

Connecting the Dots

A Lesson from Tradition

*Nadi Pariksha*¹ is an important method of diagnosis in the ancient science of Ayurveda. Unlike a modern medical test or a scan which focuses on finding out a specific medical issue, *nadi pariksha* looks for overall imbalances in the human body. A seemingly healthy person, who would not normally undergo any tests or scans, may actually be nursing several imbalances that can be picked up in a *nadi pariksha*. This could be the first step towards preventive medication and hence sustainable good health. While the Indian economy seems to be enjoying a reprieve from the stress test period of last few months, a periodic pulse-check for imbalances is always important.

Firstly, we analyse the effects of credit on GDP growth i.e. how much output could the economy produce for every incremental rupee of credit that was extended. In a capital-starved economy like India, incremental credit should have a strong growth impulse but in reality credit intensity of GDP growth has increased materially in recent times i.e. every unit of output has required larger doses of credit to support it. A simpler way to look at this would be to compare nominal GDP growth and credit growth numbers. While nominal GDP growth has halved from almost 21% three years ago,² average credit has barely changed from its 15-16% growth clip. Part of the answer may lie in the sectoral break-up of credit growth. Almost 50% of cases approved in the last one year by the Corporate Debt Restructuring (CDR) cell are from four sectors – Iron & Steel, Textiles, Power and Infrastructure (*Display 1*). While it would be intuitive to expect that incremental credit to these sectors should be low, it actually accounts for 30% of the incremental credit extended, about 7% ahead of their share in overall outstanding credit. In other words, despite marked signs of stress, credit to these sectors has grown faster than the overall credit growth for the economy. Lending to stressed sectors dampens the credit intensity as, by definition, their ability to contribute to output is strained.

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¹ Nadi Pariksha literally translated means pulse-check. It is an important diagnostic technique enunciated in the ancient Indian medical scripture called Ayurveda.

² Four Quarter Moving Average of nominal GDP growth as at September 2010

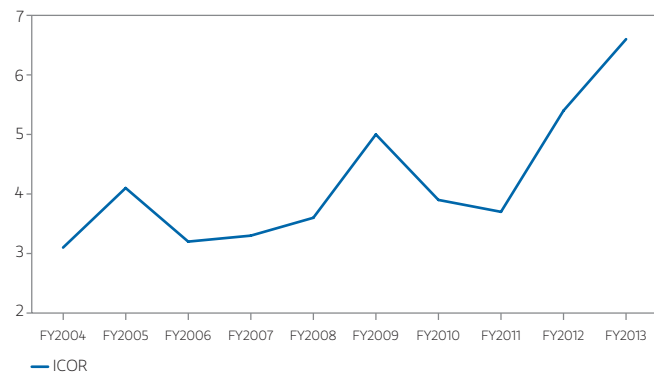
Display 1: **Stressed Sector - CDR Referrals and Credit Growth**

Sector	Share of Incremental CDR Approvals (YoY)	Share of Outstanding Credit	Share of Incremental Credit (YoY)
Iron & Steel	17%	5%	7%
Textiles	8%	4%	4%
Power	17%	8%	15%
Infrastructure	7%	6%	4%
Total	49%	23%	30%

Source: CDR Cell, RBI, Macquarie Securities. Data as of March 31, 2013

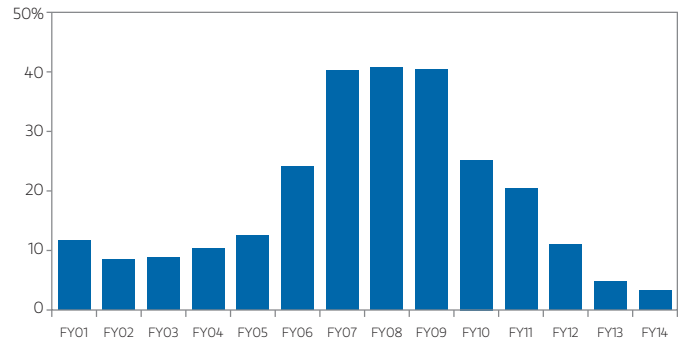
A related metric is the Incremental Capital Output Ratio (ICOR). It measures the incremental amount of capital required to generate output or GDP. From F2004 till F2011 India's ICOR hovered around the 4 times i.e. it required four units of investment to generate one unit of output. As *Display 2* shows, over the last two years this number has increased with the latest reading at 6.6 for F2013 which behooves the same question – why has the efficacy of investments gone down of late? *Display 3A* contains data from Centre for Monitoring of Indian Economy (CMIE) that shows new project announcements almost came to a standstill in F2013. While this drying up of new project announcements routinely grabs headlines, the more important metric is the amount of investments locked up in projects under implementation (*Display 3B*). Capital invested in projects under implementation has averaged over 85% of GDP since F2010, while the same number for F2003-07 period was less than 40%. Think about this as a corporate Balance Sheet with a large amount stuck in Capital Work in Progress (CWIP) for an inordinately long time. Not only does it consume capital, but by producing nothing it drags down Return on Investment as well. As *Display 4* shows, it's not surprising then that at over 33% in F2013, CWIP as a share of Net worth of Indian corporates is at the highest level it has ever been.

Display 2: **Incremental Capital Output Ratio (ICOR)**

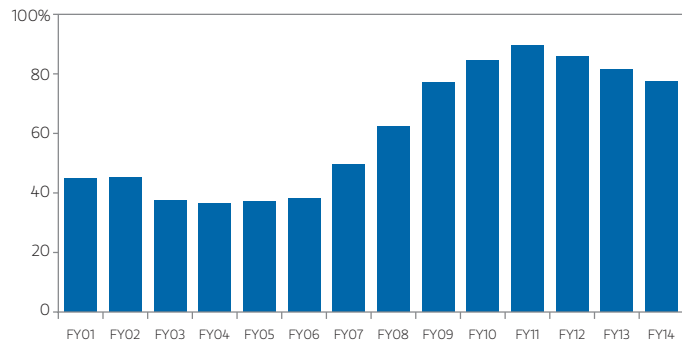


Source: CEIC, Morgan Stanley Research

Display 3A: **New Project Announcements (% of GDP)**

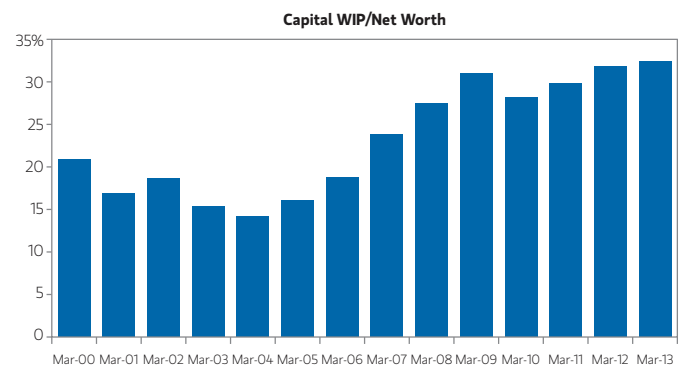


Display 3B: **Projects Under Implementation (% of GDP)**



Source: CMIE, IIFL Institutional Equities

Display 4: **Capital Work in Progress**



Source: CMIE, IIFL Institutional Equities. Data collated from largest 698 non financial companies.

Finally, while it is natural to celebrate the recent improvement in India's Current Account Deficit (CAD), a study of the last few years reveals a couple of imbalances. India's CAD widened from about 1.3% of GDP in F2008 to 4.8% in F2013. A widening CAD is typically associated with an overheated economy (also refer [CTD - Don't take your eye off the ball](#)). When an economy grows beyond its natural limits, it has to increase its reliance on imports, often leading to a higher CAD. In contrast, India's CAD widened while its real GDP growth

slowed from almost 10% to 5%. This suggests that there are rigid inelasticities in the country's trade bill. Secondly, seen from the lens of a country's Savings and Investments, CAD is Investment minus domestic Savings. So, if a country is investing more than it is saving, it results in a deficit in its Current Account. If CAD widens, it normally means that either Savings are falling or Investments are rising. That is where the Indian story is different again. In India CAD has grown with falling investments, because savings have been falling at an even faster pace. From F2008 to F2013 the Savings rate has fallen from 36.8% to 29.6% while investments³ fell from 38.1% to 34.4% over the same period. So while one would have assumed that falling investments of the magnitude of 3.7% would translate into a narrower CAD, the faster fall in savings rate of 7.2% explains its widening.

The tricky part in citing imbalances is that they may continue to exist for a while without becoming life-threatening but having diagnosed them, it would be foolhardy to gloss over them. Ayurveda does not believe in quick fixes but permanent, long-term cures. It is always tempting to pop the pill for a splitting migraine and get on with it but more often than not, the migraine recurs with higher frequency and intensity. Swallowing that bitter Ayurvedic *churna*⁴ for days on end and correcting lifestyle excesses that most often cause the headache is much tougher and may lead to even worse attacks in the near term but it is the surest way of getting rid of the ailment forever.

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Charts and graphs are provided for illustrative purposes only.

³ Investments is defined as Gross Capital Formation (GCF) and includes Gross Fixed Capital Formation (GFCF) plus inventory and valuables. The corresponding GFCF number for F2013 is 29.6% of GDP

⁴ Churna is a concoction of powdered herbs and or minerals used in Ayurvedic medicine.

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