Reality Checks in an Emerging Economy

- **Problematique** : Growth which is trickling down slowly in a milieu of increasing population pressure, pressure on all resources, and increasing inequality. Potentially a situation where further growth may be seriously challenged and many cracks in the social fabric may appear.
- **Analysis** : An examination of the agents and process of trickle down.
- What needs to be done: Accelerate the play and process of effective agents.

Methodology

- Analytical Literature review especially of opposing view points which have argued both sides of the trickle down process.
- Econometric analysis to understand the play of different agents and processes in trickle down.
- Primary data collection from different sampled locations to validate or invalidate the propositions.
- Flowing from the previous analysis what needs to be done.

Chapters of the book

- Informal sector as an agent of trickle down.
- Trickle down effects of Inter state migration.
- Does Philanthropy help trickle down through supplementing public services?
- What are the socio-economic effects of the diffusion of high technology and technological leapfrogging?
- Has improved gender parity accelerated the process of trickle down especially through greater participation of women in the governance structure and panchayati Raj Institutions?
- What is the role of government schemes aimed specifically at trickle down? Does Governance and institutions across states play an important role in accelerating trickle down?

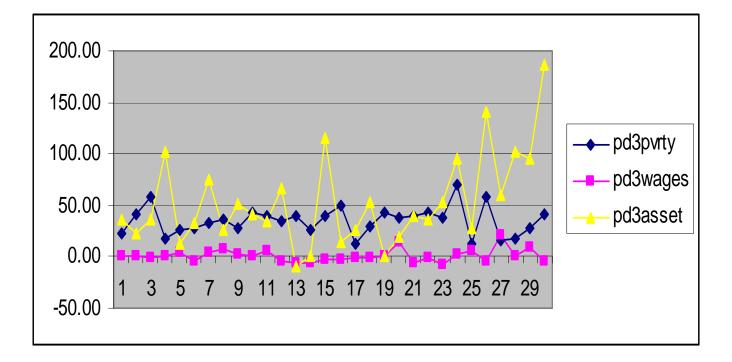
Main issues examined in the the book

- Is the informal sector in India which accounts for over 93% of total employment responsive to economic growth and an effective agent of trickle down?
- Given that different States are growing at such unequal rates, is inter-state migration an effective agent for trickling down growth to the poor states?
- Given increased inequality and a swelling middle class, is the philanthropic impulse of richer Indians on the rise and is it trickling down growth effects indirectly?
- Is ICT and mobile telephony an effective agent of trickle down?
- Is growth restoring gender parity and through it the agents of trickle down

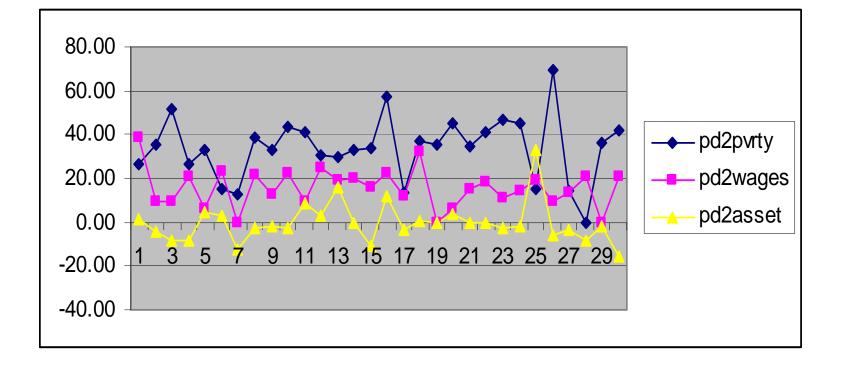
Indian Informal Sector

- In India according to the GoI estimates 50-60% of output and 93% of employment comes from the informal sector.
- The share of output and employment of the informal sector in agriculture is 96%. Thus informal activities are mainly studied for the non agricultural sectors only.
- In the manufacturing sector 40%, and in services 47% of the share of output is contributed by the informal sector. (Delhi group on informal enterprises). But as much as 80% of the secondary sector and 69% of the tertiary sector employment is informal.

Growth, informal sector and poverty (6% r.o.g per capita)



Growth, informal sector and poverty(4.5% r.o.g per capita)



Growth, informal sector and poverty

- Poverty sensitivity across states is highest for informal sector asset formation in periods of high growth.
- For every 0.3% percent increase in informal sector assets and every 0.2% increase in informal sector wages decreases poverty by one percent whereas every one 1.1% rate of growth of state domestic product reduces poverty by 1%.
- Thus poverty reduction could target informal sector asset formation.

Growth, informal sector and poverty

- Survey of 500 respondents showed the trickle down effects through the informal sector during the high growth period, i.e 2000-2007 was much higher than the trickle down during the lower growth period, i.e 1994/95-2000.
- Majority of the respondents irrespective of the subsector to which they belonged had higher incomes and asset formation post 2000 than pre 2000.
- Increase in incomes was higher in the manufacturing sector than in the services sector.
- Interestingly, but logically the number of dependents and the number of working people in the family were closely associated with higher levels of asset formation.

Grassroots capitalism

- Prevailing particularly among people at the bottom of the economic ladder, in India today. E.G Jugaad, private education, private electricity etc.
- They exhibit an uncanny ability to identify an unmet need and then find a way to supply that demand.
- Relative lack of formal education and training, or of capital and technology, are not obstacles.
- Of course the growth of these entrepreneurs has been much higher during the periods of high growth on account of increased demand for these services.
- While data on the growth of these services and goods are not systematic, anecdotal evidence suggests that this form of entrepreneurship may have grown substantially during the last fifteen odd years.

What needs to be done

- The regressions show high growth rates generate opportunities for employment, higher wages and higher asset formation.
- Higher asset formation of the informal sector is the single most important variable for poverty reduction.
- So the first and foremost requirement is to maintain a high rate of growth in the Indian economy and second to build assets in the informal sector to ensure that growth trickles down.

Disparity between states- Inter state migration

- Some states such Maharashtra, Karnataka, Andhra Pradesh, Punjab, Haryana and Tamil Nadu have grown at over 7.5% between 1991-2004.
- However, states like Bihar or Uttar Pradesh have grown at a little over 2% during the same decade.
- Bihar and UP are mostly agricultural accounting for over 75% of the labour force offering a classical case of the Lewisian model of migration of surplus agricultural labour.

Effects of Migration in India

- According to studies rural-urban migration may have reduced poverty by about 2.6% per annum in the period of high growth.
- However, a number of migrants never graduate to the formal sector.
- However employment in the informal sector can also have serious poverty reduction effects.

Has Inter-state migration led to convergence of poverty rates?

- Poverty rates has been converging over the years and going down.
- Inter-state migration has a statistically significant effect on the convergence of poverty rates.
- Such convergence is also seen in the case of rural urban poverty rates which may also be caused by inter-state migration.

Labour market effects of inter-state migration

- Each percentage increase in inter-state migration leads to an increase in real informal wages by 0.05%.
- This however refers to the real informal wage in the state of origin, showing labour market effects which arise locally when outmigration takes place.

Stylised Facts from the Survey

- Over 60% of the migrants were men.
- Nearly 90% were economic migrants.
- Over 55% were illiterate.
- Over 90% were in the working age group.
- Over 75% were permanent migrants.
- Over 65% were from scheduled or other backward castes.

Stylised Facts from the Survey

- Only 24% of the migrants had regular jobs with monthly incomes before migration.
- About 72% of the migrants were able to get wages above minimum levels. Only 28% of the migrants were able to obtain minimum wages at their state of origin,

Regression results from the survey

- The regression results showed that the higher the gap between the per capita incomes of the destination state and the state of origin the higher is the migrant likely to remit incomes for building assets.
- Women are more likely to remit incomes for asset building and women from poorer states are even more likely to remit incomes for asset building.

Conclusions

- Migrants also appear to value their rural safety nets much less than in the past, showing confidence in the growth opportunities brought by migration.
- Migration also appears to have reached a critical point of about 30%, beyond which rates of urbanization are expected to grow much faster, judging by the experience of other countries.

Philanthropy

- Estimates of total philanthropic contributions range from roughly 1% to roughly 7% of GDP.
- No systematic data collection.
- The terminology used by the surveys differ and hence these point sources are not strictly comparable.

The main actors of philanthropy

- The principal distribution channels of philanthropy are:
- 1. Informal family and personal networks
- 2. Faith based intermediaries (religious organizations)
- 3. International NGOs (e.g. Save the Children)
- 4. US centered diaspora NGOs (AIF, AAPI Trust)
- 5. Indian NGOs (CRY, Seva, GiveIndia)

Distribution of philanthropists

- The percentage of registered NPOs is highest in Maharashtra (74%) and lowest in Tamil Nadu (47%).
- An overwhelming majority of these registered NPOs are registered under Society Registration Acts.
- Most of the unregistered NPOs are in rural areas.
- But even in urban Delhi, nearly 30% of NPOs are not legally incorporated.
- Indian NPOs are essentially small : nearly *three-fourth* of all NPOs have only volunteers or at most one paid staff. Only one in 12 NPOs (8.5%) employs more then 10 paid staff.

Sources of Funding of NPOs

- Do foreign funds matter for Indian NPOs?
- The percentage of foreign funds in total receipts of NPOs during 1999-2000 was as follows:
- Nationwide, only 7.4% of total receipts of NPOs are foreign funds.
- Foreign funds constitute nearly *one eighth* of total receipts for Tamil Nadu and Delhi.
- Foreign funds as share of total receipts of NPOs in West Bengal are insignificant.

Sources of Funding of NPOs

• Who gives funds?

- Nationwide, more than 75 million households give for charitable causes - nearly *two-fifth* (40.7%) of all households in India
- *Two-thirds* (68%) of all givers live in rural areas
- Nearly two million households give in Delhi more than four-fifth (80.7%) of all households in Delhi.
- The pattern for Meghalaya and West Bengal shows that more than *two-thirds* of all households are givers (72.5% in Meghalaya and 66.6% in West Bengal)
- Nearly a *quarter* of all households in Maharashtra give for charitable causes
- In Tamil Nadu, the giver households account for *onetenth* of all households

Expenditures of Philanthropy

- Religious organizations in India are also the largest recipients of donations and have floated affiliated organizations to undertake developmental activities (29%).
- Other popular activities in the voluntary sector are community/ social service (22%);
- Education(23%),
- Promotion of sports & culture (19%)
- Health (7%)

Percentage of overhead costs

 Challenges for any charitable organization include inefficient access to capital, underscored by high fundraising costs --22% to 43% in the U.S. and around 25% in the U.K. Indian NGO's spend an average of 10% to 12% of revenue on fundraising.

New IT sector Philanthropy

- The giving that is emerging from these newly wealthy and the new middle class is diverse, it is focused, it is often allied with state interests, it is often anti-institutional and anti-intermediary – and it is growing with exceptional speed.
- It is focused on primary education, strengthening higher education, infrastructure development, health and other related activities.

Philanthropic participation in the Education sector

- Nearly 20% of the total education obtained is from the philanthropic sector.
- In some states the participation is as high as 55%.
- The poor states do not necessarily have higher participation of philanthropic schools.
- It is the states dominated by christian population which have a higher share of philanthropy.

Health care

- The private sector plays a major role and accounts for about 80% of all primary health care and 40 percent of tertiary medical care.
- There are believed to be over 7000 non profit initiatives providing healthcare services - from implementing Government programmes to providing basic health care or else specific care for diseases like Leprosy and Cancer.

Diasporic Philanthropy

Nature of Work	%
Cultural and Economic	10.55
Cultural and Educational	14.83
Cultural and Religious	4.03
Cultural and Social	15.23
Economic and Educational	15.75
Economic and Religious	3.26
Economic and Social	18.75
Educational and Religious	15.18
Educational and Social	35.15
Religious and Social	15.83

Trickle Down effects of Philanthropy

- Using an econometric model to find out whether higher rates of growth is leading to higher philanthropy, it was found that the per capita incomes in 2003/2004 across states were affected positively by an aggregation of the previous periods income and philanthropy.
- In other words, the higher the level of philanthropy the higher is the trickle down. Interestingly, the initial levels of per capita income has a much higher coefficient than philanthropy, but per capita philanthropy tends to be higher in the poorer states than in the richer states.

Trickle Down effects of Philanthropy

 This shows that even though a percent point increase in per capita philanthropy increases the per capita SDP only by 0.27 of 1%, poorer states with higher per capita philanthropy are likely to benefit more. If such states also start growing at higher rates than the impact of philanthropy would be better through better initial conditions.

Conclusions

- The potential to promote more -- and more strategic -- social investment in India is tremendous. Perhaps more than most other countries, India is ready and fertile for the infusion of private funds into development initiatives. The Government of India, more than ever before, is ready for partnership and has, in fact, opened up key social sectors to third-sector investment. The challenge before the voluntary sector is to evolve mechanisms and strategies for domestic philanthropy and social investment. Communication and fundraising are two sides of a coin.
- At the same time philanthropy is no substitute for government provision of social and physical infrastructure. To the contrary, corporate philanthropy can be used by the private sector to consolidate its position in the economy.

How IT trickles down

- Growth of the IT-ITES sector is driving considerable multiplier effects.
- Every US\$1 spent by the IT-ITES sector (on domestically sourced goods and services), translates into a total output of about US\$2 in the economy.
- The multiplier impact on employment is even more compelling; for every one job created in the IT-ITES sector, four additional jobs are created in the rest of the economy.

How Mobiles trickle down

- In a country with poor physical infrastructure which hinders physical communication, mobile telephony has offered an alternative source of communications.
- Studies show that every 10 per cent added mobile penetration has a direct impact on GDP, helping to grow by as much 0.6 per cent. India has moved beyond the magical 10 per cent penetration to touch 17 per cent and is soon likely to touch 25%.

How IT and ITES acts as a GPT

- ICT production The role of ICT producers on the economy's total value added or GDP shows its importance in the Indian economy.
- The contribution of ICT to the Indian GDP has increased from less than 1% just over eight years ago to about 6% in 2008-09. The growth rate of this sector has been over 30% and this growth has contributed about 2 percentage points to GDP growth.

How IT and ITES acts as a GPT

Explanatory Variables	
Log(PrCap/Pop)	0.74*** (0.051)
Log(Lab/Pop)	0.39*** (0.06)
Dum	0.18** (0.08)
Lit	-0.69 (0.42)
R-sqr	0.98
F-stat (4, 26)	583.93***
Observations	31

Advantages

- India has the cheapest internet access at a global level and the cheapest mobile access at the global level too.
- Among its 200 million mobile users which is growing at the rate of 8 million a month, roughly a quarter use mobiles for their internet connection.
- As 3G technology reaches India and is used in large numbers internet penetration which currently stands only at 3% versus 20% mobile penetration is likely to increase dramatically.
- Along with an almost unlimited supply of workers and the huge potential for widespread use, ICT is beginning to work like a GPT in the Indian context.

The e-Readiness Index

- The state of e-governance that depends on the rural IT applications in agriculture, education, medicines, trade; initiative and success related to e-governance projects like e-procurement, land registration, utility billing, etc.
- The states of Karnataka, Andhra Pradesh, Tamil Nadu and Gujarat are on the top in terms of egovernance. Interestingly, Maharashtra is alone on top in terms of network economy. The states are rated on the basis of number of IT parks, floor area of IT parks, sales turnover of IT companies in states and number of jobs that require infotech skills.

<u>Regression Result of the impact of E- impact upon poverty</u> Dependent variable log of poverty

Pov	Number of people below poverty level
Gsdp	Growth of SDP
Ias	Growth of asset
Dev	Dummy variable =1 if the state is E-developed, otherwise 0

Explanatory variables	
Gsdp	1.79
	(1.28)
Ias	-0.005***
	(0.001)
Dev	-0.32***
	(0.12)
R-square	0.38
Root MSE	0.33
Number of Obs	30

Wishful thinking

• The IT for the masses and bridging the digital divide movement has an inordinate amount of exaggeration and wishful thinking. But there are in fact real cases of ICT projects that actually help poor people in India to meet their basic needs and assert their fundamental rights. There is a need to define the characteristics of those projects and try to spread the word about what works and what does not.

What next

- E-governance: Is one of the most promising uses of ICT
- First is the computerization of government functions itself.
- Second, e-governance may mean government-to-people and people-to-government connections whereby citizens obtain direct access to records, rules, and information about entitlements that they need or want in their daily lives-
- Both forms of e-governance are difficult and costly to implement. These also run into strong resistance, since such methods eliminate middlemen and others whose jobs and incomes depend upon the relative inaccessibility of government documents.

What next

- Commercial funding: Commercially funded ICT networks have considerable promise.
- For example the Warana Project, though heavily funded initially by the state of Maharashtra and by Delhi, is currently maintained by the sugarcane cooperative in the area, and offers tangible benefits to sugar producers and to sugarcane growers.
- The E.I.D. Parry project in Nellikuppam, Tamil Nadu expects advantages in terms of improved information to their producers about best agricultural practices. ITC-IBD has set up a large number of IT Chaupals for soybean, shrimp and coffee farmers with the goal of reducing the costs of production that currently go to middlemen.
- In such cases, commercial interests may justify the expense of establishing rural info-kiosks, which could in theory also provide much general information in addition to specific product information.

Gender dimensions of growth effects

- The growth effects of female labour force have been felt much more strongly from 2001-2007.
- Participation of women dipped from 29% in 1991 to 21% in 1999 and rose again to 27% in 2005/2006.
- Overall female labour force participation responded better at higher rates of growth of over 5%.

Organised sector

- Perhaps the most dramatic effect of economic growth on female employment can be observed in the organized sector.
- While the organized sector only accounts for 4% of female labour force, vs. 10% for men, this sector also has the highest employment growth rates for women: 3.6% for women; 2.5% for men.
- 62% are employed within the public sector.
- Highest employment of women above 5% rates of economic growth.

Agriculture sector effects

- female rural employment was generally found to be unresponsive to growth rates, even declining with higher growth rates, stagnating at around 2% for the entire period from 1991-2007.
- Paradoxically, the wage gap between men and women in agriculture is the lowest in the poorest states. For example, Bihar, West Bengal, and Orissa show the smallest gap between the wages of men and women in rural areas.
- This is suggestive of outmigration of men from these states to other states in search of work.

Is Labour force participation the most important policy variable?

- High labour participation rates for women have been shown to raise nutrition levels for their children, lower mortality rates and raise sex ratios by combating traditional male biases (Agnihotri 1997).
- Many have argued that the labour participation of women must be made a central focus of policy.

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- However, Dalit women are likely to be involved exclusively in domestic work, and thus actually have a higher LFPR than other groups of women, though their employment may be concentrated in low-paying casual labour.
- The gap between the LFPRs of Muslim women and men was also found to be much higher than average.
- Upper caste Hindu families are also less likely to employ their women.
- A greater detail of group-differentiated data is, thus, critically needed.

Employment U curve

- Studies have found a U curve of women's employment by education levels is caused by a mixture of economic and cultural factors. (Olson and Mehta, 2006).
- Labour force participation is higher among illiterates than among the literate women.
- However, as women reach higher levels of education, their participation in the labour force increases.

Complex correlations

- Social indicators for women has been sticky upwards and is less sensitive to growth.
- Labour force participation rates, education and literacy rates have however responded positively to economic growth.
- Maternal Mortality rate which has shown little response to economic growth showing the dominance of social and cultural factors which does not accord pregnant women due care even if they are economically independent.

Education and health

- The higher is the education for woman the higher will be the per-capita income of the State.
- The correlation between education and health is very large, showing that educated women are more likely to be healthy than otherwise.
- As the health and education index of women improves, the per capita state domestic product goes up.

Gender inequality and poverty

- Not all indicators of gender inequality would impact significantly on poverty reduction.
- The index on health of women, index on education of female and index of access to economic resources of female have been used to construct a gender inequality index.
- The first two variables were found to be particularly sensitive to growth. Access to economic resources shows labour force participation rates over the age of 15.

Gender inequality and poverty

- Correlation raises the possibility that a woman who is healthy and educated may nevertheless not participate as an economic agent.
- The coefficient is negative and significant. It reflects that as the gender indicators improve the proportion of people, who are below poverty line, would decrease.
- Thus as participation of women, education and health improve, the growth effects would be significant.

Female headed households

- A recent study, however does show that female headed households were likely to be less poor than male headed households especially in the rural areas.
- In urban India, female headed households were more likely to be poorer than male headed households.
- This differential increased with higher growth rates.

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- Labour force participation data indicate that female heads are more likely to work in the market place : on average 74 per cent verus 54 per cent.
- Female-headed households spend relatively less on higher quality food items such as meat, vegetables, milk and other dairy products. But they spend less on personal consumption such as alcoholic beverages.
- Children in female-headed households are disadvantaged both in terms of access to social services and actual welfare outcomes.

Conclusions

- With regard to the macro level links between gender equality and poverty reduction, the macro correlations are stronger than those for gender equality and growth and more robust to different measures of gender equality.
- Ample evidence suggests that greater gender equality in resources such as education, health and access to employment (economic resources) can reduce the likelihood of a household being poor.

What needs to be done

- First and foremost high rates of growth need to be maintained as the organic processes set in only above an annual rate of above 5% growth.
- Focus on primary and secondary education to improve income earning opportunities of informal sector as well as women.
- Focus on infrastructure, especially credit to improve the asset base of the informal sector and decrease vulnerability of this sector.
- Upgrade skills in the informal systems in a gradual manner. For instance skills in the informal sector could be upgraded by strengthening the informal apprenticeship systems. In the case of credit the formal banks can channel funds to the informal sector through informal credit mechanisms that already exist e.g., rotating credit and savings associations at the community level, chit funds or the equivalent known under various names in India such as "Committee" as shown above.

What needs to be done

- Focus on primary and secondary education to improve income earning opportunities of this sector.
- Focus on infrastructure, especially credit to improve the asset base and decrease vulnerability of this sector. Establish linkages between the informal and the formal institutions e.g., informal credit organizations linked to formal financial institutions, informal training systems linked to formal training institutions. These linkages could also be gender biased.
- Skills in the informal sector could be upgraded by strengthening the informal apprenticeship systems.
- To take care of inter-state migration urban structural change to achieve a more balanced pattern of urbanization required. In other words rural areas have to be urbanised even if agricultural.
- Better institutionalisation of individual philanthropy and use of community resources for public service delivery. Third party watchdogs needed for corporate philanthropers.

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- Use of ICT and Mobile telephony as a GPT needs better e-readiness of states. Trickle down effects would be higher if e-governance, domestic uses and commercial uses were to mutiply. This would also need an enabling e-readiness environment.
- For trickling down growth effects and reducing gender disparity, Education especially vocational education is the most important policy variable.