6TH IGC-ISI INDIA DEVELOPMENT POLICY CONFERENCE REPORT

21-22 July 2015

New Delhi, India

HOSTED BY
IGC INDIA CENTRAL

CO-HOSTED BY
INDIAN STATISTICAL INSTITUTE

International Growth Centre

CONTENTS

The 6th IGC-ISI India Development Policy Conference, the annual growth conference of the IGC India Central Programme, was held at Hotel Le Meridien on 21-22 July, 2015. This conference brought together researchers, policymakers, civil society members as well as media representatives. It served as a forum to widely disseminate and discuss policy implications of research funded by the India Central programme and the IGC Research programme on India. Some work-in-progress projects were also presented wherein the presenters received some valuable feedback from the discussants and audience.

The programme included six research presentation sessions on the following topics; Firms and Industry, Human Development, Finance, Energy and Environment and State Capacity.

The conference had over 170 participants of which approximately 40% were from research and academia, 8% from international organisations, 3% from civil society organisations, 12% from policy circles, 2% from media, 6% from private sector and the remaining 25% were students and miscellaneous participants.

1. Welcome remarks

Dilip Mookherjee (IGC India Central, Boston University) inaugurated the conference by welcoming the participants. He noted the goal of IGC was to promote high quality research on policy problems in the poorest countries. He discussed how the focus of the India Central programme has shifted over the years. When it was launched in 2010, the focus areas were macroeconomic stabilisation, human development and inclusive growth. With the drop in growth rate and perceptions of growing corruption in recent years, three more priority sectors have been added; financial sector policies, firms and productivity, and governance. Finally, he said that the aim of the conference was to disseminate information about India Central's completed projects and receive feedback on its ongoing projects.

2. Firms and industry

The first session was on Firms and Industry was chaired by B. N. Goldar (Institute of Economic Growth). Sandip Sukhtankar (Dartmouth University) presented his IGC project on 'Does ownership structure matter? Evidence from sugarcane mills in India'. This paper examines the effect of firm ownership structure on firm behaviour and the economic outcomes of upstream suppliers by comparing privately owned sugar mills with cooperatives and public mills in India. The 'command area' zoning system, whereby mills are given monopoly power to operate within an assigned area helps tackle the identification challenge. The borders of command areas allow for a geographic regression discontinuity design, where underlying soil, weather, and institutional characteristics are exactly the same but ownership structure changes across boundaries. Using satellite images overlaid on digital maps to measure sugarcane grown along the borders, and a survey to determine the effects of crop choices on farmer welfare, he finds that private mills encourage sugarcane production. Greater cane cultivation is tied to better credit provided by private mills, particularly to land-poor farmers, and results in higher income and consumption for land-poor farmers.

The discussant, Mohan Chutani (Ministry of Commerce and Industry) noted that cooperatives were brought in to keep sugar prices lower, as it is an essential commodity; therefore it was risky if left only to the private sector. He suggested that the author should consider doing a comparative assessment of sugar industry in other countries to make the analysis more comprehensive.

The subsequent floor discussion raised a number of critical issues. A participant asked about possible solutions for distress in the sugar industry where costs are greater than prices. Some hypotheses for explaining why farmers were not hurt by monopsony power of private mills were discussed.

B.N Goldar in responding to questions from the audience concerning the enforcement of command zones on the basis of his own experience noted how cane growers' associations ensure that farmers cannot shift to another mill in another command area. They also check malpractices such as burning the fields to receive an earlier slot for crushing of sugarcane, as reported in Gujarat.

Daniel Keniston (Yale University) presented his ongoing IGC project on 'Productivity and competition in India's brick industry'. He explored two main questions: first, is there significant productivity dispersion across firms in the industry, and what does this imply for misallocation within the industry? Second, why does competition not eliminate this productivity dispersion? The study is being conducted in some districts in Karnataka and eastern Uttar Pradesh and Madhya Pradesh, covering 5% of the brick industry. The research shows significant inter-firm productivity dispersion. More dense markets were characterized by lower dispersion, higher productivity and higher prices.

Mohan Chutani noted that the Indian brick industry in India has recently come up with greener alternatives. However, as this is a labour intensive sector in India, policymakers will be interested in knowing whether infusion of better technology will generate employment-displacing effects. The chair B.N Goldar also suggested that low productivity firms may persist because of the low opportunity costs to the manufacturers since they may not have alternative employment.

Members of the audience raised a number of explanations of the coexistence of low and high productivity firms in South India. These included heterogeneity of demand, with low-income consumers patronising low productivity producers and more urban or higher-income ones buying from high-productivity ones. The role of ownership structures and scale diseconomies were also discussed.

3. Human development: Health and education I

The session, on Health and Education, was chaired by Sudhanshu Bhushan (National University of Educational Planning and Administration).

Sisir Debnath (Indian School of Business) presented his work on 'Improving maternal health with incentives to mothers vs. health workers: Evidence from India'. Using District Level Household Survey (DLHS) data, the project analyses the impact of Janani Suraksha Yojana (JSY) – a conditional cash transfer scheme that aims to incentivise mothers to deliver births at health facilities. JSY eligibility increased births at health facilities by 4 percentage points; the effect was greater (7 percentage points) during later years of the programme. JSY also increased the likelihood of prenatal care utilisation and immunisation. The marginal effect of giving the same incentives to health workers was greater than that of giving the same incentives to mothers. Effects of the program were larger in later years. The programme reduced early neo-natal mortality but had no effect on late neo-natal mortality. Complementarity between incentives to health workers and mothers were also noticed.

Abhiroop Mukhopadhyay (Indian Statistical Institute), the discussant for the session, argued that it was difficult to disentangle the role of information from that of money offered to the mothers. He contended that this work raises the broader question whether government officials should be incentivised, or whether alternate policies such as primary health care provision may be more effective. Members of the audience asked whether giving incentives to health-care providers instead of ASHA workers and mothers would improve the quality of health-care.

Subha Mani (Fordham University) presented her IGC project on, 'The impact of peers on cognitive, non-cognitive, and behavioural outcomes: Evidence from India'. Using data from Delhi University, the study examines the effect of exposure to better-quality colleges/ high-achieving peers on cognitive and non-cognitive skills. Using data from student surveys in 15 co-educational colleges, the study employs a regression discontinuity around admission cut-offs for 2011-2013. The students were second and third years from Commerce and Economics courses from the 'General' category. The main finding is a positive effect on test scores of women but not so much for men. Part of the reason is an effect of exposure on college attendance by women. There was a reduction in risk-averse behaviour in women, but little effect on other personality traits was found for both men and women.

The discussant Pawan Kumar Agarwal (Ministry of Skill Development and Entrepreneurship) said that students in highly competitive co-educational morning colleges in Delhi University may not be representative of the general college population in the country. The study did not take into account students admitted to the colleges through quotas. In his view, there is not a lot of difference in the abilities of students in the general (non-quota) category.

From the audience, many questions were also raised concerning the impact of factors not included in the study. One participant suggested the researchers also compare differential impact of peers on the performance of students based on their socio-economic characteristics and not merely gender. It was also remarked that the colleges may serve as a market signal, and it would be useful to look at the labour market outcomes since grades would not suffice for the same. Finally, use of relative percentile rankings instead of absolute grades were suggested.

4. Human development: Health and education II

The second session on health and educated was chaired by Ravi Srivastava (Jawaharlal Nehru University).

Nidhiya Menon (Brandeis University) presented her IGC project on 'Christianity and Child Health in India', which explores the relationship between religious identity and child health outcomes. The paper documents the relatively better health status of Christian children, particularly girls in the southern states of India, measured by height-for-age. They use data from Demographic and Health surveys to understand the impact of religion and anthropometric characteristics on height-for-age for both girls and boys. The study finds strong evidence of Christian advantage for infant girls; height-for-age is significantly higher than Hindu and Muslim infant girls. Menon believes that this trend can be traced to the variations in dietary restrictions as well as the characteristics like literacy, mother's height, age of marriage and labour force participation of women from each religion. The patterns are plausibly tied to the legacy of Christianity which among other things emphasised the importance of basic health, hygiene and sanitation.

Amarjeet Sinha (Ministry of Rural Development), one of the discussants, said that the paper pointed out the importance in recognising the complementarity of investments in education and improvement of health outcomes. He drew parallels from the 42nd NSSO round which showed fertility rates stabilising with each year of education. Rathin Roy (National Institute of Public Finance and Policy) commended Menon on the usage of datasets spanning two centuries for such insightful results. He also suggested including Jharkhand and North-Eastern states since they have a large Christian population.

Members of the audience pointed out that those areas with higher proportion of Christian missions may have experienced preferential treatment from the British which would have led to more economic investment and growth thus skewing the results. The issue of the highly significant decline in heights after 40 months of age was also raised.

Karthik Muralidharan (University of California, San Diego) presented 'Double for nothing? Experimental evidence on the impact of an unconditional teacher salary increase on student performance'. The paper uses a randomised control trial in Indonesia to evaluate the impact of the government's policy to permanently double teacher salaries. The research used a sample of 360 schools and 3 waves of student tests as well as student-teacher interviews. When implemented, this scheme generated a financial transfer to teachers that improved their welfare; it was associated with declines in self-reported levels of financial distress and hours worked in second-jobs. However, the researchers find exactly zero effect of the programme on student on test scores. Given that when nationally scaled up this policy added $5 billion to

Indonesia's annual wage bill, the results offer a cautionary tale for education policy in India.

Amarjeet Sinha discussed in parallel the Shiksha Karmi Project in Rajasthan, in order to draw lessons from it. He emphasised the need for adapting to local needs as seen with the project which was implemented in tribal areas, and the capacity building process that trained village women, educated only till the 8th grade, to become teachers. At the end, he asserted the role of linking adequate compensation to performance is critical.

Rathin Roy reflected on the application of the Indonesian experience to the Indian civil service. He also discussed whether contractual teachers, who are paid less, would help in improving learning outcomes.

In concluding, the discussants noted that it was not the level of pay that was important at improving performance, but the structure and potential for merit-based career progression.

The audience discussion included important observations on designing education policy and research. One participant remarked that critical shifts in education policy such as in the pedagogical content are tough to bring about, given that education is a state subject and teachers are a huge vote bank. The usage of alternative measures of learning outcomes such as student outcomes later on in the labour market was also discussed.

5. Finance

The session of Finance was chaired by R. Gopalan (Public Enterprise Selection Board).

Madhav Aney (Singapore Management University) presented his ongoing IGC project on 'Demat trading and market liquidity: Evidence from the NSE in India' co-authored with Sanjay Banerji (Nottingham University). The authors look at a particular technological innovation - dematerialised (demat) trading, at the National Stock Exchange (NSE), and its effect on financial market performance. Demat eliminated the need to transfer paper share certificates from the seller leading to a reduction in the potential loss or theft of share certificates and cancellation of the stamp duty for transfer. The authors focus on the bid ask spread to measure how well the financial market functioned following the introduction of Demat. The authors find that post-demat, the volume of trade and liquidity at the NSE increased relative to the BSE. The authors conclude that the introduction of Demat trading had a big effect particularly for firms that were less liquid at the start. Aney ended his presentation with an open question about the volatility observed in the bid-ask spread in the Bombay Stock Exchange relative to the NSE.

Ila Patnaik (Ministry of Finance), the discussant commended the paper on its central idea and for creating a model with asymmetric information. She suggested using other natural experiments occurring during that time. She remarked that it seemed counter-intuitive that small firms saw a more significant increase in liquidity whereas forgery was likely to be more prevalent for large firms' shares. Members of the audience speculated about alternative hypotheses for increase in liquidity, such as the decline in physical transaction costs, and collusion between brokers and banks that hampered the efficiency of the market at that time.

The second presenter - Souvik Datta Indian (Institute of Management, Bangalore) - presented findings from pilot studies of his IGC project 'Informal Insurance under Group Lending with Individual Liability: Evidence from India'. Their research survey sought to find causes of high repayment rates in individuality liability loans which do not have any peer monitoring a la joint liability loans. The survey was carried out with clients of Bandhan Financial Services Pvt. Ltd (BFSPL) in West Bengal. They find evidence of some peer pressure and informal insurance in the sample, which may explain repayment of loans. They also show that microfinance loans affect the lives of many poor households by increasing access to credit and improving average incomes. The loans also helped empower the women in terms of decision-making on important household matters and boosting self-esteem and morale.

Ila Patnaik, the discussant raised the issue of the absence of an analytical framework to answer the research question. She also asked how informal insurance mechanism would work in the face of common shocks. Lastly, she discussed the necessity of comparative analysis to understand the impact of individual liability lending on women's empowerment.

Members of the audience highlighted the need for distinguishing between the loans used in non-productive and productive investments. They suggested the authors study the process by which groups are formed, as this could shed light on informal insurance within the group. Participants also questioned the mechanisms for ensuring repayment – e.g., whether negative methods like coercion or social stigma were being used.

6. Energy and the environment

The session on energy and environment began was chaired by Nitin Desai (The Energy and Resources Institute).

Johannes Urpelainen (Columbia University) presented his IGC project on 'An impact evaluation study of the Rural Electrification with Off-Grid Community using solar power in Uttar Pradesh'. Using a Randomised Control Trial, the study evaluated Mera Gao Power which was implemented in rural Uttar Pradesh. The study shows that adoption of solar power as a mode of rural lighting has substantial benefits over the currently widespread use of Kerosene. In particular the program being delivered by a private company is easy to scale up and does not require subsidies. The monthly payments for solar power service, though relatively higher than urban electricity access, were affordable. Kerosene spending was significantly reduced following the adoption of solar power. Increased lighting use at relatively lower cost of adoption was evident. The study however notes the limitations of off-grid solar rural electrification: it is not suitable for irrigation and that productive loads of electricity are unavailable.

Anandajit Goswami (The Energy and Resources Institute), the discussant suggested that that there is scope exploring the role of institutions and elite capture in the study. He drew parallels from his experience in Africa of the villagers utilising solar power.

Nitin Desai said models need to incorporate harnessing energy for productive purposes such as manufacturing and education in rural areas. He further added that it is necessary to not look at micro-grids as a temporary solution, but to ultimately integrate into a hierarchic grid system.

The audience raised questions concerning seasonal variations in adoption, and the role of solar power when electricity during peak hours was often not available. One participant asked about the socio-economic characteristic of households installing the panels, since these were mainly installed in concrete houses owned predominantly by wealthy and upper-caste households. Possible cultural or technological reasons that inhibited indoor lightning, documented in the study, were also discussed.

Ram Fishman (George Washington University) presented his ongoing IGC project on 'The effects of subsidies on resource saving technologies'. The study, implemented in Gujarat, studies the effects of subsidising the adoption of drip irrigation on water and electricity use. Compared to flood irrigation, the study shows that subsidies significantly increase the adoption of drip irrigation. In turn this increases the use of electricity initially, after which it gradually declines, particularly between two to four years after adoption. The study shows that increased adoption leads to increases in land use and productivity.

Alok K. Sikka (Indian Council for Agriculture) remarked that a better way of analysing the impact of the subsidies would be to look at water productivity and energy productivity. In particular, effects on cropping patterns ought to be incorporated: whether adoption induces farmers to raise area devoted to water-hungry crops such as sugarcane. He discussed the Pradhan Mantri Krishi Sanchayee Yojana (PMKSY) which would ensure life-saving irrigation only at critical stages.

Anandajit Goswami suggested that to incorporate the behavioural tendencies of land expansion and sale of excess water in markets, the author should study the dynamic valuation of water which could vary across religion and caste boundaries.

Nitin Desai concluded the discussion by commending the author on the impressive scale of his data. He also said that since the area studied is so water starved, the subsidies do increase inefficiencies which would have to be addressed at some point.

The audience raised questions concerning difference in adoption levels between tribal and non-tribal communities, and how subsidy costs varies with rainfall. One participant raised the question of spill-over effects of such subsidies on ground-water tables and other potential uses of water of expansion of water use.

7. State capacity

The last session of the conference on state capacity was chaired by Pronab Sen (IGC India Central; National Statistical Commission).

Sheetal Sekhri (University of Virginia) presented her IGC project on 'Dial 'Mobile' for Monitoring: Using technology to increase transparency in public service delivery'. The study looked at the impact of Information Communication and Technology (ICT) platforms on the delivery of a school midday meals (MDM) programme in Bihar, as part of a massive school-feeding programme. The study aimed to reduce high programme leakages by identifying a low-cost, scalable system to improve accountability of public service delivery. The study used a Difference in Difference approach, following the gradual roll out of an Interactive Voice Response System (IVRS) across Bihar. IVRS collected beneficiary take-up data and monitored programme delivery. Prior to IVRS, monthly reports prepared by school headmasters would document the number of students requiring meals. Under IVRS, schools registered additional points of contact allowing for increased school-level monitoring of actual provisions. The study found overall that independent data based assessment of MDM provision improved after IVRS. She emphasised that the study showed significant promise for the use of ICT in reducing leakages and improving efficacy of public service delivery.

The discussant of the session, Santosh Mathew (Ministry of Rural Development) offered an analysis of other external factors in Bihar at the time of the study that may have contributed to IVRS' success. He noted that Nitish Kumar's wider reform agenda, under which public programmes experienced significant improvements in administrative capacity, may have been instrumental. He suggested that some of IVRS' impact could be attributable to improved managerial quality and wider changes in political economy and governance in Bihar during the study.

Pronab Sen remarked that, in his own experience he witnessed the huge differentials between data reported directly at the block level and at the state-level. He remarked that since data can be doctored at each level, selecting the intervention point is a very difficult task.

One participant questioned the quality of nutrition through Mid-Day Meals with constrained resources. The inclusion of parents and other stakeholders to enhance MDM delivery was also discussed.

Finally, Anant Sudarshan (Energy Policy Institute at University of Chicago) presented his ongoing IGC project 'Emissions Trading as Environmental Innovation in India'. He argued that existing evidence suggests that concentrations of fine particulate matter across India, particularly in North India, has a substantial impact on life expectancy, as well as broader economic costs from elevated disease burdens, all of which negatively impact economic productivity. The challenge, outlined by him, lies in developing a responsive and efficient regulatory scheme, and providing adequate information and monitoring whilst keeping compliance costs low to ensure that good firms are not inhibited from entering the market. To this end, the study examines three different approaches for regulating emissions. Particular emphasis was placed on testing a market-driven emissions-trading scheme and assessing its impact on pollution and firm compliance. An emission-trading scheme allows for continuous incentives to firms to reduce pollution. Using market-based monitoring may encourage innovations and greater efficiencies among participating firms. Leveraging the market to regulate firms in contexts where state enforcement capacity is insufficient is also desirable.

The discussant Santhosh Mathew pointed out the importance of developing alternatives to the classic approach of increasing regulatory oversight through greater administration and reporting burdens. He agreed that markets offer the scope for leveraging locally generated collective action to enforce regulations. Sheetal Sekhri raised the issue of prevalence of hotspots of pollution due to the market mechanism. In the same vein, she asked whether a tax would be more advantageous to control pollution. Another participant raised the issue of the functioning of the emissions trading mechanism if there is a demand-side market failure and firms colluded to increase trading limits.

Pronab Sen closed the conference with a vote of thanks to the paper presenters. He remarked that unlike most conferences, this had a small quantum of papers; yet each had interesting insights. He thanked the audience and participants for the high quality discussion and feedback.

The International Growth Centre (IGC) aims to promote sustainable growth in developing countries by providing demand-led policy advice based on frontier research. The IGC directs a global network of world-leading researchers and in-country teams in Africa and South Asia and works closely with partner governments to generate high quality research and policy advice on key growth challenges. Based at LSE and in partnership with the University of Oxford, the IGC is funded by the UK Department for International Development (DFID).

IGC Bangladesh
Institute of Governance Studies (IGS)
SK Center (5th-7th floor)
GP.JA-4, TB Gate
Mohakhali, Dhaka 1212
Bangladesh
Email: bangladesh@theigc.org
Twitter: @IGC_Bangladesh

IGC India Bihar
Asian Development Research Institute (ADRI)
BSIDC Colony, Off-Boring Patliputra Road
Patna- 800 013
India
Email: india.bihar@theigc.org
Tel: +91-612-265649
Twitter: @IGC_IndiaBihar

IGC India Central
Indian Statistical Institute, Delhi Centre
Shaheed Jeet Singh Marg
Qutab Institutional Area
New Delhi 110016
Delhi
Email: indiacentral@theigc.org
Tel: +91 9953207240; +91 11 40727754
Twitter: @Ideas4India

IGC Myanmar
MDRI-CESD, Highway Complex
Building A1, Room No 112
Hanthawaddy Road
Yangon, Myanmar
Email: myanmar@theigc.org
Twitter: @IGC_Myanmar
Facebook: IGC Myanmar

IGC Pakistan
Lahore University of Management Sciences
opposite Sector U, D.H.A., Lahore, Pakistan
Email: pakistan@theigc.org
Tel: 042 3560 8000 extensions 2160, 2249, 2216
Twitter: @IGC_Pakistan

READ MORE IDEAS FOR GROWTH AT THEIGC.ORG/BLOG

International Growth Centre
London School of Economics and Political Science
Houghton Street London WC2 2AE
www.theigc.org

DIRECTED BY

FUNDED BY