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International Conference on Entrepreneurship
Catalysts of Entrepreneurship: Policies for Growth

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PREFACE

The first International Conference on Entrepreneurship was held at the Indian School of Business (ISB) in Hyderabad, India, on June 5–6, 2009. The theme of the conference was “Catalysts of Entrepreneurship: Policies for Growth.” Participants discussed policy issues that can impact the growth of entrepreneurship in India. This document summarizes the proceedings and includes several of the speakers’ presentations. We are grateful to ISB for organizing the conference.

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The RAND Institute for Civil Justice

The RAND Institute for Civil Justice is an independent research program within the RAND Corporation. The mission of RAND Institute for Civil Justice (ICJ) is to improve private and public decisionmaking on civil legal issues by supplying policymakers and the public with the results of objective, empirically based, analytic research. ICJ facilitates change in the civil justice system by analyzing trends and outcomes, identifying and evaluating policy options, and bringing together representatives of different interests to debate alternative solutions to policy problems. ICJ builds on a long tradition of RAND research characterized by an interdisciplinary, empirical approach to public policy issues and rigorous standards of quality, objectivity, and independence.

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The Kauffman-RAND Institute for Entrepreneurship Public Policy

The Kauffman-RAND Institute for Entrepreneurship Public Policy, which is housed within the RAND Institute for Civil Justice, is dedicated to assessing and improving legal and regulatory policymaking as it relates to small businesses and entrepreneurship in a wide range of settings, including corporate governance, employment law, consumer law, securities regulation and business ethics. The institute’s work is supported by a grant from the Ewing Marion Kauffman Foundation.

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ACKNOWLEDGMENTS

In the course of organizing this unprecedented collaborative effort to begin a working dialogue about entrepreneurship in India, a number of prominent researchers, speakers, and panelists have shared their expertise and perspectives with us. This conference and subsequent proceedings would not have been possible without their active contribution to the deliberations that took place at the International Conference on Entrepreneurship, titled “Catalysts of Entrepreneurship: Policies for Growth,” held on June 5–6, 2009, in Hyderabad, India.

The Kauffman-RAND Institute for Entrepreneurship Public Policy would like to gratefully acknowledge its conference partners – the Indian School of Business and the LEGATUM Institute – for their assistance in conceptualizing and participating in the conference, and for putting forth the ISB-RAND preliminary research findings.

Krishna Kumar gratefully acknowledges additional support from the Rosenfeld Program on Asian Development. Elizabeth Brown acknowledges the Pardee RAND Graduate School for supporting her attendance of the conference.
EXECUTIVE SUMMARY

The first International Conference on Entrepreneurship was held at the Indian School of Business (ISB) in Hyderabad, India, on June 5–6, 2009. The theme of the conference was “Catalysts of Entrepreneurship: Policies for Growth.” The two-day symposium was characterized by collaboration between policymakers, industry leaders, members of academia, and entrepreneurs. Participants shared a forum to deliberate on a comprehensive set of policy issues that can impact the growth of entrepreneurship in India.

Emphasizing the importance of creating an effective ecosystem for entrepreneurial growth in his welcome address, Dean Ajit Rangnekar said, “Entrepreneurship was one of the first initiatives undertaken by the Indian School of Business. In a developing country like India, we need to bring the government, academia, industry, and regulators together so that there is a dialogue on important aspects of policy that can promote entrepreneurship in the country. We also need to create an effective ecosystem in which entrepreneurs may flourish and to grow.”

Krishna Tanuku, executive director of the Wadhwani Centre for Entrepreneurship Development at the ISB, said, “According to a study conducted by the Kauffman Foundation, about a third of the U.S. economy, of $14.3 trillion, comes from companies that are less than 25 years old, showing that encouraging entrepreneurship has a huge multiplier effect on the economy. Using that as a benchmark, the opportunity for Indian entrepreneurs in enterprise creation and enterprise growth is estimated to be about $500 billion to $600 billion in the next eight to ten years.”

The conference program was designed to focus on entrepreneurial development in two sectors: Education and Effective Utilization of Infrastructure. With the help of appropriate policies, these two sectors can generate the next wave of great entrepreneurial activity in India. The research work done by the ISB and the RAND Corporation, in partnership with the LEGATUM Institute, is the basis for the conference theme. The need for in-depth research on entrepreneurial development is highlighted by the fact that there are no Indian studies that connect the effect that government policy has on entrepreneurship. The ISB and RAND have come together to fill that void by studying the policy documents of 15 Indian states that are well known for encouraging entrepreneurship.

The conference also featured academics from the ISB and the Pardee RAND Graduate School, presenting preliminary research findings on the micro-, small-, and medium-enterprise sector and the initiatives taken by Indian states toward promoting entrepreneurship. While the potential for growth is immense, there are multiple challenges vis-à-vis policy and regulatory frameworks. Separate panels discussed the role of policies in hampering and fostering entrepreneurship within the education and infrastructure-utilization sectors.

The key areas of discussions centered on

• policies and practices that encourage or discourage entrepreneurs in India both at the state and the central government level
• the performance of recent reform structures, such as a single window clearance vis-à-vis new venture creation, with specific focus on sector-specific variations
• current regulatory regimes.

This conference has helped evolve an effective, pragmatic, and comprehensive set of policy discussions and preliminary recommendations to promote entrepreneurship in India. In addition, it has raised questions that need to be further researched while highlighting the need for action and the road ahead.
The Challenges of Entrepreneurship

“Entrepreneurs are self-motivated and will find opportunities for success whether the environment is conducive or not,” said Nagarajan Vittal, former Central Vigilance Commissioner (CVC) and the keynote speaker at the conference. He cited the example of Karsanbhai Patel, who started as a chemical lab assistant and later went on to develop Nirma Washing Powder, an affordable detergent that forced Hindustan Lever to sit up and take notice. In Patel’s case, government policies were in his favor. Aditya Birla, on the other hand, moved to Egypt because he felt that policies in India were too restrictive for him to achieve the kind of growth he envisioned. In both instances, the entrepreneurs had grand visions. However, it is essential to combine vision with action, and to create wealth and justice along the way.

In this context, systematic evidence-based policy research can come to the rescue of developing economies, by seeking to clarify the forces that encourage entrepreneurship. These forces include incentive structures, stakeholders, and future labor force demands. Such research can also help reduce bureaucratic impediments for entrepreneurship by ensuring good governance models and helping to develop performance indicators for empirical measurement of progress. In addition, research can help educate policymakers on best practices in entrepreneurial policy. Citing the example of the RAND-Qatar Policy Institute, Bruce Nardulli elaborated on how a joint venture initiated in 2001 between the RAND Corporation and the government of Qatar aimed to bring in empirically based policy options to redefine the K–12 educational system. Recognizing that an ecosystem of educational and economic reforms is necessary to improve human capital, growth, and entrepreneurship, Qatar’s senior leadership has already embarked on reforms at the university level.

In his keynote address, Evan Feigenbaum, a senior fellow at the Council on Foreign Relations, spoke about his experience in the U.S. government and the bond between the United States and India. He said, “When I served in the U.S. government, I did have the privilege of helping to push forward the strategic partnership between the U.S. and India. Like entrepreneurs, who question assumptions, take risks, and ultimately turn big ideas into path-breaking innovations, those of us who have worked on behalf of U.S.-India relations have, in some sense, been entrepreneurs. Much like the entrepreneurs in this room, both governments have had to turn bold ideas into policy innovations. And the U.S.-India relationship itself became a kind of exercise in entrepreneurship.”

Vittal pointed out that one of the key issues that needs to be addressed during the process of developing an ecosystem for entrepreneurial growth is fostering ethical entrepreneurship that rests on the tenets of honesty and justice. “Honest businessmen can be created, provided you have a system in which people are punished for corruption,” he added.

“Considering that we have 5,000 obsolete laws in India, we should think along the lines of adopting something akin to the sunset principle in the U.S., in which old laws are systematically phased out after some time and retained only if they are modified. One of the fallouts of this incredibly stifling regulatory framework is the presence of middlemen. Operating costs across the board can go up 5 to 20 percent due to corruption. Corruption can be reduced using information technology and by applying the five principles of engineering: elimination, combination, modification, resequencing, and substitution,” said Vittal. Som Mittal, president of NASSCOM, pointed out that “The government needs to make the environment conducive to do business in India.” “In the next 10 to 12 years, India is going to be brimming with opportunities. Eighty percent of these opportunities are going to be in virgin markets, virgin areas, and virgin verticals; areas that haven’t yet emerged today,” Mittal added.
Panel on Entrepreneurship in the Education Sector: Recommendations

- Schools are allowed to register only as a trust or a society, and not as a public/private limited firm. This increases the barriers of entry and discourages entrepreneurship in this segment.
- Although the education sector is regulated, the educational institutions themselves must be accredited.
- Lack of good exit options is a big hindrance to attracting foreign investment in the education space.
- Give education official “Industry” status.
- Schools should be allowed to seek affiliation from central, state, and foreign boards.
- Government should formulate an appropriate level of regulation of schools to encourage more private players to enter the industry.
- Encouraging private players to leverage IT and broadband communications could, to a certain extent, take care of the problem of reaching out to the masses and providing “education for all.”
- Government should apply segment-specific add-on policies to a very basic core set of policies in the education sector – different policies for preschool, K–12, vocational, finishing schools, colleges, post-graduation degrees, and others.
- Encourage teacher training and skill enhancement for teachers in public schools.

Questions for Further Study

- Do Indian private schools and colleges cater only to the elite? Should there be a cap on the fees that can be charged by private schools? How should this be rationalized?
- Should the government look at reducing regulation for private schools? Would this help solve the problem of “affordable education for all”?
- What are the barriers to scale in entrepreneurship in education in India?
- Is entrepreneurship in the education industry seen as just another example of how Special Economic Zones (SEZs) are viewed (i.e., as a land bank)? Is the education industry attracting more interest from infrastructure leasing firms?
- Quality and Private vs. Quantity and Public. Are there any business models that provide quality education to the bottom of the pyramid? Is quality education only for the elite? Are they different segments?
- Are the exit options for investors in this segment too stringent? Is the current regulatory system unattractive to foreign investors?
- The current vocational training institutes lack the elasticity to respond to labor market demands due to nonindustry participation in the curriculum development. Can public-private partnerships (PPP) address this issue?

Panel on Infrastructure Utilization: Recommendations

- There is a need for a substantive policy think tank in India.
- Multiple entrepreneurial opportunities could be created to act as support systems that help build the ecosystem for sustainable industrial clusters, SEZs, and other industry conglomerates.
- Entrepreneurial opportunities in the alternative and renewable energy, supply chain and logistics, and MSME clusters need to be fully explored and encouraged by the government.
- States should have better policies for land titles, as the land title issue hampers real estate development.

Questions for Further Study

- Is the “Rurban” model in Gujarat a good model for rural urban development? Can it be an effective model that can be replicated across India? Does one size fit all?
- Can the government promote cluster policies and provide an ecosystem that enables entrepreneurs with mutual interests to learn from and support each other?
• What policies can help develop clusters close to industrial areas, thereby facilitating the creation of an entire city? Such policies would help establish and promote more cities in the country, thus leading to greater entrepreneurial opportunities.
OVERVIEW OF ONGOING ISB-RAND RESEARCH

Objective of the Research
William Inboden, senior vice president of the LEGATUM Institute, said that the LEGATUM Institute was drawn to entrepreneurship research because of its Prosperity Index results. The LEGATUM Institute developed the Prosperity Index to measure prosperity across countries. The Prosperity Index focuses on two aspects – economic growth and quality of life; entrepreneurship is reflected on both sides of the index.

Fred Kipperman, a fellow at the RAND-Kaufman Institute for Entrepreneurship Public Policy, chaired the ISB-RAND ongoing research and preliminary findings overview session.

The ISB-RAND research, supported by the LEGATUM Institute, aims to systematically study the role of Indian public policy, especially state-level policy, and its relation to entrepreneurial outcomes. It also looks at the current trends of micro-, small- and medium-enterprises (MSMEs) in India and how they are impacted by certain state-level policies. A trend analysis from annual data for 1991–2002 was conducted. Data were collected across 35 states and union territories. Much of the data in this research were sourced from the All India Census of Small-Scale Industries (SSI), Annual Reports, Ministry of MSME, indiastat.com, the Central Statistical Organisation (CSO), and National Accounts Statistics.

More specifically, the research analyzes the impact of specific outlays and subsidies in the form of investments in industrial parks, clusters, and state expenditure on support technology in the MSME sector.

The broad categories of research that are being addressed by this research effort are

- Overview of the Indian MSME Landscape
- State Industrial Policies
- State-level Policies and Entrepreneurial Outcomes
- Effects of Single Window Clearance on Indian Manufacturing Firms
- Survey of Innovation in the SME Sector
- Public-Private Partnerships in Infrastructure Projects.

Overview of the Indian MSME Landscape
Preliminary findings indicate the MSME sector contributes 8 percent to the country’s GDP and employs 8.1 percent of the total Indian labor force – close to 41 million people. MSMEs account for 40 percent of all Indian exports and are responsible for 45 percent of the total manufacturing output. The MSME sector comprises 13 million firms, out of which only 2.2 million are registered. Out of the 13 million firms, “sick” units – that is, units that are underperforming or close to insolvency – make up 14.5 percent of the registered and 7.6 percent of the unregistered firms.

What makes the MSME sector even more relevant for the study is the fact that it is estimated to grow at the rate of 12.3 percent in the 11th Five-Year Plan (2007–2012), as opposed to an overall industrial growth rate of 9.8 percent. From 1991 to 2006, the average growth rate of this sector was consistently higher than the industrial growth rate, with the exception of 1995–1996. The MSME sector got a new lease on life in 1999 with the formation of the Ministry of MSME. This gave the sector a new focus on government policy, which has helped it establish a new path of accelerated growth. The National Board for MSME was formed with the clear mandate and objective of managing cluster development, training entrepreneurs, developing infrastructure, and promoting financial access.

The MSME Development Act of 2006 introduced a number of new policies, such as a simplified registration process for new MSMEs. This now involves completing a memorandum instead of the earlier, more time-consuming process. With this new process in place, District Industry Centres...
(DICs) no longer have to shoulder the administrative burden of MSME registration. Another change implemented in the act is the systematic penalties imposed on late payments from suppliers. Often, large firms delay payments to smaller firms, putting a strain on the latter’s working capital resources. The penalty imposed is that payments delayed by more than 45 days must incur a compound interest rate, which is three times the bank rate notified by the Reserve Bank of India (RBI). Thus, the act ensures smoother flow of working capital for firms that may be cash-starved.

A noteworthy shortcoming of the MSME Development Act of 2006 is that it does not substantially address labor policy. The act does not encourage provisions for more flexible employment policies, nor does it have provisions to promote entrepreneurship among women in spite of the clear objective laid out in the 11th five-year plan (2007).

Another important preliminary research finding is a negative correlation between subsidies and growth parameters. While this does not imply causality, the statistics do provide a starting point for further investigation. The lesson is that, sometimes, general investment in banks, labor reforms, and infrastructure might have a better impact on MSMEs. The caveat is that we are looking at state-level outcomes, and this might change with respect to individual outcomes.

Another interesting aspect of the operating landscape of the MSME sector is the constraints of expensive capital. Shamika Ravi pointed out that banks were picking larger borrowers to meet their 40 percent priority lending target, which was effectively crowding out smaller firms. Since enterprises with a net worth less than Rs. 10 crore (100 million rupees) cannot access the stock market, they often end up borrowing from banks at a higher interest rate than the Prime Lending Rate (PLR). In contrast, bigger firms are in a better bargaining position and tend to end up with better deals with the banks.

State Industrial Policies
This component of the in-progress research, dealing with state-level initiatives for entrepreneurship, was conducted by Elizabeth Brown, a doctoral fellow at the Pardee RAND Graduate School. Brown studied the effect of state industrial policies on entrepreneurial results. For her preliminary research, she developed a data set of state-level policies, so that policies across states can be compared and connected to outcomes.

Brown used the most current policy documentation from the Office of the Development Commissioner, Ministry of Micro, Small, and Medium Enterprises Web site. Although the Web site contains links to an industrial policy for each Indian state, it is not known if the MSME Ministry makes it mandatory for states to report their MSME policy statements. However, since every Indian state presents a policy statement, Brown assumed that reporting is required. Brown chose 15 states with adequate entrepreneurial activity and data for research: Andhra Pradesh, Assam, Bihar, Gujarat, Karnataka, Kerala, Tamil Nadu, Punjab, Rajasthan, West Bengal, Maharashtra, Haryana, Madhya Pradesh, Orissa, and Uttar Pradesh.

Brown included 23 unique policies across all states to create a universal list. She compared each state’s policy statement against the universal list, and presented the results in a matrix that she used to analyze the number of policies each state adopted. She then grouped these policies into meaningful categories, each of which targeted a specific purpose. For example, some policies supported people, technology, and capital, whereas others reduced bureaucratic burden.

The matrix revealed a wide variation in adoption of policies by states. Andhra Pradesh, Uttar Pradesh, and Madhya Pradesh, for example, had adopted the most policies, but exhibited considerable variation in terms of the nature of those policies. Bihar and West Bengal had adopted the fewest policies. This, however, does not touch upon the implementation aspect and is only indicative of the intentions of the respective state governments. Supporting business infrastructure
policy was the most popular policy across states. Some states adopted complementary policies. For example, research and development policies were adopted in conjunction with support for technology clusters and support for infrastructure. SEZ-related policies were adopted in conjunction with export subsidies and other business-friendly policies. Policies that reduced bureaucratic burden and increased social good were found together in most states. Policies that reduced bureaucratic burden were also found with policies that supported business infrastructure and increased the state’s outward orientation. Also, policies supporting people, technology, and capital were negatively correlated with policies intended to reduce the bureaucratic burden. A correlation between certain government policies and the growth of MSMEs in the states was established. As a result, it may be concluded that microfinance is more effective than subsidies in providing impetus to the growth of MSMEs.

**State-Level Policies and Entrepreneurial Outcomes**

Krishna Kumar, a senior economist at RAND and a professor at the Pardee RAND Graduate School, explored the effect of state-level policies on entrepreneurial outcomes. His research on entrepreneurship among women showed preliminary findings indicating that policies that give preferential treatment to women are positively correlated with the degree of entrepreneurship. It is yet another challenge to motivate entrepreneurial activities in rural areas.

With respect to promoting women entrepreneurs, a study conducted in Sri Lanka revealed an interesting pattern. It was found that when money is given to men, the growth tends to be faster. However, when money is lent to women, while there may be less growth, the money generated is well spent and goes into education, health, and betterment of the household. Kumar pointed out that economic development is highly correlated with the well-being of women. So although promoting entrepreneurship among women may not directly accelerate growth, future generations will benefit from an increase in such entrepreneurship. This illustrates the concept of human capital transmission across generations. Hence, entrepreneurship among women should be encouraged in spite of the potential growth tradeoff.

On a more positive note, Kumar said that “economic growth and equitable development are not necessarily disconnected pieces. They can be two sides of the same coin.” If you empower someone in a village to be an entrepreneur, Kumar explained, it results in growth. Hence, growth-oriented policies and entrepreneurship-related policies need not be different. The way forward is to create wealth at the bottom of the pyramid, by creating policies that enable access to training and credit. Microfinance is a very good vehicle that will increase access to credit and ensure that a lower stratum of the economy has financing options. There seems to be an inherent dichotomy in the fact that when government provides subsidies, the growth of MSMEs is not positively impacted, whereas when banks provide credit, it leads to growth. One of the reasons for this is the choice of recipient of that credit. When banks provide finance to people, they select people who are likely to make a profit and repay the loan. But when government provides financial subsidies, it is not the same as banks providing finance. This is because government provides finance subsidies to remaining “sick” units – i.e., units that are underperforming or nearly insolvent. According to Milton Friedman, “When a private enterprise fails we shut it down; when the government fails we pump in more money.” Since the financial subsidies are targeted at units that are failing, it seems that these subsidies have a negative effect on growth. There is a negative correlation between subsidies and growth, although this need not imply causality. It is because subsidies are given when there are a lot of sick units.

Additionally, subsidies reduce innovation and efficiency. They may be helpful to entrepreneurs to provide the initial nudge, said Kumar, but they should be targeted and time-bound to be most effective. For example, once the firm achieves a certain size or growth, subsidies should be withdrawn.
Effects of Single Window Clearance on Indian Manufacturing Firms

Neeraj Sood, an economist at RAND and a professor at the Pardee RAND Graduate School, is working with a team of RAND researchers on a project aimed at introducing policy reform in India through empirical research and data gathered from Indian settings. They are evaluating the effect of the Single Window Clearance (SWC) system, a concept to streamline interaction with regulatory authorities and provide new and existing firms with a single point of contact for regulatory permits. The SWC system is also intended to increase efficiency of the government clearance system and curb multiple nodes of corruption.

The researchers looked at data from 15 Indian states and evaluated the timing of implementation of SWC policies and their effect on three primary performance metrics: number of new firms, performance of existing firms in terms of reducing regulatory burden, and increases in turnover and assets.

The researchers divided the Indian states into three core categories: Early Adopters (states such as West Bengal, Assam, Rajasthan, and Uttar Pradesh, which implemented the SWC system before 2000); Average Adopters (states such as Kerala, Karnataka, Andhra Pradesh, Tamil Nadu, Himachal Pradesh, Madhya Pradesh, Gujarat, and Orissa, which adopted the system from 2000 to 2004); and Late Adopters (states such as Haryana, Punjab, Chandigarh, Bihar, and Maharashtra, which adopted the system after 2004). The research assumes that this is one of the prime factors that influence the chosen performance metrics research.

The preliminary findings indicate that the SWC system seems to be working primarily in three ways:

• Data on the number of new firms showed that Early Adopters of the SWC policy clearly had much stronger entrepreneurial activity, with high growth in the number of new firms.

• SWC reforms cut regulatory burden for both new and existing firms, since much less managerial time is spent on regulatory activities. The researchers compared data from an enterprise survey in 2002 and 2005 and found that firms' sales and assets growth was positively correlated with SWC system implementation. The decrease in regulatory burden appears to spur growth in manufacturing.

• The SWC system is more likely to benefit larger firms in the organized sector, as opposed to smaller firms.

Survey of SME Innovation

Arnab Mukherjee of the Pardee RAND Graduate School emphasized the overall importance of the SME sector to the economy. It is a very dynamic part of the economy, particularly because it is growing twice as fast as the rest of the economy.

Mukherjee said that growth in the SME sector must be maintained in order to produce sustained overall growth rates. Innovation is a key to maintaining such competitiveness in existing markets, and innovation can help create new markets for products. Examining countries such as Malaysia, the United States, and the United Kingdom may be useful for understanding how innovation can help India grow, and how such innovation affects products and processes.

To improve our understanding of the type of processes and managerial adaptations that lead to innovation, a survey of SMEs is being conducted, with the following objectives:

• The survey will assess whether SMEs value innovation. It will also characterize SMEs in terms of:
  o the specific type and size of industry
  o the location (market, goods produced, production methods)
  o business and policy environment issues
  o the Impact of financial literacy on ability to effectively acquire funding.
• In addition, the survey will examine the documented history of firms that have obtained patents, copyrights, and trademarks, as a means of understanding innovation by SMEs.

Public-Private Partnerships in Infrastructure Projects in India

There is ongoing research on the public-private partnerships in infrastructure (PPI) landscape in India, and on the exploration of infrastructure opportunities. As presented by Krishna Kumar, PPIs are relevant to entrepreneurship: India faces a significant shortfall of $190 billion in financing key infrastructure projects, and PPIs help promote capital market development and create a more rational pricing structure. However, PPIs are not a panacea.

The inherent obstacles in the system are the inadequacy of the domestic credit market system and the inability to manage the PPI process and control monopolies. Another key issue is the limited returns in some sectors due to government subsidies, which discourage private partners.

Many of the infrastructure projects are politically sensitive. On a sensitivity scale, we can rank the sectors as follows, with 1 being the least politically sensitive and 4 being the most:

1. Telecom
2. Ports and airports
3. Energy
4. Water and sanitation.

In the latter cases, the chances of break-even are low, and hence there is greater hesitation. PPIs differ considerably based on the involvement of the private sector, and they can be categorized as follows:

1. Management control
2. Lease contract
3. Greenfield project
4. Divestiture.

The risk and the capital investment by private partners changes depending on the above categories, with 1 being the least capital-intensive and risky for private investors, and 4 being the most risky.

India is among the top 10 PPIs in the world. Brazil ranks number 1 in the world for PPI, as a percentage of gross fixed capital invested. India’s PPI landscape has also grown sufficiently since 1990. In terms of PPI expenditure on the different sectors, India spent around 31.5 percent on energy, 45.5 percent on telecom, 22.7 percent on transport, and the balance on water and sewage treatment.

The types of PPIs in India are segmented as follows: Concession –14.8 percent; Divestitures – 5.6 percent; Greenfield – 79.7 percent; and Management and Lease contracts – negligible.

Regression analysis showed that the amount of PPI reduces with an increase per capita GDP. This may be because the governments of developed countries have adequate funds to develop the project themselves, or because they already have a well-developed infrastructure in place and hence will not have to spend as much as developing countries.

Summary of Preliminary Research Findings

• There was a wide variation in adoption of policies among the 15 states studied.
• Government outlays for SMEs do not always result in positive outcomes in the SME sector. The correlation of number of SME units and their output and employment are in fact negatively correlated with expenditures on financial subsidy (though no causality is implied).
• When government provides subsidies, the growth of MSMEs is not positively impacted, whereas when banks provide credit, it leads to growth.
• The Single Window Clearance system increases firm formation, but the effect is more pronounced for firms with more than 10 employees (the organized sector).
• The SWC system is also positively associated with sales and asset growth.
• Implementation of the SWC system brought down time spent on regulations by 5 percent.
• The MSME Development Act of 2006 lacks substantial labor policy. The act does not encourage provisions for more flexible employment policies. The act does not have provisions to promote entrepreneurship among women in spite of the clear objective laid out in the 11th five-year plan (2007).
• Microfinance is more effective than subsidies in providing impetus to the growth of MSMEs.
• Policies that are geared toward individuals (subsidies for human capital and training, access to capital, special treatment of women entrepreneurs, etc.) positively influence the decisions of individuals to become entrepreneurs. Policies aimed at industry (SEZs, openness, infrastructure support, etc.) do not influence the decisions of individuals to become entrepreneurs or, in some cases, influence them negatively.
• The implication is that different sets of policies might be needed to encourage entrepreneurship at the grassroots and at more established levels.
CONCLUSION

These proceedings document and summarize the deliberations at the first International Conference on Entrepreneurship, titled “Catalysts of Entrepreneurship: Policies for Growth.” The conference focused primarily on two sectors: Education and Effective Infrastructure Utilization through entrepreneurship.

This document presents an overview of the Indian MSME landscape with specific reference to state industrial policies. The focus is on state-level policies vis-à-vis entrepreneurial outcomes. Deliberations on the effects of the Single Window Clearance system on Indian manufacturing firms and the effects of public-private partnerships in infrastructure projects in India provide practical insights from industry experts, policymakers, and researchers/academicians who have expertise in these specific areas. While discussing the way forward in both education and infrastructure utilization, these proceedings also present key findings, recommendations, and questions for further research.
SPEAKERS

Reuben Abraham  Executive Director, Centre for Emerging Markets Solutions, Indian School of Business (ISB)

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Elizabeth Brown  Doctoral Fellow, Pardee RAND Graduate School

Evan Feigenbaum  Senior Fellow, Council on Foreign Relations, United States

Sushil Handa  Chairman, Claris Lifesciences Limited

William Inboden  Senior Vice President, LEGATUM Institute

Fred Kipperman  Fellow, RAND-Kauffman Institute for Entrepreneurship Public Policy, United States

Krishna Kumar  Senior Economist, RAND Corporation and Professor, Pardee RAND Graduate School

Som Mittal  President, NASSCOM

Arnab Mukherji  Pardee Rand Graduate School, IIM (Bangalore)

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Parth Shah  President, Centre for Civil Society

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Anand Sudarshan  MD and CEO, Manipal Education Group

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Nagarajan Vittal  Former Central Vigilance Commissioner

Jonathan Zasloff  UCLA Law School and the Ziman Center for Real Estate
The U.S.-India Strategic Partnership:
Catalyzing Entrepreneurship and Growth

Evan A. Feigenbaum

Keynote Speech to the International Conference on Entrepreneurship
Indian School of Business
Hyderabad, India
June 6, 2009

Well, thank you very much, and thank you all for coming out on a Saturday morning. And let me just say what an absolute pleasure it is to be back in India, and especially to be at the Indian School of Business for the first time. I’ve read and heard so much about this institution. And it’s also a very special pleasure to be in Hyderabad. This, of course, is a conference on entrepreneurship. And in so many ways, this city—and, I think, south India, more generally—really exemplify the very essence of Indian entrepreneurship. So thanks very much for having me. I’ve enjoyed the conference thus far, and I look forward to the rest of the discussion.

Now, I should come clean at the very outset by confessing that I’m neither a technology entrepreneur nor much of a management entrepreneur. I didn’t start a business. I didn’t develop a high technology product. I didn’t create some path-breaking innovation, like so many Indian, non-resident Indian, and American entrepreneurs, including some of you.

But when I served in the U.S. government until just a few months ago, I did have the privilege of helping to push forward the strategic partnership between the United States and India. And from my standpoint, at least, that makes me one of a group of Indian and American policy entrepreneurs: political leaders, diplomats, bureaucrats, legislators, businesspeople, students, scholars and ordinary citizens who recognized—and then sought to capitalize on—important and emerging economic and strategic possibilities between our countries.

Absolutely nothing about this partnership has been inevitable. If it had, we would have been strategic partners long ago.
But like entrepreneurs, who question assumptions, take risks, break a little china, and ultimately turn big ideas into path-breaking innovations, those of us who have, in whatever measure, worked on behalf of U.S.-India relations have had, in some sense, also to be entrepreneurs.

Ask yourself, for instance, just how it could be that the world’s largest democracy and its oldest democracy ended up in so much ideational and policy disagreement, rancor, and acrimony during the Cold War?

How could it be that two such entrepreneurial peoples as Indians and Americans ended up with virtually no economic content to their relations for more than fifty years?

So much about today’s U.S.-India relationship was unexpected even just ten years ago. And so, much like the entrepreneurs in this room, both governments have had to turn bold ideas into policy innovations. And so the U.S.-India relationship itself became a kind of exercise in entrepreneurship, one that brought together many, many people on behalf of a very big idea.

Now, in that spirit, I thought what I would do today is to talk briefly about three things:

First, I want to provide a little context by saying something about how we got here – in other words, how the United States and India, two countries that looked so warily at each other for so long, came to forge an emerging partnership – and also what could support that partnership, or else what might set us back.

Second, I’ll say something about how economics, trade, and investment fit into all that. And I’ll also say something about where I think some of the obstacles to closer economic relations still lie.

Finally, I’ll say something about how entrepreneurship has contributed—and, I think, can contribute still more—to our relations.

So let me start with the United States and India. Frankly, this is a partnership that should have emerged long ago, but didn’t. And I don’t need to review the many reasons why, or the aborted earlier efforts to remove some of the old acrimony.

Suffice it to say that the three main obstacles to closer U.S.-India relations have, after several decades, been removed:
The first obstacle was, of course, the Cold War. Locked in a strategic and ideological struggle with the Soviet Union, Americans sought partners and, yes, Americans asked countries to choose sides.

India’s nonalignment—which some Americans saw as a quasi-alignment with the Soviet Union—did not fit easily with that worldview. And so as India has reassessed its own priorities and strategic options in the wake of the Soviet collapse, the United States, too, has found some common ground with India amidst the geopolitical and geoeconomic changes that flowed from the end of the Cold War.

A second obstacle—and it was a big one—was the almost complete lack of economic content to our relations. And you here in India know the reasons for that better than anyone.

Quite simply, India was not well integrated into the global economy, and certainly not into the global supply chains that have linked so many Asian and other countries to the U.S. economy. Until the 1990s, India also pursued policies that made trade with, and investment by, Americans especially difficult.

The final obstacle involved India’s nuclear program. And this, too, proved to be a very big obstacle indeed.

As you may know, the Clinton Administration sought to improve U.S.-India relations without taking some of the steps that its successor took in this area. And that revealed, I think, some of the limits on our relationship, especially from an Indian vantage point.

Indeed, overcoming those limits became, in many ways, the underlying basis for the civil nuclear deal completed last year. And so while I don’t need to review in detail the rationales for the deal, I should at least note that, from an Indian perspective—and on a fairly bipartisan basis between NDA and UPA governments—there was a perceived contradiction between America’s efforts to pursue a strategic partnership with India, on the one hand, while, on the other, pursuing policies that made India a principal target of American nonproliferation sanctions. That, together with environmental, energy, and commercial-related arguments—as well as India’s nonproliferation record and commitments—pushed both sides toward the deal.

All three obstacles have now been removed.
The Cold War is over. And we have built a partnership on a number of key economic and diplomatic issues.

Our relations no longer lack economic content, in large part because India embarked on economic reforms in 1991 that have utterly changed the landscape here. And these reforms helped to create the conditions for the economic content to our relations that had eluded us for so long.

Indeed, India is now one of America’s fastest-growing trading partners. And two-way trade nearly doubled between 2004 and 2007, from just under $30 billion to about $60 billion. This still pales in comparison to the more than $350 billion U.S.-China trading relationship—China is America’s second-largest national trading partner. But the trend is clear and the trajectory is accelerating. And investment is no longer just one-way. Indian companies, too, are investing in the United States. Essar, for instance, bought Minnesota Steel.

Finally, then, as I said, the civil nuclear agreement removed the third obstacle to closer relations. And so we are well positioned to take U.S.-India relations to the next level.

Now, that doesn’t mean we are going to agree on everything. I, for one, am concerned, for instance, about how our governments will manage disagreements on climate and the future of the international trading regime.

Entrepreneurs in both countries may be developing green technologies, but there will be a potentially contentious debate ahead about the demand side of controlling emissions—caps and such—as we move toward the Copenhagen conference this fall, which will seek to develop a new international convention to replace Kyoto.

We’ll also have to manage some disagreements about the international trade regime that scuttled efforts last year to complete the Doha round. And arms control, too, will be an issue that requires careful management as the United States focuses again on the Comprehensive Test Ban Treaty, and as we move toward a Nuclear Nonproliferation Treaty review conference.

But having said that, we’ve developed habits of cooperation that were unthinkable even five years ago. We’ve learned a lot about each other. And we’re working in unprecedented ways on everything from counterterrorism to defense sales to education— for instance, through conversion of the American Fulbright program into a jointly funded Fulbright-Nehru fellowship that will expand and extend such opportunities in higher education.
So I think we can look back with pride on an absolutely transformational period in U.S.-India relations.

In fact, if you look back not very far into history—just 12 or 13 years—there was a time in the United States when people thought very little about India at all, especially in elite American foreign policy opinion, and even, for that matter, in elite corporate and business opinion. And when people did think about India, it was almost always in the narrow context of South Asia—usually hyphenated with Pakistan. So everything was “Indo-Pak” this or “Indo-Pak” that: Indo-Pak nuclear balance, Indo-Pak force balance, Indo-Pak relations.

That’s changed. And I think the change has a lot to do with what’s happened in India—the emergence of India as a global player economically—but also with what’s happened in the United States. The world of 2009 just isn’t the world of 1949, and we Americans know that. Countries like India bulk larger in the world economy.

And there are ties that bind us now that are developing in spite of government. These are the ties between people like you: entrepreneurs, businesspeople, students. We have 95,000 Indian students in the United States—more than from any country in the world. We have nearly three million Indian-Americans, who’ve played a vital role in forging closer ties between our countries. And for its part, India has made great strides in welcoming non-resident Indians living in the United States and elsewhere to become entrepreneurs here in India.

And so these people—and their contacts with one another—form a kind of “living bridge,” a very human bridge that increasingly binds the United States and India together.

Now, let me turn to economics and trade. As I said, we have a fast-growing partnership. And it isn’t just big companies anymore.

A February 2008 small and medium-sized enterprise summit on the margins of the U.S.-India Trade Policy Forum drew around 60 Indian SMEs, while on the U.S. side, companies like FedEx and UPS have been involved in helping American SMEs in their approach to India. For instance, FedEx recently led a trade mission to India of 15-20 U.S. SMEs.

But one statistic, in particular, suggests to me some of the obstacles: While the United States is India’s number one trading partner in goods and services, India is America’s number 17 trading partner. And that puts it in down the list and in a league with countries as small as Belgium and Ireland and Singapore and Malaysia—countries with populations of between just 4 and 20 million.
So how did this happen?

Well, first, it reflects the legacy I described earlier: we’re playing catch-up after decades in which our relations lacked economic content. But it’s a function, too, of a series of structural impediments—some of which the Indian Government is working hard to address, others of which we are seeking to address jointly, but some of which still have some ways to go.

I’m sure you know the list—and, yes, it’s a list with an American perspective. But, then, one goal here—and certainly at a conference like this—should be to seek ways to foster investment, support transnational networks of entrepreneurs, and encourage companies from the United States and India to find each other. So we need to be straightforward about what the obstacles are.

And I know, in any case, that the Indian government—and many Indian companies, for that matter—have their own list of obstacles that they see in the United States: rising protectionist sentiment, the question of technology licenses, and visa policies and processing. These undoubtedly will continue to form part of the U.S.-India conversation.

But what are some of these impediments?

Investment caps, of course, including in sectors of greatest interest to American firms, such as retail and the financial sector. And I certainly know this is politically controversial here. Infrastructure. Bureaucracy and regulations that, despite government efforts, continue to overwhelm all other factors as potential deterrents to starting a business in India.

RAND’s research—and some of the research you’re going to hear about at this conference—illuminates these points.

Likewise with the availability of skilled workers—the bedrock on which Indian growth has been based. Over the last few years, a surplus has turned into a shortage.

And then there are educational reforms, which could help to keep Indian students, who so often choose to go abroad, here in India.
The research shows that these are critical concerns to business, not just to non-resident Indians but also to U.S. and other entrepreneurs interested in starting businesses in India.

And there are other challenges: regulations, tax laws, capital requirements, repatriation of profits as applied to foreign-owned business in India. In all of these areas, transnational entrepreneurs have a stake.

The good news, I think, is that the Government of India is well aware of these issues. It has ambitious plans for infrastructure. And this, too, has formed part of the U.S.-India conversation.

And the government now has a strong electoral mandate to weigh the next stages of liberalization and reform.

This, ultimately, is something only India can do. It isn’t for foreigners to decide India’s best course. And goodness knows, there’s a lot of debate here and elsewhere in the wake of the global financial crisis about “American” ideas.

But India is ever more deeply intertwined into the fabric of the global economy. Why did the crisis hit here in India, even though some believed its growth model and comparative lack of trade integration could insulate it? As Reserve Bank Governor Subbarao recently told a Washington audience, it has a lot to do with India’s financial integration – in other words, Indian corporates borrowed heavily abroad. And so even with a cautious *national* policy on financial liberalization here in India, we still live in a world where India is deeply integrated in other, sometimes unexpected, ways. And there’s simply no denying the degree to which India’s choices—private and public—have already made it an increasingly important part of the global economic system.

The trick with reform, then, is to remove the bottlenecks that, too often, stifle even Indian entrepreneurship. And so given those challenges, the sessions at this conference on increasing entrepreneurship in education and infrastructure should be immensely useful in debating issues such as foreign direct investment in education and public-private partnerships in infrastructure.

Now, I want to just conclude with one more word about entrepreneurship. It’s of course a key engine of economic growth, and it’s something at which Indians and Americans really do excel.

Since the liberalization of the 1990s, there are clear signs that entrepreneurship has been on the rise in India. But different states have different initiatives, and analysis from other countries has shown that policies aimed at small businesses have not always helped. So this conference can help to fill that gap.
As our colleagues from RAND, Legatum, and the ISB will tell us, entrepreneurship can happen in a large firm or a small firm, or among those who aren’t currently entrepreneurs. And so through policies geared discretely toward each of these groups, India can, one hopes, achieve in parallel its dual goals of rapid growth and inclusiveness.

Ultimately, I suspect, this will require something of a public-private partnership – because as I said, this is one of those relationships that has moved forward, in large part in spite of government.

Indian immigrants in the United States, in particular, have a wide range of professional ties to India, returning regularly for business, and to exchange technology and labor market information with colleagues and friends. Some advise companies. Others invest in start-ups and venture funds. And still others have played an advisory role to the Indian Government – and, for that matter, to the U.S. Government.

So we can only hope that state and local policymakers concerned with economic development recognize the growing importance of relationships with local entrepreneurs.

Economic activity, particularly information-technology-related entrepreneurship, is highly localized everywhere in the world. In Silicon Valley. In Massachusetts. In Beijing’s Zhongguancun neighborhood. And here in South India. And that means regional governments are closest to—and are usually the most aggressive in promoting—technology-related entrepreneurship and growth.

This suggests that that coordination between the U.S. and Indian governments needs to be complemented by efforts at the state and local levels. Even as the Indian government weighs national-level education reforms—and even as the U.S. and Indian governments work together on initiatives like the new Fulbright-Nehru program—issues related to education and training, corporate incorporation and location, monitoring of occupational health and safety standards, environmental impact, venture capital flows, even certain types of taxation, might also be addressed at the regional and state levels.

Large firms can always find each other: Boeing and Air India. Lockheed and the Indian military. General Electric and Westinghouse and, I hope, NPCIL. But small and medium-sized enterprises need more help: national help, state-level help, and ultimately, policy incentives from both countries. Indeed, the challenges to large firms, both Indian and American, are exacerbated in the SME sector precisely because they don’t have the same resources as large multinationals.

The business climate matters. For instance, the World Bank’s 2009 survey “Doing Business” tells us it takes 30 days to start a business in India, and 17 days to export a product. This is an affirmative change from the 89 days it took to start a business in 2004, and 36 that it took to export something. But it’s still a
challenge for small and medium-sized enterprises, which have smaller margins, shorter timeframes, and higher transactions costs.

So that’s the task ahead. And that’s some of what I hope we’ll learn about at this conference — and some of what we all seek innovative policy and management solutions to.

It is, as I said, just an incredibly exciting time for Americans and Indians to be involved with one another. So I look forward to the conversation. Thanks for having me.
International Conference On Entrepreneurship

Outline of Research Presentations

June 5-6, 2009
We are grateful to the Legatum Institute for supporting this research.

Its mission:

To promote political, economic and individual liberty in the developing and transitioning world.
Research Team

- Elizabeth Brown, Pardee RAND Graduate School
- Krishna B. Kumar, RAND
- Tewodaj Mengistu, Pardee RAND Graduate School
- Arnab Mukherji, IIM Bangalore
- Shamika Ravi, ISB
- Neeraj Sood, RAND
- Joanne Yoong, RAND
- Fred Kipperman, Kauffman-RAND Institute for Entrepreneurship Public Policy
We present findings from research in progress to

- Solicit feedback that would allow us to refine the research
- Facilitate subsequent panel discussions by providing a conceptual framework

Final reports will be peer reviewed

- Until then, need to exercise caution in interpreting / citing results
Overall Goals of Research

- To systematically study the role of Indian public policy, especially state policies, on entrepreneurial outcomes
  - Data-driven analysis
  - Use secondary data; primary data collection under way

- To form the basis for education courses on best practices in entrepreneurial policy aimed at policymakers
Session on June 5, 18:25 – 19:40

- Overview of the Indian MSME landscape (Shamika Ravi, ISB)
  - Trends, major policy developments
- State-level initiatives for entrepreneurship (Elizabeth Brown, PRGS)
  - Development of a state policy matrix
- Q&A / Discussion (Moderated by Fred Kipperman, RAND)
Session on June 6, 09:15 – 10:45

- The Single-Window Clearance Policy (Neeraj Sood, RAND)
  - Effect on growth of new and existing firms

- The SME Innovation Survey (Arnab Mukherji, IIMB)
  - Description of primary data collection in progress

- What effects do state-level initiatives have? (Krishna Kumar, RAND)
  - Connect state policy matrix with entrepreneurial outcomes

- Public-private partnership in infrastructure
  - A first step in understanding how to foster entrepreneurship in infrastructure

- Q&A / Discussion (Moderated by Reuben Abraham, ISB)
State Industrial Policies

Elizabeth Brown, RAND

June 5-6, 2009
Aim is to develop a “Policy Matrix”

- Research Question
  - What is the effect of state industrial policies on entrepreneurial outcomes?

- Develop a data set of state-level policies enabling the project to
  - Compare state policy environments
  - Use reproducible, transparent, quantitative methods to connect policies to outcomes
Focus on 15 states with adequate entrepreneurial activity and data

- Andhra Pradesh
- Assam
- Bihar
- Gujarat
- Haryana
- Karnataka
- Kerala
- Madhya Pradesh
- Maharashtra
- Orissa
- Punjab
- Rajasthan
- Uttar Pradesh
- Tamil Nadu
- West Bengal
Gather and assemble state-level policy information

- Review and download documents
  - Obtain official industrial policy documents for micro, small and medium-sized enterprises for 15 Indian states.

- Inventory state industrial policies
  - Inventory documentation and identify a “universal” list of 23 unique policies.

- Compare each state’s policy statement against the universal list
  - Designate a one if the state has the policy and a zero if the policy is absent.

- Create state policy data set
  - Organize the data in a spreadsheet with States listed in rows and Policies in columns.
State-policy data organized in a matrix

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<td></td>
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</tr>
</tbody>
</table>
1. Skill Development & Training, Human Capital
   • Reimbursement for on-the-job, vocational, industry-specific training, training institutions

2. ISO Certification
   • Reimbursement for quality assurance certification, e.g. ISO 9000

3. Technology Upgradation
   • Reimbursement for technology acquisition, investment, purchase

4. R&D Knowledge Capital Development
   • Subsidy for public and private R&D, excellence, institution-building, facilities development, patent fee waivers

5. Capital/Finance Subsidies
   • Tax credits, interest waivers and concessional financing
Reducing bureaucratic burden

6. Single Window Clearance
   • Speeds business permitting by consolidating approvals at state or district level

7. Excise, Sales Tax, Octroi, VAT Subsidies
   • Policies reducing state’s cut of business transactions

8. Business Registration, Entry Tax, and Stamp Duty Subsidies
   • Policies reducing the fiscal-related bureaucratic/administrative burden of doing business in the state

9. Improving State Services to Business
   • Administrative improvements, computerization

10. Flexible Labor Regulations
    • Industry friendly, removing minimum wage protections, maximum work hours
Supporting business infrastructure

11. Cluster/Estate/Industry Park
   • Support for official Economic Clusters, Industrial Estates and Parks

12. Industry Thrust
   • Industry-specific incentives, not tied to geography

13. Infrastructure Support
   • Incentives for physical infrastructure improvements to roads, electrification, clusters, etc.

14. Electricity/Power Subsidies
   • Subsidies and duty waivers for use, self-use or production of energy, state guarantees for continuous power

15. Land Use Subsidy
   • Incentives for land development including land development in a SEZ or Industrial Park
Increasing state’s outward orientation

16. Export Subsidies
   • Special Concessions to export-oriented businesses

17. FDI Subsidies
   • Subsidies on foreign direct investment, fast-tracking FDI approvals

18. Marketing Assistance Subsidies
   • Subsidies to participate in industry fairs, exhibits and events, direct reimbursement, assistance in market identification

19. Special Economic Zone (SEZ)
   • Presence of a SEZ in the state
Achieving social good

20. Women Entrepreneurs
   • Incentives to encourage female entrepreneurship

21. Scheduled Castes and Scheduled Tribes
   • Incentives to encourage SC/ST entrepreneurship

22. Sick Firms
   • Incentives for takeover and rehabilitation of firms in “sick” industries

23. Environment, Quality of Life
   • Incentives for water, waste, conservation measures, environmental management, impact studies
Wide variation in adoption of policies by states
Supporting business infrastructure is most popular across states.
States adopting complementary policies

- Policies grouped together
  - R&D subsidies in conjunction with
    - Support for technology clusters
    - Assistance for technology, marketing, and ISO certification
    - Support for infrastructure
  - SEZs in conjunction with
    - Export subsidies
    - Business-friendly policies
    - Support for technology clusters and infrastructure
    - Assistance for technology and marketing
States adopting complementary policies (continued)

- Policies grouped together (continued)
  - Policies that reduce bureaucratic burden and achieve a social good tend to be found together in most states.
  - In some states, we find that reducing bureaucratic burden is found with supporting business infrastructure and with increasing a state's outward orientation

- Uncorrelated Policy Groups
  - Policies supporting people, technology, and capital are negatively correlated with policies reducing the bureaucratic burden
<table>
<thead>
<tr>
<th>State</th>
<th>Policy Document Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>Industrial Investment Promotion Policy 2005-2010</td>
</tr>
<tr>
<td>Assam</td>
<td>Assam Industrial Policy 2003</td>
</tr>
<tr>
<td>Bihar</td>
<td>Industrial Incentive Policy 2006</td>
</tr>
<tr>
<td>Gujarat</td>
<td>The Industrial Policy 2003</td>
</tr>
<tr>
<td>Haryana</td>
<td>Industrial Policy 1999</td>
</tr>
<tr>
<td>Himachal Pradesh</td>
<td>Industrial Policy 2003</td>
</tr>
<tr>
<td>Karnataka</td>
<td>New Industrial Policy-2006-2011</td>
</tr>
<tr>
<td>Kerala</td>
<td>Industrial &amp; Commercial Policy 2007</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>Industrial Promotion Policy - 2004</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>Industrial Investment and Infrastructure Policy of Maharashtra 2006</td>
</tr>
<tr>
<td>Orissa</td>
<td>Orissa Industrial Policy - 2007</td>
</tr>
<tr>
<td>Punjab</td>
<td>Industrial Policy - 2003</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>Rajasthan State Industrial Policy</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>Micro, Small and Medium Industries Policy 2008</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>Industrial and Service Sector Investment Policy 2004</td>
</tr>
<tr>
<td>West Bengal</td>
<td>West Bengal Industrial Policy</td>
</tr>
</tbody>
</table>

Overview of the Indian MSME Landscape

Shamika Ravi, ISB

June 5-6, 2009
Outline of presentation

1. Overview of the MSME sector in India

2. Recent trends in the MSME sector (1991-2007) for registered and unregistered units


4. Brief state-level analysis of expenditures and outcomes
The MSME sector is a significant contributor to the Indian economy

1. 8% of National Gross Domestic Product
2. 8.1% of total labor force (509 million) in India
   • 41 million employed
3. 40% of total Indian exports
4. 45% of total manufacturing output
5. 130 lakhs firms (108 lakhs unregistered + 22 lakhs registered)
6. Sick units: 14.5% registered and 7.6% unregistered
7. Composition

<table>
<thead>
<tr>
<th></th>
<th>Registered</th>
<th>Unregistered</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing/processing</td>
<td>62%</td>
<td>36.1%</td>
<td>33.6%</td>
</tr>
<tr>
<td>Repair/maintenance</td>
<td>7.5%</td>
<td>18.5%</td>
<td>16.6%</td>
</tr>
<tr>
<td>Services</td>
<td>30.3%</td>
<td>45.4%</td>
<td>49.8%</td>
</tr>
</tbody>
</table>
Steady Growth in number of MSME firms

- Unregistered firms have dominant share (86.3% in 2003-'04)
- Registered firms have doubled in number (1990-2004)

Data source: Annual Reports, Ministry of Small Scale Industries, Government of India
SME Sector growing faster than total Industrial Sector

Data source: Annual Reports, Ministry of Small Scale Industries, Government of India

- Throughout the post liberalization period (almost)
Growth in MSME production has accelerated since 2000

**1999: new policy package**
- Ministry of MSME formed (earlier SSI & ARI)
- Consolidated policy: Credit, infrastructure, technology and marketing
- Central Excise duty exemption limit raised
- Reduction of the reserved product list

Data source: Annual Reports, Ministry of Small Scale Industries, Government of India
Exports and domestic consumption accelerated since 2000

- Exports in MSME sector has accelerated since 2000
- Growth in domestic consumption more than growth in exports

Data source: Annual Reports, Ministry of Small Scale Industries, Government of India
Number of ‘sick’ MSME has come down

- ‘Sick’ Units: erosion of net worth or delay in repayment of institutional loan
- Amount Outstanding is total institutional debt overdue >12 months
- The remaining ‘sick’ units have become more indebted

Data source: Annual Reports, Ministry of Small Scale Industries, Government of India

ICE 2009
Recent Major Policy Initiative: MSME Development Act 2006

1. Decisively defines the MSME by Plant and Machinery (P&M) investment
   - Allowances for inherently smaller investment of service enterprise
   - New definition expanded P&M limits

<table>
<thead>
<tr>
<th>Micro manufacturing</th>
<th>&lt; 25 lakhs</th>
<th>Micro Service</th>
<th>&lt; 10 lakhs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small manufacturing</td>
<td>&lt; 5 crores</td>
<td>Small Service</td>
<td>&lt; 2 crores</td>
</tr>
<tr>
<td>Medium manufacturing</td>
<td>&lt; 10 crores</td>
<td>Medium Service</td>
<td>&lt; 5 crores</td>
</tr>
</tbody>
</table>

2. Composition of the National Board for MSME with a very clear mandate and long run objective
   - Managing cluster development, training entrepreneurs, developing infrastructure and promoting financial access
3. Simplifies registration process for new MSMEs
   - Previous time consuming process replaced by simpler Filing of Memoranda
   - Intention of encouraging formalization of informal enterprises
   - New process relieves District Industry Centers (DICs) of admin burden

4. Substantially increases the penalties for late payment
   - A major working capital constraint on MSME stems from large companies delaying payment to smaller supplier
   - Act imposes stringent deadlines to ensure smooth cash flow to MSME
   - All payments to be made within 45 days or pay compound interest rate which is 3 times bank rate notified by RBI
Recent Major Policy Initiative: MSME Development Act 2006

5. Sets agenda for specific future policies

   a. **Procurement Preference Policy**: guide government bodies on how much of their supplies should be purchased from MSMEs

   b. **Close of Business Policy (Exit Policy)**: regulate liquidation of sick or weak units
Lingering Debates: MSME Development Act 2006

1. Expansion of P&M limits expands the priority sector
   - Bank pick larger borrowers to meet 40% priority lending target
   - This effectively crowds out smaller firms from priority lending
   - Indian Federation of Tiny Enterprises (IFTE) proposes that tiny, small and medium enterprises have their own separate priority package

2. Enterprises with net worth of less than 10 crores cannot access stock market therefore cannot access capital easily
   - MSMEs often borrow from banks at rates higher than PLR
   - Larger businesses bargain and borrow at rates lower than PLR
3. Act notes the need for **Procurement Preference Policies** but such policies are **not specified yet**
   - Federation of Association of Cottage and Small Industries (FACSI) proposes separate preference polices for micro or small (vis-à-vis medium) enterprises to guarantee government procurement
   - Many women’s organizations argue for specific quotas for women run enterprises

4. Many legal debates regarding the upcoming Closure of Business Policy (CoB)
   - **Either:** Expedient closure process can ensure that inefficient investment is redirected to more efficient business
   - **Or:** CoB should remain restricted to prevention of mismanagement and irresponsible business practices
   - Who takes priority in CoB cases: owners? Shareholders? Employers etc.
Lingering Debates: MSME Development Act 2006

5. The Act lacks substantial labor policy
   - Act should include provisions for more flexible employment policies
   - Act should regulate/encourage better labor practices e.g. minimum wage, employee benefits and stable work environment

6. No provisions to promote female entrepreneurs despite 11th Five Year Plan (2007) clear objective
   - Women entrepreneurs face several obstacles to finance, market, information
   - Suggested policies: Reshaping the Procurement Preference Policy; creation of shared facilities for female employees/business women such as day care; single window interface to reduce information gap
Study effect of state outlays on state-level MSME outcomes

• **Specific state outlays and subsidies**
  1. Total financial subsidy to SSI sector
  2. Total state investment in industrial parks
  3. Total number of clusters and industrial parks
  4. Total state expenditure to support technology in SSI sector

• **These are actual outlays (de facto policies) and the effect is studied at an aggregate level**
  – Later presentations identify state-level *de jure* policies along more dimensions

• **Performance of MSME sector in a state is measured by**
  1. Total number of SSI units
  2. Total output
  3. Total employment
  4. Total exports

• Later presentations analyze outcomes at individual and firm level for more recent years
Control for state characteristics

- Performance of MSME is also impacted by other state characteristics:
  1. State GDP
  2. State population
  3. State literacy rate
  4. Total annual expenditure on infrastructure
  5. Average labor cost per many day worked
  6. Total number of bank branches and offices
  7. Per capita tax (Direct +Indirect)
Use annual data up to 2002

1. 35 states and Union Territories

2. Annual data for years 1991-2002

3. Data source:
   - All India Census of SSI
   - Annual Reports, Ministry of MSME, Government of India
   - Website: Ministry of MSME, Government of India
   - Indiastat.com
   - Central Statistical Organization, National Accounts Statistics
Aggregate effects of state outlays minimal

<table>
<thead>
<tr>
<th></th>
<th>Total Financial Subsidy</th>
<th>Industrial Park Investment</th>
<th>Number of clusters/parks</th>
<th>Expenditure on technology support</th>
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<tbody>
<tr>
<td>Number of units</td>
<td><strong>Negative</strong>**</td>
<td>No effect</td>
<td>No effect</td>
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<tr>
<td>Total output</td>
<td><strong>Negative</strong>**</td>
<td>No effect</td>
<td>No effect</td>
<td>No effect</td>
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<tr>
<td>Total employment</td>
<td><strong>Negative</strong>**</td>
<td>No effect</td>
<td>No effect</td>
<td>No effect</td>
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<tr>
<td>Total Exports</td>
<td>No effect</td>
<td>No effect</td>
<td>Positive*</td>
<td>Positive*</td>
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</table>

- Need to search for effects at a more disaggregated policy level and unit of analysis, which later presentations will do

ICE 2009
## Bank branches and infrastructure expenditure affect aggregate outcomes

<table>
<thead>
<tr>
<th></th>
<th>State P.C.GDP</th>
<th>Literacy Rate</th>
<th>Infrastructure expenditure</th>
<th>Labor Cost per day</th>
<th>Number of bank branches</th>
<th>Total taxes</th>
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</thead>
<tbody>
<tr>
<td><strong>Number of units</strong></td>
<td>Positive**</td>
<td>No effect</td>
<td>Positive**</td>
<td>No effect</td>
<td>Positive**</td>
<td>No effect</td>
</tr>
<tr>
<td><strong>Total output</strong></td>
<td>No effect</td>
<td>No effect</td>
<td>Positive**</td>
<td>No effect</td>
<td>Positive**</td>
<td>No effect</td>
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<tr>
<td><strong>Total employment</strong></td>
<td>No effect</td>
<td>No effect</td>
<td>No effect</td>
<td>No effect</td>
<td>Positive**</td>
<td>No effect</td>
</tr>
<tr>
<td><strong>Total Exports</strong></td>
<td>No effect</td>
<td>No effect</td>
<td>Positive**</td>
<td>No effect</td>
<td>Positive**</td>
<td>Negative*</td>
</tr>
</tbody>
</table>

ICE 2009
Public Private Partnerships in Infrastructure (PPIs) are relevant to entrepreneurship

Policies relevant to PPI

Impacts Infrastructure

Influences economy-wide entrepreneurship

Infrastructure becomes engine of entrepreneurship
Present an overview of ongoing research

- A framework to capture the complexities of PPI
- An overview of the Indian PPI landscape
- A sense of where this research is headed
- Later panel explores infrastructure as an engine of entrepreneurship
PPIs go beyond providing funds

- Enable the public sector to respond to infrastructure needs
  - India faces a shortfall of $190bn in financing key infrastructure

- Promote capital market development

- Facilitate improvements in performance and efficiency
  - Private sector management expertise and new technology
  - Incentives for tariff discipline and self-sustainability of utilities
But political risks and institutional inadequacies can hinder PPI

- Sectors such as water inherently more “public”
  - Strong opposition to any form of privatization
  - Distorted tariffs makes private investment non-viable

- Inadequacy of domestic credit market

- Inadequacy of public institutions
  - Weak ability to manage the PPI process or control monopoly power

- Limited private returns on investments for some sectors
  - Capital intensive, with large fixed costs sunk in assets
Infrastructure sectors vary in political risk of introducing PPIs

Degree of political sensitivity

Potential for costs not reflecting tariffs
## PPI types differ in extent of private sector involvement

<table>
<thead>
<tr>
<th></th>
<th>Private management &amp; operation</th>
<th>Private entity assumes full commercial risk</th>
<th>Private entity commits new investment capital</th>
<th>Specified contract period</th>
<th>Full or partial private ownership</th>
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</thead>
<tbody>
<tr>
<td><strong>Management contract</strong></td>
<td><a href="https://example.com">✓</a></td>
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<td><a href="https://example.com">✓</a></td>
<td><a href="https://example.com">✓</a></td>
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<tr>
<td><strong>Lease contract</strong></td>
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<td><a href="https://example.com">✓</a></td>
<td><a href="https://example.com">✓</a></td>
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<tr>
<td><strong>Greenfield projects/concessions</strong></td>
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<td><a href="https://example.com">✓</a></td>
<td><a href="https://example.com">✓</a></td>
<td><a href="https://example.com">✓</a></td>
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<tr>
<td><strong>Divestiture</strong></td>
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<td><a href="https://example.com">✓</a></td>
<td><a href="https://example.com">✓</a></td>
<td><a href="https://example.com">✓</a></td>
<td><a href="https://example.com">✓</a></td>
</tr>
</tbody>
</table>
**PPI types ranked by degree of private ownership**

- Management contract
- Lease contract
- Greenfield projects
- Divestitures

*Level of private investment / capital*

*Level of private commercial risk*
India: PPI amount in top ten

Top ten with the highest PPI in millions of US$ (1980-2007)

Average PPI as a percentage of Gross Fixed Capital Formation in parenthesis

- Turkey (7.2%)
- Indonesia (7.2%)
- Philippines (23.7%)
- Malaysia (14.2%)
- Russian Federation (4.9%)
- China (1.7%)
- Mexico (7.2%)
- India (4.4%)
- Argentina (17.6%)
- Brazil (12%)
India: PPI increasing since 1990

- In hundreds of millions of US$
- As % of Gross Fixed Capital Formation
India: PPI mostly concentrated in telecom

Total PPI investment in millions of US$ by primary sector

- Energy: 31.5%
- Transport: 22.7%
- Telecom: 45.5%
- Water and sewerage: 0%
India: Greenfield projects dominate

Total PPI investment in millions of US$ by PPI type

- Greenfield project: 79.7%
- Concession: 14.8%
- Divestiture: 5.6%
- Management and lease contract: 0.9%

ICE 2009
**PPI appears to decrease with GDP per capita**

A scatter plot showing the relationship between PPI as a percentage of GFCF and GDP per Capita PPP (constant 2005 $). The data points for various countries are marked, including India, Philippines, Brazil, Indonesia, Turkey, Argentina, Russia, Malaysia, Mexico, and China. The trend line indicates a negative correlation, suggesting that PPI decreases as GDP per capita increases.
Management time dealing with officials appears to decrease with PPI

Time dealing with officials (% of management time)

PPI as a percentage of GFCF

 ICE 2009
Future work

• In a cross-country context, identify policies that aid PPI
  – Focus on specific economic mechanisms relevant to sector-PPI type combination

• Identify best practices in policymaking and assess relevance for India

• Study impact of PPI on SMEs in infrastructure sectors
A Survey of Innovation in the SME Sector

Arnab Mukherji, IIMB

June 5-6, 2009
SME Sector: A key component of the Indian economy

- Contribution of SMEs to Indian economy:

<table>
<thead>
<tr>
<th>Indicators</th>
<th>%</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>SME growth in production</td>
<td>18.0</td>
<td>2006-07</td>
</tr>
<tr>
<td>Share of SME in total GDP (current prices)</td>
<td>15.5</td>
<td>2006-07</td>
</tr>
<tr>
<td>SME Exports in India’s total export</td>
<td>33.9</td>
<td>2005-06</td>
</tr>
<tr>
<td>SME Share in Industrial Production</td>
<td>38.8</td>
<td>2003-04</td>
</tr>
<tr>
<td>SME Employment in total Industry Employment</td>
<td>34.9</td>
<td>2005-06</td>
</tr>
</tbody>
</table>

Source: Ministry of MSME & CSO

- Innovation is key for SME growth
  - Better ability to compete in existing markets
  - Ability to enter and develop new markets
Innovation has been studied in many countries

- Surveys from Malaysia, UK, & US provide information on
  - Innovations in products and processes
  - Employee skills and managerial adaptations
  - Use of technology, computers etc.

- A 2007 National Knowledge Commission study examines innovation in India
  - Interview 78 SMEs
  - SMEs value innovation highly
  - SMEs face fewer bottlenecks than larger firms
Our survey on innovation seeks to bridge knowledge gap in India

- Objective is to measure innovation in firms across a range of different industry clusters to identify
  - If SMEs systematically engage in innovation
  - The types of SMEs (by firm attributes such as size, industry, etc.) that engage in innovation
  - Where innovation takes place
  - The role of policy and business environment in fostering innovation and growth
  - The role of financial literacy and risk preference
Innovation is related to technology use and knowledge strategy

- We gather information on
  - Fraction of labor force using computers
  - Access to Internet
  - Overt commitment to technology use or knowledge creation
Nature of innovation

- Type of innovation – services, product, process
- Reasons for not innovating (e.g. lack of competition)
- Strategies to foster innovation
  - Expenditure on R&D, acquiring firms etc.
  - Applying for patents, copyrights, trademarks, etc.
- Source for innovation
  - Within the firm, markets, institutional connections
Business and policy environment

- Business and policy environment affect SME location, innovation, growth

- What does SME location depend on?
  - Nature of business
    - Size of market, level of competition, etc.
  - Policy
    - Tax rebates, subsidies, Single Window Clearance, etc.

- Policies that aid innovation
  - Infrastructure, labor, finance, tax and tariff subsidies, etc.
Survey in progress

- Focus on cities with concentration of specific industries
  - Bangalore: IT & ITES
  - Hyderabad: Healthcare
  - Chennai: Auto components
  - Indore: Manufacturing
  - Mysore: Retail trade

- Select 500 SMEs in each city
- List from Dun & Bradstreet
- Largest employers
- Mix of manufacturing and service firms Dun and Bradstreet list
Future work

- Study responses to refine survey questions
- Analyze responses to identify
  - Drivers of and barriers to SME innovation
  - Innovative sectors within the SME domain
- Conduct survey using representative sample
  - State-level stratified random sampling design using MSME census
Effects of Single Window Clearance on Indian Manufacturing Firms

Neeraj Sood, RAND

June 5-6, 2009
What is Single Window Clearance?

- Single clearing center for starting new business or new projects by existing businesses
  - Use of a composite application form, e.g. Assam
  - Online facility or e-governance system, e.g. Maharashtra

- In some instances, consolidation of authority for a variety of permits and licenses under a single body
  - Typically empowered committees at district/state level, e.g. Kerala, MP
Policy Questions

- What are the effects of single window clearance (SWC) on:
  - Growth in number of firms in manufacturing sector?
  - Existing manufacturing firms?
    - Regulatory burden
    - Sales
    - Assets
How can SWC affect number of firms and performance of existing firms?

- Reduce regulatory burden and costs of entry
  - Promote new firm entry
  - Enable existing firms to devote more resources to productive activities

- Concentrate regulatory power in the hands of a single entity
  - Create barriers for entry of new firms
  - Create barriers for expansion of existing firms

- Entry of new firms can have indirect effects on existing firms
  - More competition means less growth in sales
  - More competition means high productivity
Adoption of SWC reforms has increased over time

![Graph showing an increase in adoption of SWC reforms over time]
Which states were early and late adopters?

- **Early Adopters (before 2000)**
  - West Bengal, Assam, Rajasthan, Uttar Pradesh

- **Average Adopters (2000 to 2004)**
  - Kerala, Karnataka, Andhra Pradesh, Gujarat, Tamil Nadu, Himachal Pradesh, Madhya Pradesh, Orissa

- **Late Adopters (after 2004)**
  - Haryana, Punjab, Chandigarh, Bihar, Maharashtra
Were early and late adopters on different growth trajectories?

State Growth Rates (1997-2001) By Group
Exposure to SWC positively associated with growth in number of firms

<table>
<thead>
<tr>
<th>Firms in:</th>
<th>% Change, total firms (est.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less than 10 workers</td>
</tr>
<tr>
<td>Early States</td>
<td>0.65%</td>
</tr>
<tr>
<td>Average States</td>
<td>0.50%</td>
</tr>
<tr>
<td>Late States</td>
<td>-3.51%</td>
</tr>
</tbody>
</table>

Source: Author calculation based on NSS reports and Annual Survey of Industries
SWC reforms cut regulatory burden among existing firms

- Used panel data from World Bank Enterprise Surveys
  - Firms surveyed in 2002 and 2005

- Overall, all firms in the sample spent less managerial time dealing with regulations

- Biggest change was experienced by firms in states that implemented SWC reforms
  - About 5% less time spent on regulations
**SWC exposure is positively related to sales and asset growth**

<table>
<thead>
<tr>
<th>Firms in:</th>
<th>% Change, Total Sales 2002 - 2004</th>
<th>% Change, Total Assets 2002 - 2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early States (pre 2002)</td>
<td>39.3%***</td>
<td>20.4%**</td>
</tr>
<tr>
<td>Average States (2002-2004)</td>
<td>27.5%**</td>
<td>17.4%</td>
</tr>
<tr>
<td>Late States: No SWC (after 2004)</td>
<td>18.7%</td>
<td>14.0%</td>
</tr>
</tbody>
</table>

Source: Author calculation based on panel data from World Bank Enterprise Survey 2002 and 2005
Conclusions

- SWC may decrease regulatory burden and spur growth of manufacturing sector
- Both new and existing firms might benefit from SWC policies
- SWC policies most likely to benefit larger firms in the organized sector
Connect state-level initiatives with entrepreneurial outcomes

- As seen earlier, we construct a matrix of state-level industrial policies
  - Based on a wide-ranging review of industrial policy documentation

- Research question: How are these policies connected to entrepreneurial outcomes?
  - As reported in the Global Entrepreneurship Monitor (GEM) survey
GEM focuses on the individual entrepreneur

- Have seen effect of single window clearance on firms from Enterprise Survey (ES)
- Get a different perspective here on the effect of policies on individuals
- Can assess if policies influence individuals and established firms in a similar way
  - That is, does the same set of policies work for both groups?
Focus on 15 states with adequate entrepreneurial activity and data

- Andhra Pradesh
- Assam
- Bihar
- Gujarat
- Haryana
- Karnataka
- Kerala
- Madhya Pradesh
- Maharashtra
- Orissa
- Punjab
- Rajasthan
- Uttar Pradesh
- Tamil Nadu
- West Bengal
Group policy initiatives by those geared towards individuals...

- Human capital & technology assistance
  - Technical assistance, assistance for ISO certification, R&D subsidy, marketing assistance

- Subsidy for capital & financing

- Special treatment of individuals
  - Subsidy for women, SC/ST entrepreneurs
...and those geared towards industry

- **Openness**
  - Export subsidy, FDI subsidy
- **Incentives for Special Economic Zones (SEZs)**
- **Single Window Clearance (SWC) policy**
- **Policies to improve business environment**
  - Lower stamp duty, flexible labor regulation, business-friendly subsidies
- **Special treatment of industry**
  - Subsidy for taxes, power, land, sick industries, and environmental impact, support for infrastructure, target industry, incentives for technology clusters
Use entrepreneurial outcomes from GEM Adult Population Survey, 2006

<table>
<thead>
<tr>
<th>Outcome Measure</th>
<th>What it captures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Entrepreneurial Activity</td>
<td>Respondent <em>currently</em> trying to start a new business independent of work, trying to start a new business as part of work, or owns or manages a new business</td>
</tr>
<tr>
<td>Future Entrepreneurship</td>
<td>Also includes respondent plans to be involved in any entrepreneurial activity in the <em>near future</em></td>
</tr>
<tr>
<td>Good Opportunity</td>
<td>Respondent agrees that there will be good opportunities for startups in the next six months</td>
</tr>
</tbody>
</table>
**Individuals respond better to policies geared towards them**

<table>
<thead>
<tr>
<th>Policy group</th>
<th>Association with entrepreneurial outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human capital &amp; technology assistance</td>
<td>Positive for current and future entrepreneurship</td>
</tr>
<tr>
<td>Subsidy for capital &amp; financing</td>
<td>Positive for all three measures</td>
</tr>
<tr>
<td>Special treatment of individuals</td>
<td>Positive for all three measures</td>
</tr>
</tbody>
</table>
## Individual response to industry-level policies is mixed

<table>
<thead>
<tr>
<th>Policy group</th>
<th>Association with entrepreneurial outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Openness</td>
<td><strong>Negative</strong> for perceptions of good opportunity</td>
</tr>
<tr>
<td>SEZs</td>
<td><strong>Positive</strong> only for future entrepreneurship</td>
</tr>
<tr>
<td>Single Window Clearance</td>
<td><strong>Negative</strong> for current and future entrepreneurship</td>
</tr>
<tr>
<td>Business environment</td>
<td><strong>Positive</strong> only for perceptions of good opportunity</td>
</tr>
<tr>
<td>Special treatment of industry</td>
<td><strong>Negative</strong> for all three measures</td>
</tr>
</tbody>
</table>
We can group states by effectiveness of policies

<table>
<thead>
<tr>
<th>Effectiveness</th>
<th>Future Entrepreneurship</th>
<th>Good opportunity</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Gujarat, Maharashtra, Karnataka</td>
<td>Kerala, Karnataka, Tamil Nadu, West Bengal</td>
</tr>
<tr>
<td>Medium</td>
<td>Assam, Tamil Nadu, Kerala, Uttar Pradesh, Andhra Pradesh, West Bengal, Madhya Pradesh, Haryana</td>
<td>Bihar, Assam, Uttar Pradesh, Madhya Pradesh, Maharashtra, Gujarat, Andhra Pradesh</td>
</tr>
<tr>
<td>Low</td>
<td>Bihar, Orissa, Rajasthan, Punjab</td>
<td>Rajasthan, Orissa, Haryana, Punjab</td>
</tr>
</tbody>
</table>
**Different policies aid firms and individual entrepreneurs**

- Would not be correct to conclude that policies such as openness, SWC, *hurt* entrepreneurship
  - For instance, SWC positively associated with sales and assets in sample of established firms (using Enterprise Survey)

- But might need to target policies
  - For individuals vs established firms

- We also find knowing other entrepreneurs highly influential
  - Local governments could play crucial role in connecting potential and current entrepreneurs