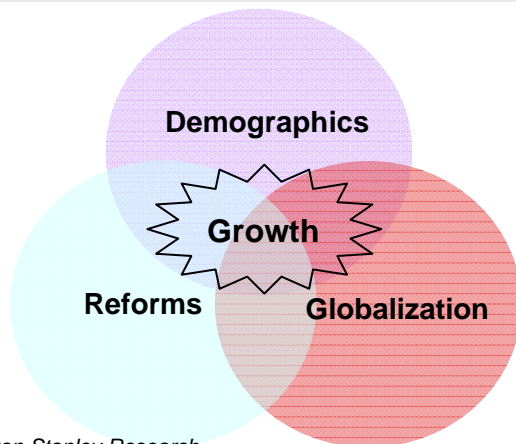
Source: IMF, Morgan Stanley Research

India Is Transitioning to Higher Growth Path



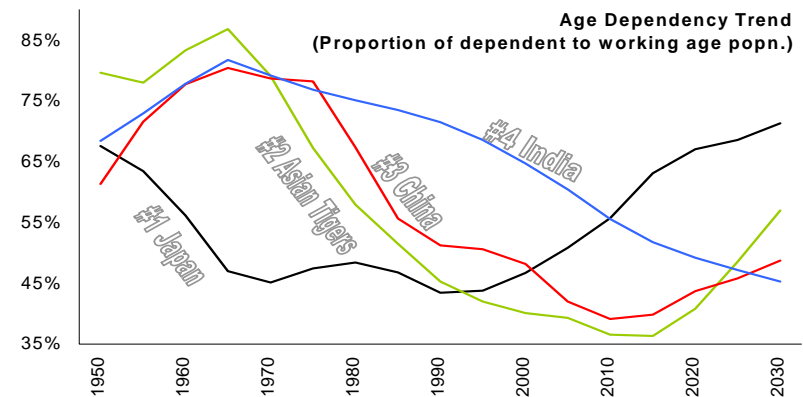
E= Morgan Stanley Research estimates
Source: RBI, CSO, Morgan Stanley Research

Growth Driven by an Interplay of Three Macro Factors



Source: Morgan Stanley Research

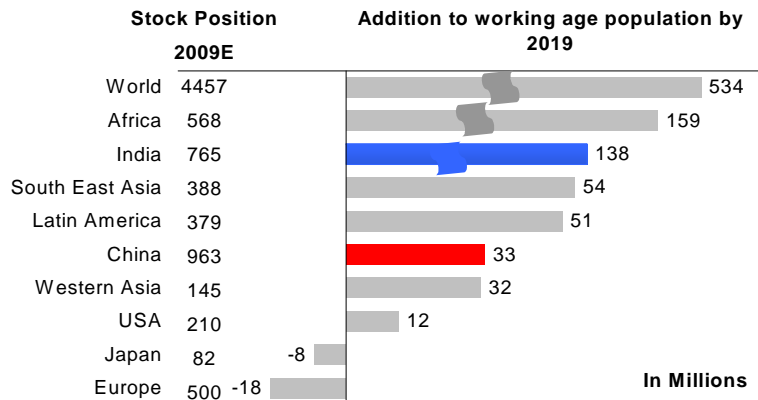
India Is Asia's Fourth Demographic Wave



UE= United Nations Research estimates Source: UN, Morgan Stanley Research

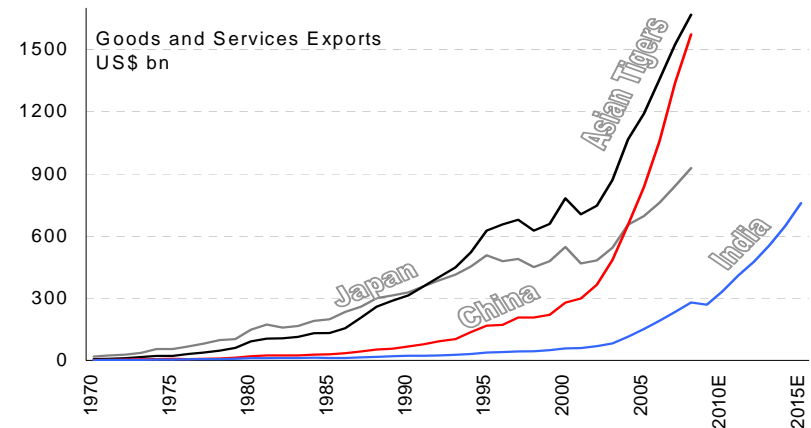
Theme IV: Long-term Growth Outlook: An Interplay of Three Macro Factors

India the Largest Contributor to Growth in the Working Population Over the Next 10 Years



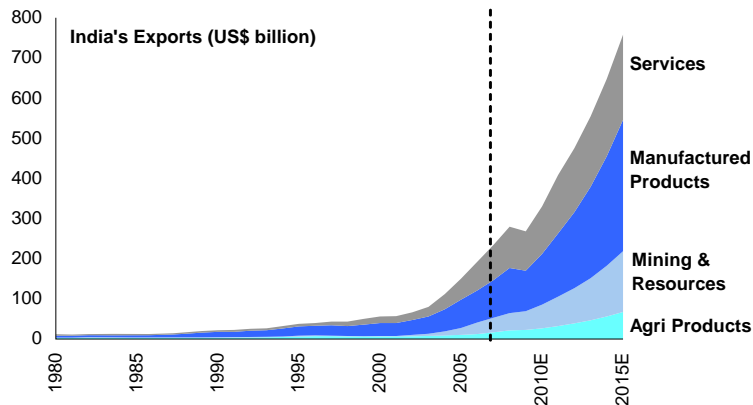
Source: UN, Morgan Stanley Research

Trend in Exports



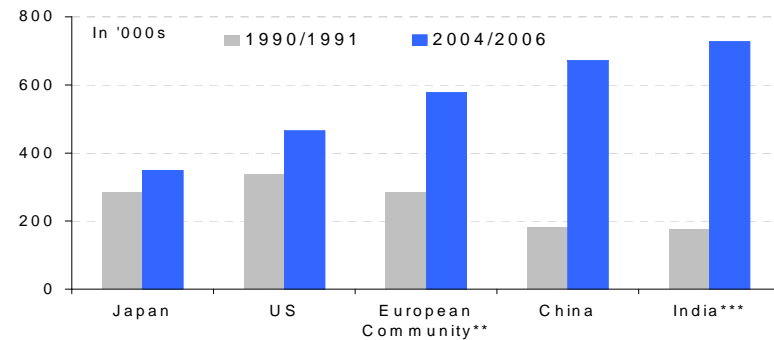
Source: WTO, Morgan Stanley Research; E= Morgan Stanley Research estimates

India Has Taken the Lead in High-end Commercial Services



E = Morgan Stanley Research estimates Source: CSO, Morgan Stanley Research

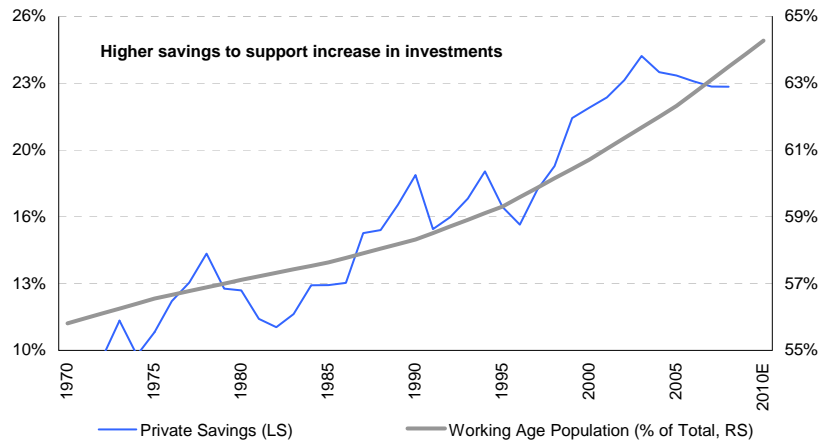
Delta in Global Supply of Science & Engineering Students Graduating in a Year* ('000s)



* Includes people with first university degree in science and engineering; ** Includes Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Spain and United Kingdom; *** Note: India data do not include engineering diploma holders; the data are for the latest year available (i.e., the current data for different countries range over various years from 2004 to 2006.) Source: National Science Foundation, NASSCOM, Morgan Stanley Research

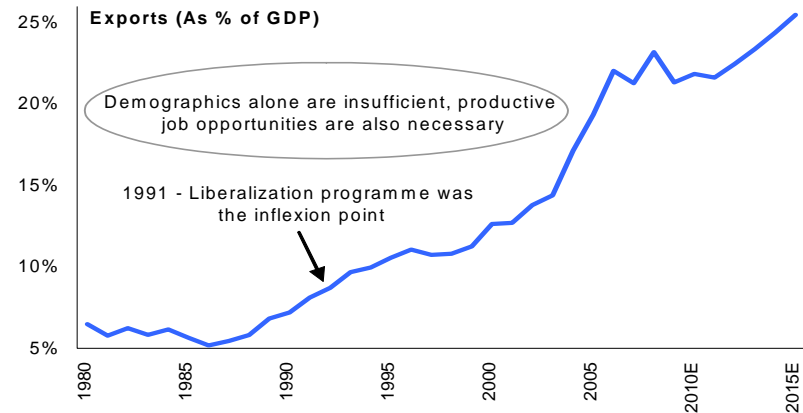
Theme IV: Long-term Growth Outlook: An Interplay of Three Macro Factors

Private Savings Should Keep Rising, Driven by Improving Share of Working Age Population and ...



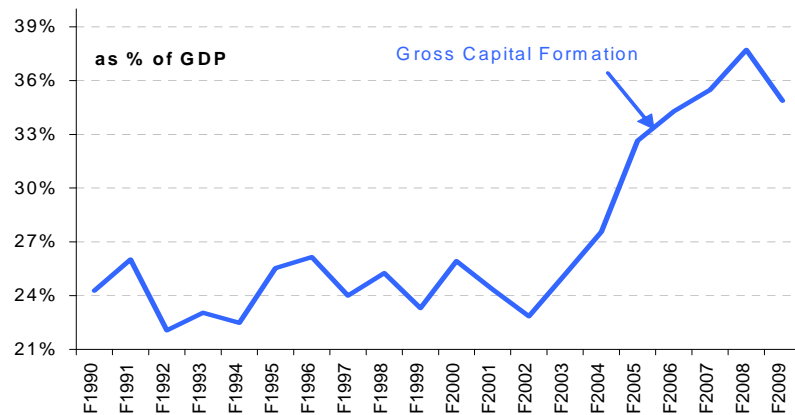
Source: CSO, UN, Morgan Stanley Research E = United Nations Research estimates

... Higher Exports



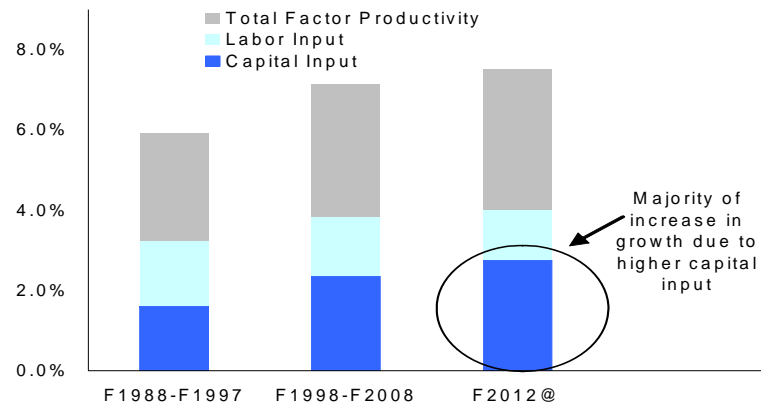
Source: WTO, Morgan Stanley Research; E = Morgan Stanley Research estimates

Rising Investments to GDP ...



Source: CSO, Morgan Stanley Research

... Higher Capital (investments) Input Likely to Be Key Driver to Growth



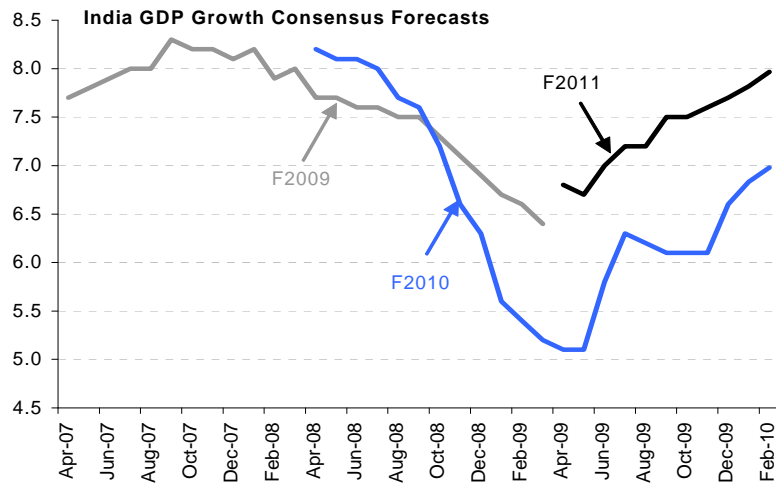
@ Likely scenario

Source: CSO, Morgan Stanley Research

Facts and Figures

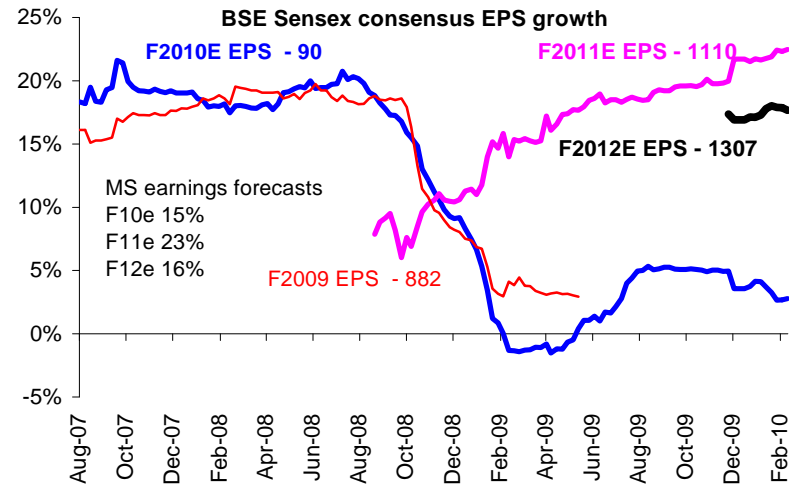
Facts and Figures: Consensus Expectations

Consensus GDP Growth



Source: Consensus Economics Inc, Morgan Stanley Research

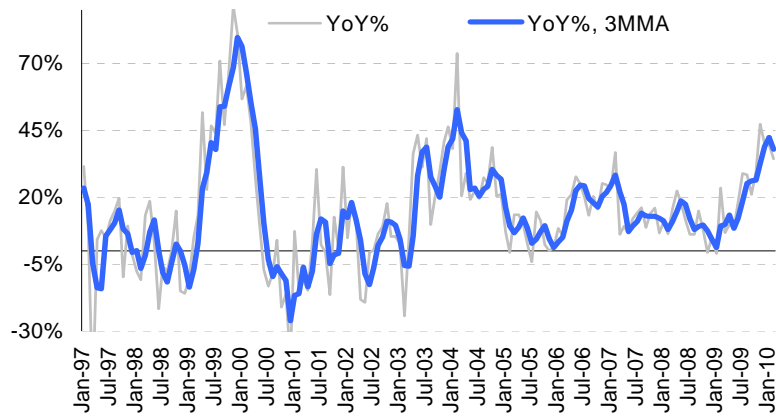
Consensus Earnings Estimates



Source: IBES, Bloomberg, Morgan Stanley Research

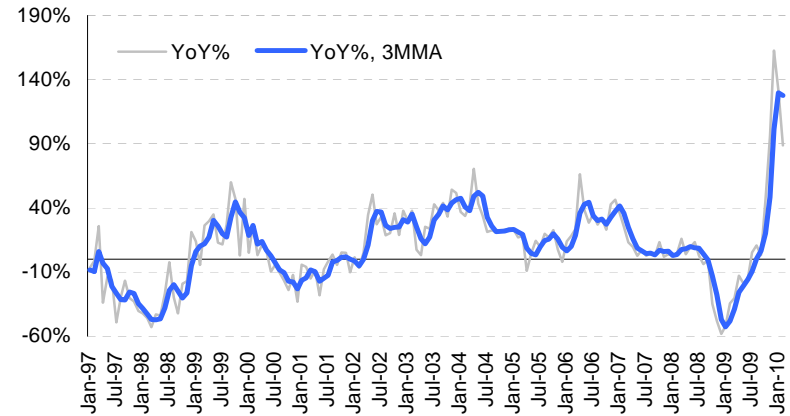
Facts and Figures: Growth Indicators

Passenger Car Sales (YoY% and YoY%, 3MMA)



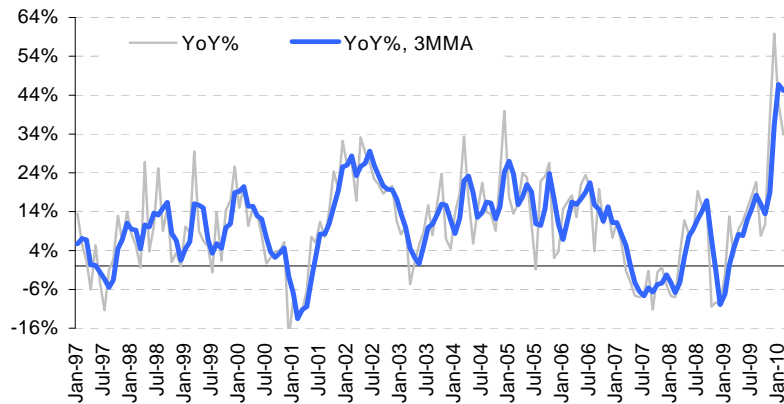
Source: SIAM, Bloomberg, Morgan Stanley Research

Commercial Vehicle Sales (YoY% and YoY%, 3MMA)



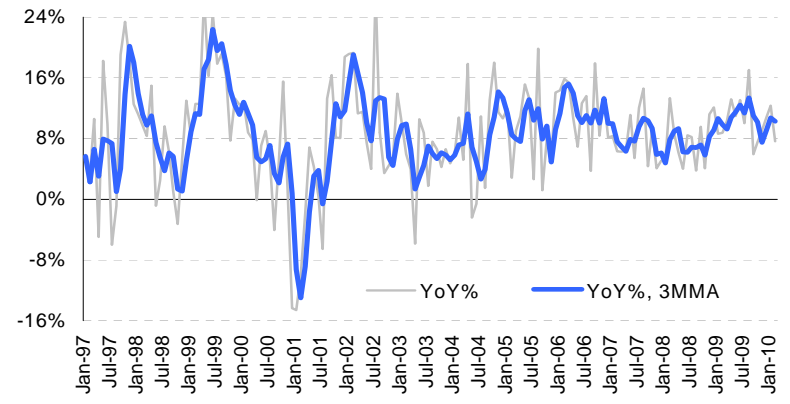
Source: SIAM, Bloomberg, Morgan Stanley Research

Two-wheeler Sales (YoY% and YoY%, 3MMA)



Source: SIAM, Bloomberg, Morgan Stanley Research

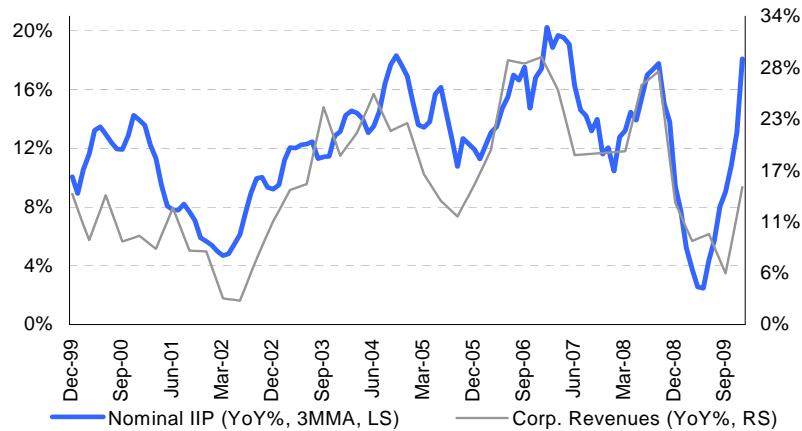
Cement Dispatches Growth (YoY% and YoY%, 3MMA)



Source: CMA, CMIE, Morgan Stanley Research

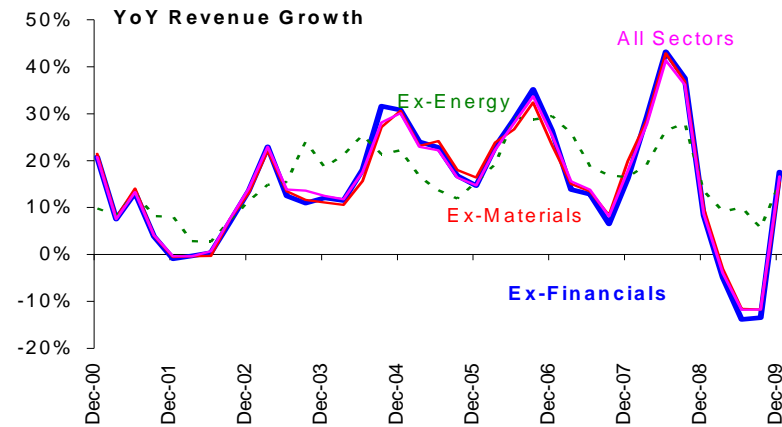
Facts and Figures: Corporate Performance

IP Growth vs. Corporate Rev. Growth (ex-Energy)



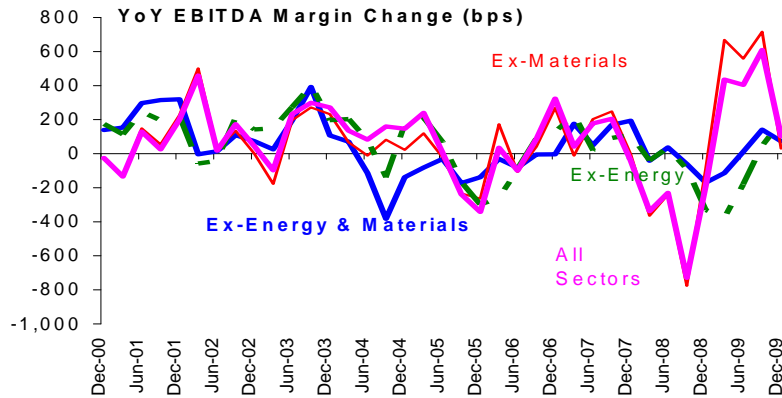
Based on a universe of 94 companies
 Source: CSO, company data, RBI, Morgan Stanley Research

Revenue Growth



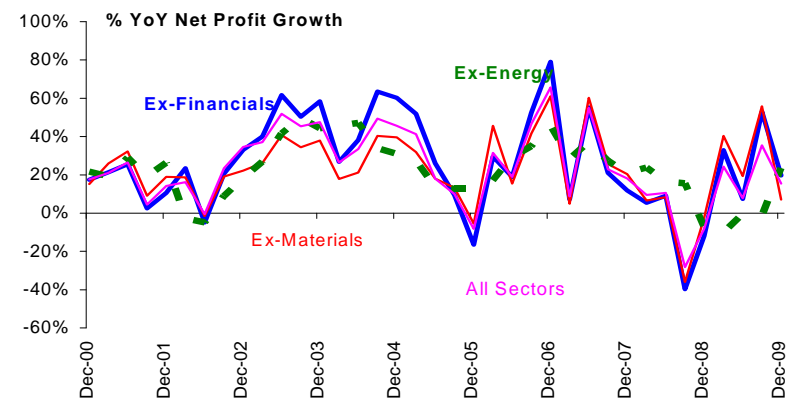
Based on a universe of 94 companies
 Source: Company data, Morgan Stanley Research

EBITDA Margins



Based on a universe of 94 companies
 Source: Company data, Morgan Stanley Research

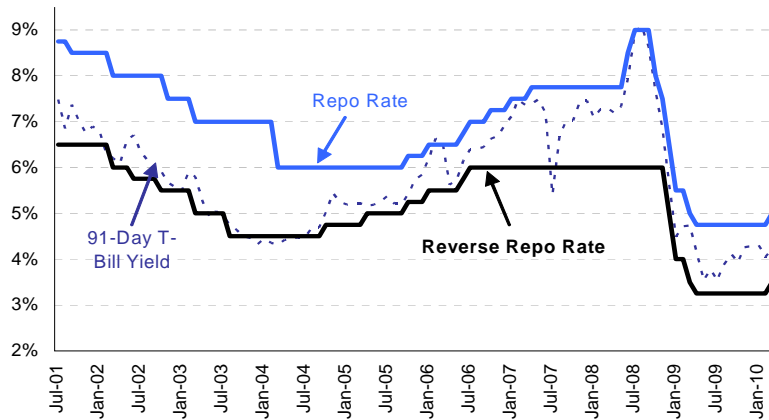
Net Profit Growth



Based on a universe of 94 companies
 Source: Company data, Morgan Stanley Research

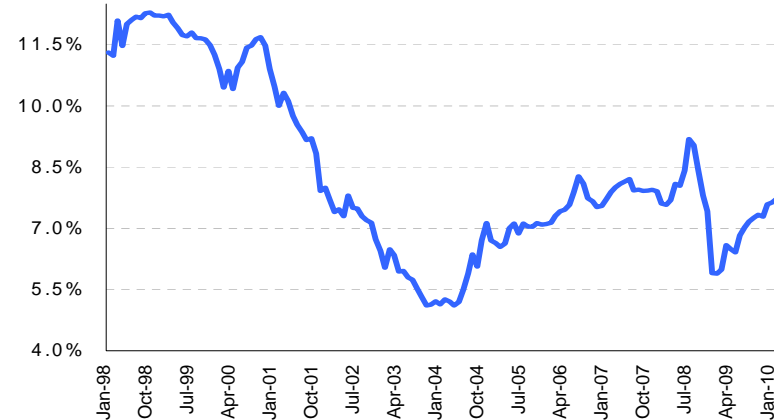
Facts and Figures: Interest Rate Environment

Short-term Policy and Market Rates



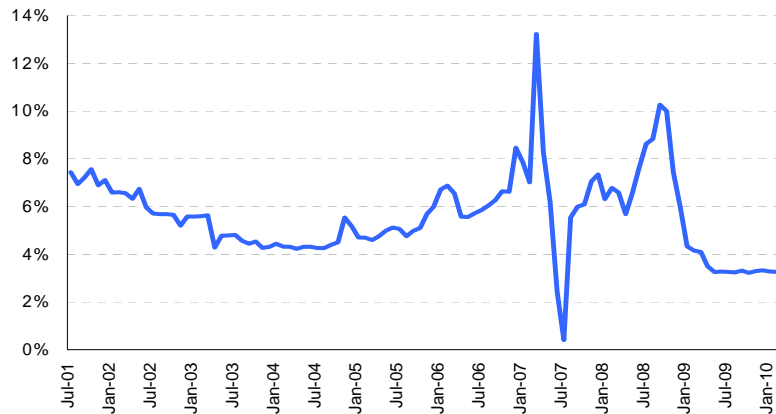
Source: RBI, Bloomberg, CEIC, Morgan Stanley Research

Nominal 10-year Bond Yield



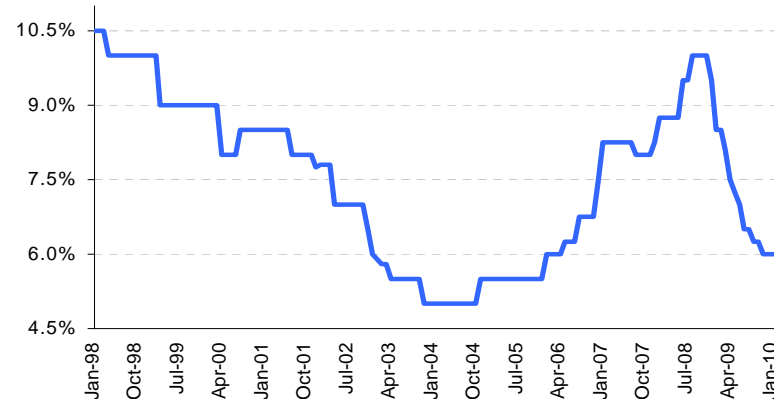
Source: RBI, Bloomberg, Morgan Stanley Research

Call Money Rate



Source: Bloomberg, Morgan Stanley Research

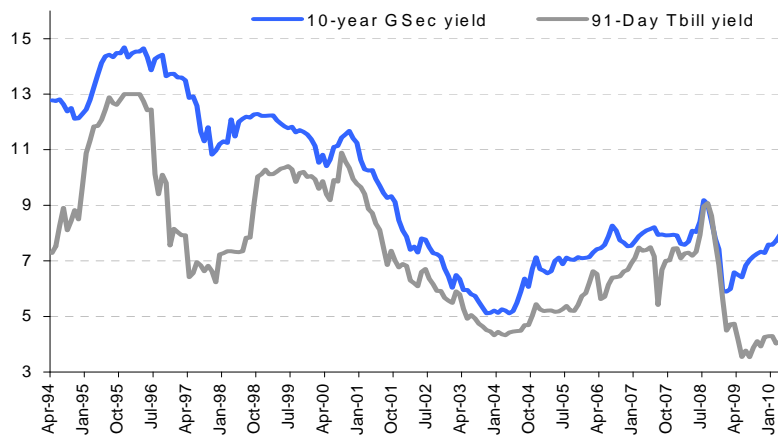
State Bank of India's One-year Bank Deposit Rate



Source: SBI, Morgan Stanley Research

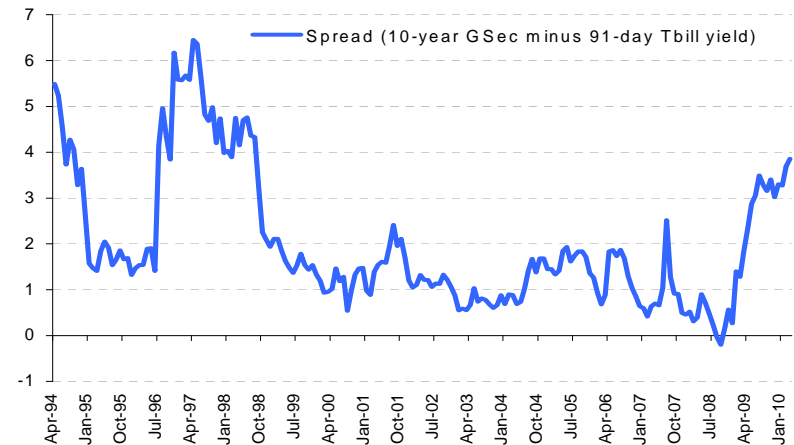
Facts and Figures: Interest Rate Environment

10-year GSec Minus 91-day T-bill Yield



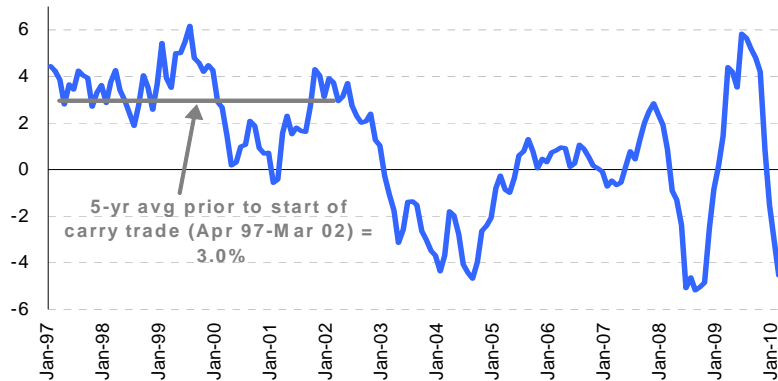
Source: Bloomberg, Morgan Stanley Research

Spread: 10-year GSec Minus 91-day T-bill Yield



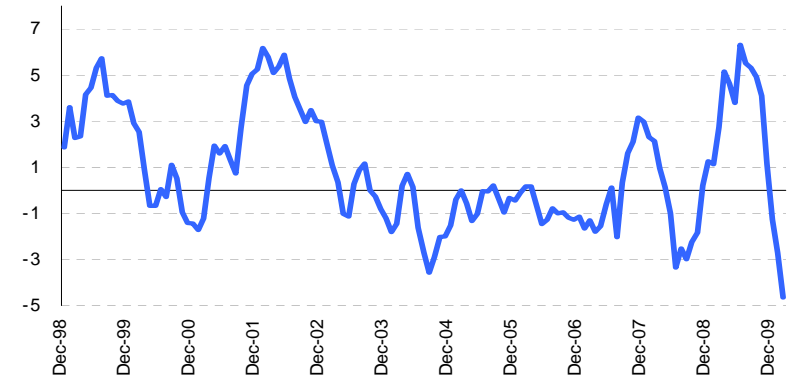
Source: Bloomberg, Morgan Stanley Research

**Real Spread Between Long Rates
(Indian and US 10-year Government Bond)**



Note: Computed using WPI for India and core CPI for US. Source: RBI, CEIC, Bloomberg, Morgan Stanley Research

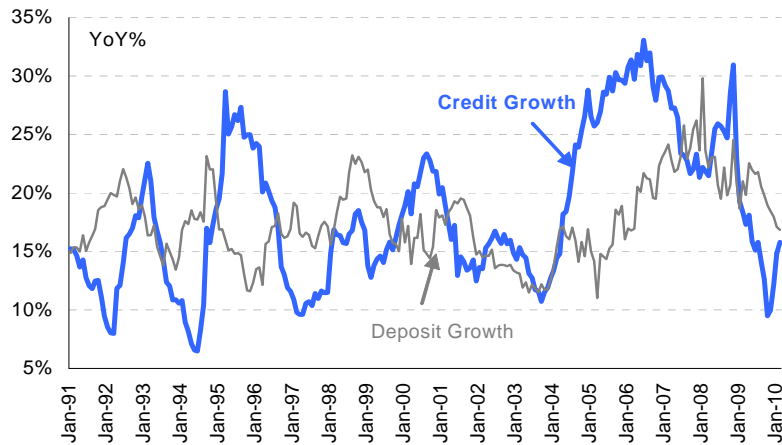
**Real Spread Between Short Rates
(Indian and US 91-day T-bill)**



Note: Computed using WPI for India and core CPI for US. Source: RBI, CEIC, Bloomberg, Morgan Stanley Research

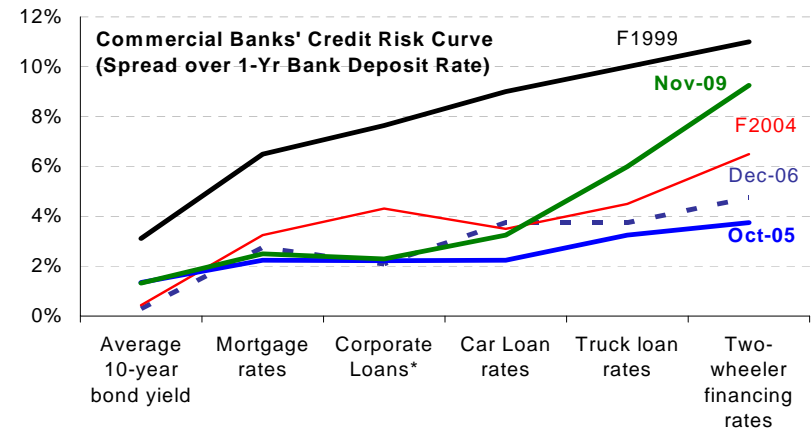
Facts and Figures: Monetary Indicators

Credit and Deposit Growth



Source: RBI, Morgan Stanley Research

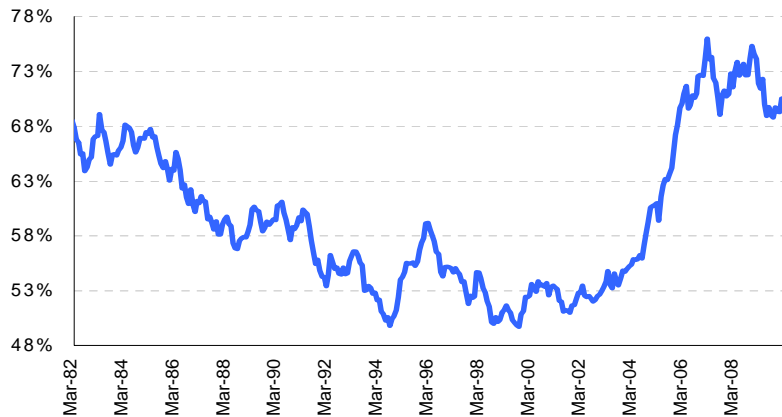
Commercial Banks' Credit Risk Curve (Spread Over One-year Bank Deposit Rate)



*Using yield on an A-rated corporate bond as a proxy.

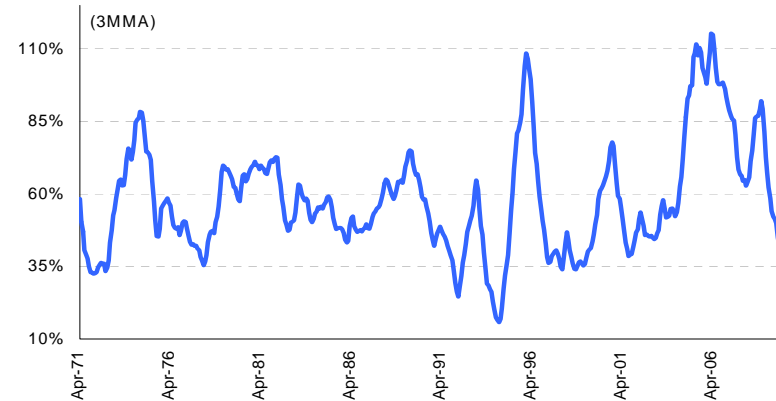
Source: Morgan Stanley Research

Credit-Deposit Ratio



Source: RBI, Morgan Stanley Research

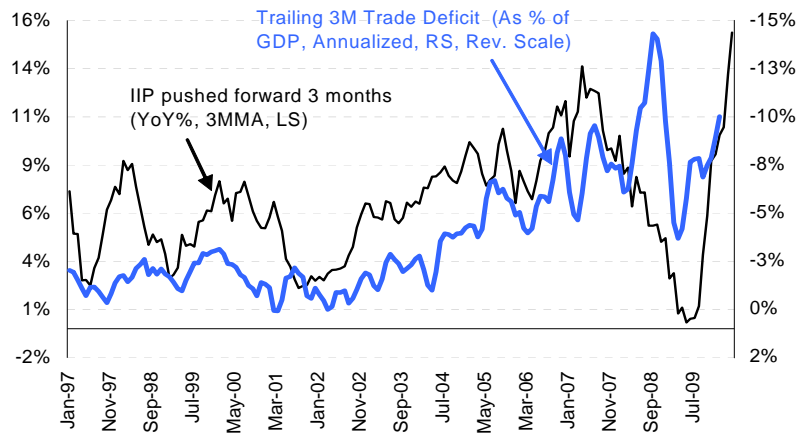
Incremental Credit-Deposit Ratio



Source: RBI, Morgan Stanley Research

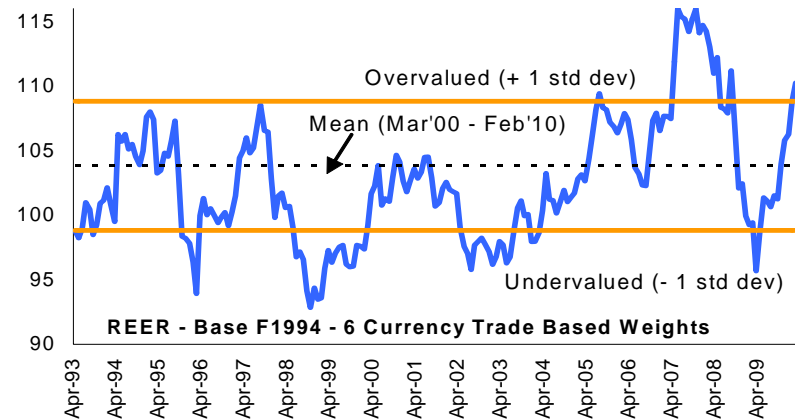
Facts and Figures: Foreign Trade

Trade Deficit vs. IP Growth



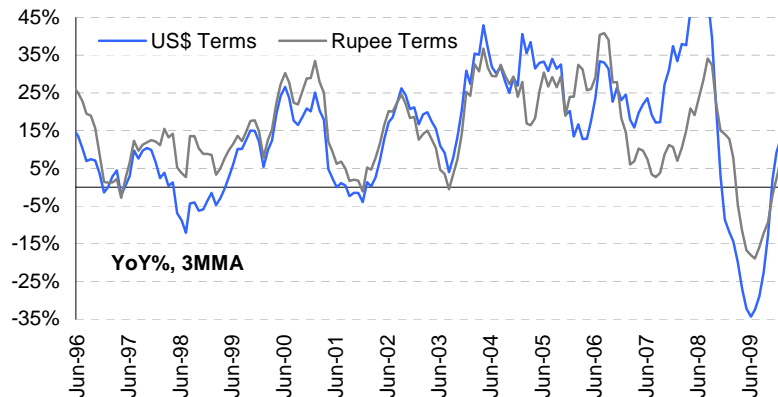
Source: Ministry of Commerce, CSO, RBI, Morgan Stanley Research

Rupee: Real Effective Exchange Rate (REER)



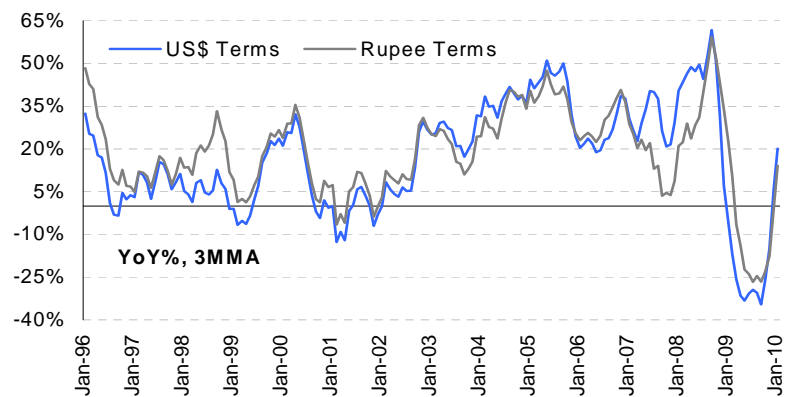
Source: RBI, Morgan Stanley Research

Export Growth (in USD and INR terms)



Source: Ministry of Commerce, Morgan Stanley Research

Import Growth (in USD and INR terms)



Source: Ministry of Commerce, Morgan Stanley Research

Loans as a % of GDP

Loan as a % of GDP: Regional Comparison (December 2008)

	China	India	Indonesia	Vietnam	Thailand	Korea	Malaysia	Taiwan	Hong Kong	Singapore
Total Loans	106%	51%	29%	86%	96%	83%	98%	141%	196%	125%
--Business Loans	87%	38%	19%	83%	70%	45%	48%	82%	144%	61%
--Retail Loans	19%	13%	10%	3%	25%	38%	50%	59%	52%	64%
----Mortgage Loans	10%	8%	2%	0%	17%	23%	26%	45%	39%	50%
----Non-mortgage Loans	9%	5%	7%	3%	8%	15%	24%	14%	13%	14%

Source: Morgan Stanley Research

Data corresponds to Scheduled Commercial Banks only. For the whole banking system in India, loan to GDP ratio stood at 54.6% as of December 2008.

Facts and Figures: Balance of Payments

India's Overall Balance of Payments (US\$ billion), F3Q2007 – F2Q2010 (YE March)

	Quarter-ended											
	Dec-06	Mar-07	Jun-07	Sep-07	Dec-07	Mar-08	Jun-08	Sep-08	Dec-08	Mar-09	Jun-09	Sep-09
A. Current Account	-3604	4223	-4531	-4258	-3510	-3438	-3275	-12576	-11666	-1213	-5992	-12626
-Trade Balance	-16433	-12383	-19747	-21475	-24240	-26005	-25277	-39122	-34048	-20204	-26015	-32202
--Exports	30824	35700	36601	38429	43054	48079	57454	53630	39436	38481	38789	42350
Growth %	20.5%	16.7%	23.4%	17.5%	39.7%	34.7%	57.0%	39.6%	-8.4%	-20.0%	-32.5%	-21.0%
--Imports	47257	48083	56348	59904	67294	74084	82731	92752	73484	58685	64804	74552
Growth %	23.3%	13.5%	20.9%	23.0%	42.4%	54.1%	46.8%	54.8%	9.2%	-20.8%	-21.7%	-19.6%
-Invisibles	12829	16606	15216	17217	20730	22567	22002	26546	22382	18991	20023	19576
--Services	6080	9372	9006	9417	11346	9083	10710	14400	13852	10670	9098	6273
--- Travel	983	1251	182	201	876	832	341	75	979	74	282	126
--- Transportation	-10	203	-573	-468	-245	-215	-713	-710	-528	416	-287	346
--- Software Services	6918	8775	8157	8248	8757	11780	11237	11185	10694	10370	10373	10207
--- Others	-1811	-857	1240	1436	1958	-3314	-155	3850	2707	-190	-1270	-4406
--Transfers	8628	8713	8197	9300	10934	13515	12142	12942	10151	9562	12878	13703
-----Transfers: Private	8430	8663	8208	9254	10861	13384	12102	12988	9964	9512	12939	13757
--Income	-1879	-1479	-1987	-1500	-1550	-31	-850	-796	-1621	-1241	-1953	-400
B. Capital Account	10815	15803	15698	33225	29640	28024	4853	7098	-6114	1409	5956	23612
-Foreign Investment	6467	2788	10416	13167	14847	4897	4757	3590	-5374	494	15294	16793
-- Foreign Direct Investment	2898	941	2874	2266	2120	8633	8963	4902	446	3186	7026	7116
---FDI: in India	9848	5088	7595	4847	7952	14334	11876	8778	6327	8011	9651	11325
---FDI: Abroad	-6950	-4147	-4721	-2581	-5832	-5701	-2913	-3876	-5881	-4825	-2625	-4209
-- Portfolio Investment	3569	1847	7542	10901	12727	-3736	-4206	-1312	-5820	-2692	8268	9677
- Loans	6481	8016	9147	9580	10071	11855	6334	2608	548	-820	-1819	2518
--External Assistance	619	766	241	468	565	840	351	519	992	777	85	487
--Loans: Commercial Borrowings	4049	6316	6944	4217	6240	5208	1480	1687	3777	997	-441	1186
--Short Term Credit to India	1813	934	1962	4895	3266	5807	4503	402	-4221	-2594	-1463	845
-Banking Capital	-3113	1683	-918	6643	207	5827	2696	2275	-4956	-3260	-3365	4423
-Rupee Debt Service	-2	-93	-43	-2	0	-76	-30	-3	0	-68	-23	-1
-Other Capital	982	3409	-2904	3837	4515	5521	-8904	-1372	3668	5063	-4131	-121
Overall Balance of Payments	7505	20452	11201	29236	26739	24991	2234	-4736	-17880	300	117	9416
Errors and Omissions	294	426	34	269	609	405	656	742	-100	104	153	-1570

Source: RBI, Morgan Stanley Research

Facts and Figures: Balance of Payments

Sources of Forex Accretion										
(In US\$ Billion)	F2001	F2002	F2003	Avg in F1998 to F2003	F2004	F2005	F2006	F2007	F2008	F2009
Current Account	-3.6	0.8	6.3	-1.8	14.1	-2.5	-9.9	-9.6	-17.0	-29.8
-Trade	-14.4	-12.7	-10.7	-14.3	-13.7	-33.7	-51.9	-61.8	-91.6	-119.4
-Invisibles	10.8	13.5	17.0	12.0	27.8	31.2	42.0	52.2	74.6	89.6
Capital Account	10.0	10.6	12.4	10.3	17.3	28.6	25.0	47.0	109.2	9.7
Foreign Investment	5.9	6.7	4.2	4.6	13.7	13.0	15.5	14.8	45.0	3.5
--FDI	3.3	4.7	3.2	3.2	2.4	3.7	3.0	7.7	15.4	17.5
--FII	2.6	2.0	0.9	1.7	11.4	9.3	12.5	7.1	29.6	-14.0
Banking Capital	0.8	5.6	8.4	2.2	6.0	3.9	1.4	1.9	11.8	-3.4
- Of which: NRI Deposits	2.3	2.8	3.0	1.8	3.6	-1.0	2.8	4.3	0.2	4.3
Short Term Credit	0.1	-0.9	1.0	0.1	1.4	3.8	1.7	6.6	17.2	-5.8
Ext. Com. Borrowings	3.7	-1.6	-2.3	2.0	-2.9	5.2	2.5	16.1	22.6	8.2
Other capital items	NA	0.8	1.1		-0.9	2.8	3.8	4.3	12.7	7.3
Other Capital (Valuation Change)	-1.9	0.0	4.4	0.0	0.0	2.4	-5.0	10.2	18.4	-37.7
Total Forex Accretion	4.5	11.6	21.3	7.5	31.4	28.6	10.1	47.6	110.5	-57.7

Source: RBI, Morgan Stanley Research

Facts and Figures: Economy & Markets

Current Market Statistics

Current Market Capitalization (US\$ bn)	1355
MSCI Weight (Asia Pacific ex Japan)	8.1
Average Daily Volumes (US\$ bn)	
-- Cash	4.3
-- Derivatives*	14.0
Total Domestic Mutual Fund Assets (US\$ bn)**	165.5
FII Ownership (% of Market Cap)#	17.0%

Savings and Investments

Saving (F2009, % of GDP)	32.9
Gross Capital Formation (F2009, % of GDP)	34.9
Level of Gross FDI (F2009, US \$bn)	35
Gross FDI as % of GDP, F2009	3%

National Income Statistics

Nominal GDP (F2009, US\$ bn)	1212
Population (mn, F2009)	1154
Population Growth (% CAGR, F1995-2009)	1.4%
Per Capita GDP (F2009, US\$)	1050
Nominal US\$ GDP Per Capita Growth (%, F1995-F2009)	8%

Composition of GDP (% , F2009)

Agriculture and allied activities	18.9%
---Agriculture	17.0%
---Mining & Quarrying	1.9%
Industry	23.8%
---Manufacturing	14.6%
---Electricity, gas & water supply	2.0%
---Construction	7.3%
Services	57.3%
---Trade, hotels, transport & communication	28.6%
---Financing, insurance, real est. & bus. services	14.8%
---Community, social & personal services	13.9%

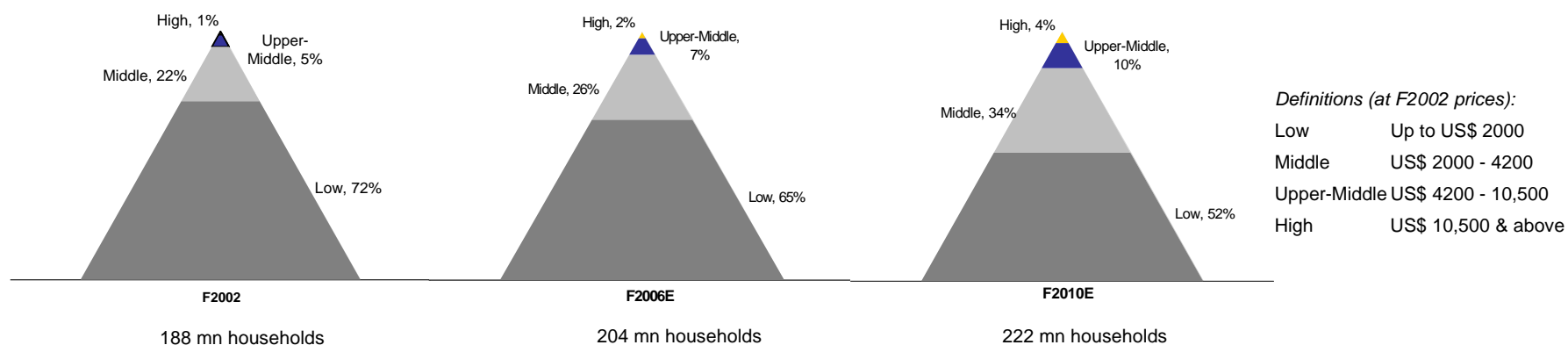
Note: * Only NSE, ** Data as of January 2010

Data as of September 2009, the data is for 1250 NSE listed companies

Source: CSO, RBI, BSE, MSCI, AMFI, company data, Morgan Stanley Research

Facts and Figures: Social

Growing Middle Class (% Share of Households)



Source: NCAER; E= NCAER estimates

Demographic Comparison

	Year	India	China	S Korea	Russia
Per Capita Nominal Income, US\$	2009	1083	3678	17062	8814
Penetration Comparison					
Electricity (Consumption per capita kw h)	2007	704	2179*	7516	6968
Telephone Mainlines (per 1,000 people)	2009	32	238	500	280
Mobile Phones (per 1,000 people)	2009	451	568	986	1460
Televisions & Projectors (Retail Volume - units per 1,000 households)	2009	99	121	172	134
Personal Computers (Retail Volume - units per 1,000 people)	2009	21	180	273	36

* Data as of 2006; Source: Euromonitor, IMD Competitiveness, World Bank, Infraline, CEA, Morgan Stanley Research

Facts and Figures: Government Debt, Trade

Public Debt Structure (% of GDP, F2009)

Public Debt	73.5
-------------	------

External Debt Structure (% of GDP, F2009)

External Debt	19.9
-Short Term Debt	4.3
---Debt Service Coverage Ratio	4.6

Trade Data (% of GDP, F2009)

Goods Exports	15.1%
Goods Imports	25.5%
Trade Balance	-10.3%
Current Account Balance	-2.6%

India: Share of Global Goods Exports

1953	1.3%
1963	1.0%
1973	0.5%
1983	0.5%
1993	0.6%
2001	0.7%
2005	0.9%
2008	1.1%

Facts and Figures: Sovereign Ratings

India: Foreign Currency Debt Ratings				India: Local Currency Debt Ratings		
S&P	Moody's	Fitch		S&P	Moody's	Fitch
BBB+	Baa1	BBB+		BBB+	Baa1	BBB+
BBB	Baa2	BBB		BBB	Baa2	BBB
BBB-	Baa3	BBB-	Cut off for investment grade	BBB-	Baa3	BBB-
BB+	Ba1	BB+		BB+	Ba1	BB+
BB	Ba2	BB		BB	Ba2	BB
BB-	Ba3	BB-		BB-	Ba3	BB-
B+	B1	B+		B+	B1	B+
B	B2	B		B	B2	B
B-	B3	B-		B-	B3	B-

Source: Bloomberg, Morgan Stanley Research

Facts and Figures: Trade

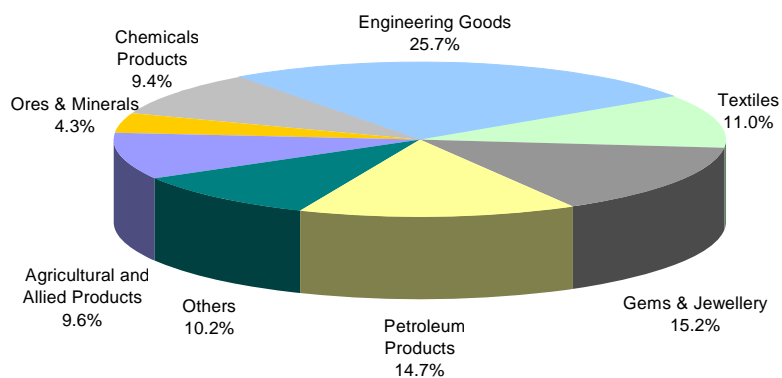
Main Export Origins, % of Total (F2009)

Asian Countries (Ex-Japan ex- China)	23.3
Europe	24.6
USA	12.0
China	5.1
Japan	1.8

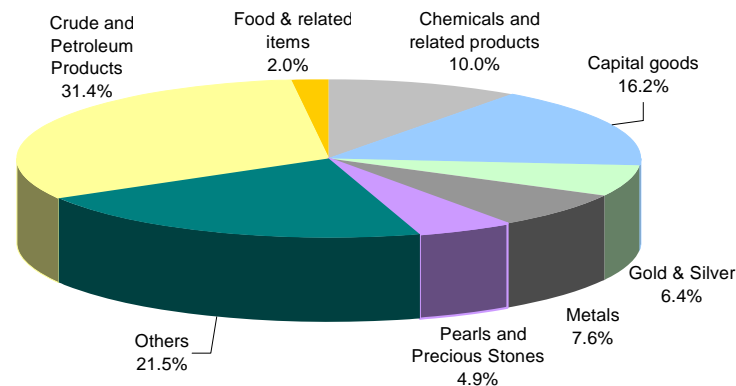
Main Import Destinations, % of Total (F2009)

Asian Countries (Ex-Japan ex- China)	15.5
Europe	21.0
China	10.7
USA	6.0
Japan	2.6

Composition of Exports (F2009)



Composition of Imports (F2009)



Source: CMIE, Morgan Stanley Research

Facts and Figures: Balance Sheet

Balance Sheet of the Indian Corporate Sector*		Balance Sheet of Indian Households		
	F2009	(in US\$ bn)	March 31, 2009	% Share
Liabilities		At Cost		
Net Worth	59.5%	Physical Assets	1084	51.2%
Loans	40.5%	(Including gold and property)		
Total Liabilities	100.0%	Financial Assets	1316	62.1%
Assets		Currency	135	6.4%
Net Block	65.4%	Deposits	600	28.3%
Investment	13.3%	Contractual savings	378	17.8%
Net Working Capital	21.3%	Claims on the Govt.	123	5.8%
Total Assets	100.0%	Equities	80	3.8%
		Financial Liabilities	-281	-13.3%
		Trade Debt	4	0.2%
		Financial Liabilities	-285	-13.4%
		Net Financial Assets	1035	48.8%
		Total Assets	2118	100.0%

* Based on data for top 200 companies

Macroeconomic Forecasts: India

Years Ending March 31	F2006	F2007	F2008	F2009	F2010E	F20011E	F2012E
National Income							
GDP at Factor cost Rs bn	32,491	35,646	38,935	41,550	44,521	48,318	52,400
GDP (at current mkt prices) Rs bn	37,065	42,840	49,479	55,744	62,939	72,035	82,419
GDP (US\$ bn)	837	947	1,229	1,212	1,319	1,605	1,980
Growth rates							
Gross domestic product	9.5%	9.7%	9.2%	6.7%	7.2%	8.5%	8.4%
Agriculture and Allied activities (incl. mining)	4.7%	4.3%	4.6%	1.6%	1.4%	4.7%	3.0%
Manufacturing, Constn, Electricity	10.2%	13.2%	10.1%	4.1%	9.2%	8.8%	8.6%
Services	11.1%	10.2%	10.5%	9.8%	8.1%	9.6%	9.9%
Money and Banking							
Money Supply (M3) growth (avg)	16.1%	19.6%	21.8%	20.3%	18.0%	20.0%	20.0%
Bank non-food credit (avg y-y increase)	33.7%	31.3%	24.3%	24.1%	15.0%	23.0%	25.0%
Interest rates							
91-Day T-Bill Yield (year-end)	6.5%	7.4%	7.3%	4.7%	4.5%	5.8%	6.5%
Repo Rate (year-end)	6.5%	7.5%	7.8%	5.0%	4.8%	6.0%	6.8%
Prices							
Wholesale price index (avg y-y increase)	4.4%	5.4%	4.7%	8.4%	3.8%	7.0%	6.0%
Consumer price index (avg y-y increase)	4.2%	6.8%	6.2%	9.1%	12.2%	8.0%	6.7%
External sector							
Current account							
Exports (US\$ bn)	105	129	166	189	175	217	262
Imports (US\$ bn)	157	191	258	308	298	366	443
Trade balance (US\$ bn)	-52	-62	-91.5	-118.7	-122.9	-150	-182
Exports as % of Imports	67.0%	67.6%	64.5%	61.4%	58.7%	59.2%	59.0%
Invisibles, net (US\$ bn)	42	52	76	90	91	115	137
Current account balance (US\$ bn)	(9.9)	(9.6)	(15.7)	(28.7)	(32.1)	(34.7)	(44.8)
Current account Balance as a % of GDP	(1.2%)	(1.0%)	(1.3%)	(2.4%)	(2.4%)	(2.2%)	(2.3%)
Capital account							
Debt creating capital inflows (US\$ bn)	7	22	25	15	13	17	19
Foreign investment (US\$ bn)	16	15	43	3	45	42	44
Total capital -net (US\$ bn)	25	45	107	7	56	67	75
Capital inflow as a % of GDP	3.0%	4.8%	8.7%	0.6%	4.3%	4.2%	3.8%
Reserves							
Foreign currency reserves (US\$ bn)*	151	199	309	251	283	313	348
Foreign currency reserves as no. of months imports	11.5	12.5	14.4	9.8	11.6	10.4	9.5
External debt							
External debt (US\$ bn)	138	171	225	230	245	263	281
External debt as a percentage of GDP	16.5%	18.1%	18.3%	19.0%	18.5%	16.4%	14.2%
Public Finance							
Fiscal deficit (As % of GDP)							
-----Central government	4.0%	3.3%	2.6%	6.0%	6.7%	5.5%	4.8%
-----State government	2.4%	1.8%	1.4%	2.6%	3.2%	2.6%	2.5%
-----Consolidated Deficit **	6.5%	5.4%	3.9%	8.5%	9.8%	8.1%	7.3%

E = Morgan Stanley Research Estimates; Source: RBI, CSO, Budget Documents, and Morgan Stanley Research

** Individual central and state deficits may not aggregate to consolidated deficit due to adjustments relating to inter-government transfers.

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