





AXIS INFRA INDEX (All)

310.30, down 37.8% q-o-q

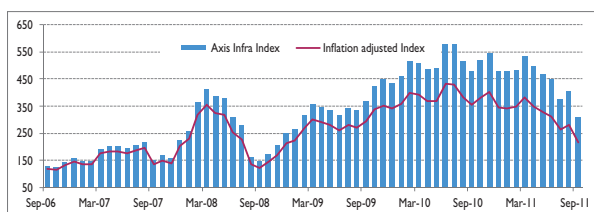
Infrastructure operating environment still stretched as of Sep'11; Fund flows continue to slow

UPDATE, NOVEMBER 2011

The Axis Infra Index has been on a downtrend over the past few months, falling to 310.3 in September, down from the April level of 498.7 (Chart 1 below). In inflation adjusted terms, too, the Axis Infra Index fell by a similar magnitude in September, due to the rising Wholesale Price Index (WPI). The downtrend validates concerns about a slowdown in the momentum of infrastructure projects. Fresh capex decisions largely seem to have been put on hold, due to multiple reasons including increasing cost of funds, and procedural and operational impediments.

CHART 1: AXIS INFRA INDEX

In terms of the contribution of Index constituents of the All, the fall in the September Index was primarily driven by



funds flows (trends in the components of the Axis Infra Index are shown in Chart 2 below).

Bank credit to infrastructure sectors had increased by ₹ 10,118 cr in August (accounting for the move up in the Index), but had come down again in September (to ₹ 5,029 cr). Some part of the loans given for 3G / BWA spectrum financing last year have reportedly been refinanced from non-bank sources, so on a net basis the flow of funds has been coming down. Funds

flow from non-bank sources to infra segments seem to have shrunk significantly. Equity and debt fund raising has been tepid, especially on the equity side where no funds were raised by infra companies in September. In July and August, around ₹ 7,000 cr was raised via debt placements.

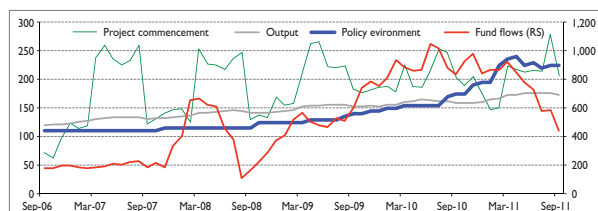
The Projects Commencement Index had spiked in August due to a large project (Delhi Airport Metro Express Pvt. Ltd.'s Airport Express Link Project worth ₹ 16,000 cr) coming online; adjusted for this project, commencements would have been lower in August. Project completions also remained low in September. Some of the larger projects completed in September were BSNL's CDMA Services & Handsets project (₹ 5,000 cr), NHAI's Ayodhya-Lucknow Highway Project (₹ 1,045 cr), Madurai-Arupukottai-Tuticorin Four-Laning Highway Project (₹ 910 cr) and Ennore Port's Coal Terminal Project (₹ 400 cr).

The infrastructure environment is reflected not just in terms of capacities and financeability but also the operations of infra segments. The Index uses power generation, ports throughput, cement dispatches and steel pipes production as proxies for the output of the major infrastructure sectors. Trends in these segments had earlier contributed to the falling Index, due to the operating environment indicated earlier, but there had been a significant improvement in many of these indicators in the last months of the All's coverage. Ports throughput, for instance has improved significantly in 2011, and electricity generation has increased quite strongly in the first nine months.



The policy environment had become challenging since the first half of 2010. In addition to project uncertainty, an acceleration in the pace of monetary policy tightening has increased the cost of funds for infra projects, making commercial viability of new projects increasingly difficult. This has resulted in a drop and then subsequently tapering in the Policy Index.

CHART 2: MOVEMENTS IN THE COMPONENTS OF THE AXIS INFRA INDEX



Going forward, we expect improvements in the policy environment. A series of financial sector measures to enable greater funds flows into infrastructure have been put in place, implemented in successive RBI Policy Reviews, the FY12 Budget and by SEBI. These include tax incentives, widening the scope of refinancing, including through foreign debt, expanding the range of “collateral” qualifying as security for loans and relaxing the limits on inflows of portfolio funds into corporate bonds, particularly infrastructure. Guidelines for Infrastructure Debt Funds (IDFs) are expected to be operationalised shortly and will inter alia help mitigate any potential asset liability mismatch of bank lending and approaching sector exposure limits (particularly for the power sector),

by tapping domestic and foreign long term funds (including insurance and pension funds).

For funds to start flowing in, however, the central and state Governments will have to implement measures to address and mitigate financing risks. Initiatives have been taken to increase the pace of awarding contracts for road projects. Land acquisition procedures are getting increased attention, with greater clarity hopefully emerging on the envisaged role of the public authorities and private project developers. Reforms in the power distribution segment have been sought to reduce the increasing losses, which impact the PPAs power developers have to sign with state discoms. Regulators are enhancing the scope of open access for generating companies, and some efforts in increasing competition in large urban areas are underway. Efforts to incentivise tariff rationalisation and loss reduction in state discoms have started. The Power Ministry and Central Electricity Regulatory Authority are rationalising generation and transmission tariffs, including hydro power generation and interstate transmission.

In addition, with inflation expected to come down gradually in the next few months, RBI may change its monetary policy stance going forward, and this would ease funding costs.

The Annexure below provides a brief summary of the methodology of the construction of the Axis Bank Index.



ANNEXURE: METHODOLOGY OF THE AXIS INFRA INDEX (AII)

COMPONENTS OF THE INDEX

The primary objective of the Index is to convey a sense of investment conditions in infra sectors and the ability of the segment to draw in capital funds. Therefore, the Index places inordinate weight on funds flows, which after all, is the ultimate outcome of all the underlying conditions, the efficiency in commissioning projects, the regulatory environment, tax incentives, etc.

- i. Output indicators: The intention is to capture primarily supply side performance of selected sectors. Data availability plays an important role in selection of the indicators. Some indicators also have a demand signal built in, e.g., base and peak load demand shortages in electricity.
- ii. Capex Completions / Project Commencements: This shows the value of infra projects getting completed / coming online.
- iii. Flow of funds: Financial closure is a signal of the commercial viability of the project, even with VGF. Funds flows have been separated into equity and debt components, to reflect the different risks associated with each:
 - a) Equity: Although project finance typically has a 4:1 debt - equity ratio, equity has been given a higher weight in view of the risk characteristic of equity and its role in pulling together debt funds.
 - b) Debt: Bank loans have been the largest source of debt funds for infra projects. However, data on bank credit flows into projects classified as infrastructure by the RBI is only available at quarterly intervals. We have allocated the quarterly disbursements equally across the three months.
 - c) Signals from Equity markets: Strong equity market performance is a likely precursor to higher equity market fund flows to the sector as it is an indicator of attractiveness of the sector. The performances of infrastructure sector equity stocks have also been incorporated through the CNX Infrastructure Index.
- iv. Regulatory and policy developments: Because of natural monopoly characteristics, infrastructure segments are amongst the most closely regulated. Due to the non-recourse nature of the project financing, the risks associated with changes in the legal, policy, tax and regulatory environment have a large role in determining commercial viability of projects. The Index incorporates these changes as ordinal indicators.

April 2005 is chosen as the base year, with the values of the Index components normalised to 100 for the month. This choice is consistent with many key macroeconomic variables using 2004-05 as their base year.

Determining the weights of Index components: The AII is constructed from the above five indicators using principal component analysis (PCA). Simulations show that the AII remains relatively robust to the weighting changes.



Corporate Office: Axis House, Bombay Dyeing Mills Compound, P. B. Marg, Worli, Mumbai – 400 025.

Registered Office: "TRISHUL", Opp. Samartheswar Temple, Near Law Garden, Ilisbridge, Ahmedabad - 380 006.

Visit us at www.axisbank.com