

## **Making Industrial Policy Work for Growth, Jobs and Development in India**

**Remarks by José M. Salazar-Xirinachs**

**Assistant Director-General for Policy, ILO at Symposium:**

**"Making in India: Towards a Strategy of Manufacturing-Led Growth and Job Creation in India"**

**Claridges Hotel, New Delhi, 29 Nov, 2014**

I am very pleased to be back in New Delhi and particularly to discuss such an important challenge as industrialization in India.

### **Past, present and future of industrialization in India**

It is a fact of economic history that no large country has ever developed without industrializing.

Industry is key to increase productivity and living standards. It is also a sector characterized by superior growth dynamism and strong learning effects.

In India, unfortunately, the strong promise of successful industrial development post independence was only partially fulfilled.

As late as in 1993, the manufacturing sector accounted for only 15% of GDP. Surprisingly, that rate remains roughly the same today while in the meantime a series of emerging economies increased their share of manufacturing in GDP to levels significantly higher: Thailand to 34%, China to 32%, Malaysia and Indonesia to 24% and the Philippines to 31%.

The contribution to jobs of manufacturing in India has also remained relatively low, increasing from 37 million workers in 1993 to 53 million today, a modest 10% of the economically active population of nearly 500 million.

This contrasts with the services sector, where now 31 percent of the labour force works, that is, an estimated 150 million people.

Moreover, the reality is that, as Amrit Amirapu and Arvind Subramanian and many other distinguished Indian economists have pointed out: India has been deindustrializing, big time, and it is imperative for India's development that it reverses its deindustrialization. In a continental sized country like India, there is of course tremendous differentiation in the industrialization experience and level among different states. But almost all states have been deindustrializing, even the poorer ones that never effectively industrialized.

In the light of this disappointing record, the aspiration by the new government to revive India's manufacturing through programmes such as ***Make in India*** is very timely and extremely important.

I understand that the ***Make in India*** programme is targeting creating 100 million jobs over the next decade and bringing manufacturing up to 25% of Indian GDP by 2022. This is ambitious. But I am not going to discuss whether these precise targets are realistic or not. Most important is that the overall thrust of the programme is timely and in the right direction.

I suspect there is wide agreement in this room, and certainly in most of India, that the desirability of promoting industrialization in India is beyond question. The questions are: is this feasible under present conditions? What critical mass of policies can achieve this? How to have a structured and coordinated approach and how to design effective institutions and organize the public-private collaboration to advance towards the stated objectives?

The main components of the ***Make in India*** programme are:

1. Investments in innovation and new technology, including through the development of smart cities, industrial clusters, technological corridors and manufacturing zones.
2. A major Foreign Direct Investment attraction drive.
3. A major emphasis in improving infrastructure including actions to accelerate project execution, and speed up a backlog of approvals for infrastructure and other development projects.
4. Actions to facilitate doing business in areas such as starting a business, dealing with construction permits, registering property, paying taxes, enforcing contracts and, last but not least, reform labour laws.
5. New policies to promote Micro, Small and Medium Sized Enterprises (MSME)
6. Actions to enhance competitiveness, skills and job creation in leading manufacturing sectors, through integrated strategies and support for at least 25 leading sectors that include: automobiles and its components, aviation, biotechnology, chemicals, construction, defence and aerospace, electrical machinery, electronic systems, food processing, information technology, leather, mining, oil and gas, pharmaceuticals, ports, railways, renewable energy, roads and highways, textiles and garments, tourism, and wellness.

So the vision is long term and forward looking, and the strategy is comprehensive and ambitious. If properly implemented there is no doubt that it holds great promise to be quite transformational for India's pattern of growth, job creation and development.

Before going further, let me state from the outset that I am keenly aware that here in India you had and continue to have an intense and very well informed debate on growth, industrialization and development, one in which a very

distinguished line of economists, including many internationally renowned, have contributed.

The list is long and includes the late Sukhamoy Chakravarty, whom I had the privilege of meeting at Cambridge in the 1980s and having as tutor for a year. Ajit Singh, whom I also met at Cambridge. And I just benefited from reading some very enlightening recent papers by Arvind Subramanian, C.P. Chandrasekhar and others.<sup>1</sup> I have also seen some very good papers produced by the Confederation of Indian Industry and some international consultancy firms.<sup>2</sup>

So I venture my comments in a spirit of humility and aware of the risks of not being in my own more familiar pond of the productive development and industrialization debates in Latin America, where I come from.

What I plan to do is:

- First, discuss some elements of the global context that I think Indian policy makers and the wider public debate must take into account, and,
- Second, refer to some aspects and lessons from the international experience with industrial and productive transformation policies that I think are highly relevant for the Indian policymakers and national discussions as you move forward.

## I. The global context

As regards the global context, I would like mention a few of the new elements and trends that is important to take into account.

**First**, there is a new geography of growth and a shifting pattern of cost advantages. A key aspect is the rising labour costs in China and in other emerging economies. According to the Boston Consulting Group's Index of Cost Competitiveness, among the top 25 exporting countries, India has the second lowest manufacturing cost. This has been frequently mentioned as creating opportunities for low-skilled countries such as India. While this is fundamentally correct, there are related elements to consider. First, India is not alone, the whole continent of Africa, now with 1 billion people, has also its eyes set on this opportunity. And there are many low cost economies also trying to promote industrialization. Countries like Mexico have regained a good status as a leading low-cost manufacturing base.

---

<sup>1</sup> C.P Chandrasekhar (2014) "Promise Belied: India's Post-Independence Industrialization Experience" unpublished, forthcoming; "Six decades of Industrial Development: Growth and Development of the Manufacturing Sector in India from the 1940s", forthcoming; Amrit Amirapu & Arvind Subramanian, "India must reverse its deindustrialization", Op-ed in the *Business Standard*, New Delhi, May 9, 2014.

<sup>2</sup> Boston Consulting Group & Confederation of Indian Industry (2014) *Make in India: Turning Vision into Reality*, CII 13th Manufacturing Summit 2014, downloaded from CII website.

But most importantly, one must take into account that while low cost can provide some competitive advantages, the attractiveness of a country for investment is influenced by other non-cost factors that are even more important: the quality of infrastructure and logistical facilities, the ease of doing business and, most of all, the quality of human resources. So even though it is true that China is becoming more expensive, this is only a potential opportunity and India must pay acute attention to these non-cost factors.

**Second**, it is not just a new geography of growth, it is also a new geography of skills! The rising education levels in many emerging economies are changing the nature of global competition for talent, and it is talent what drives many of the international location decisions of companies.

In just ten years from 1996 to 2007 the numbers of undergraduate and postgraduate enrolments increased from 72 million to 136 million in a group of 113 emerging and developing countries. Some authors call this the ***Great Doubling***.

This new geography of skills is a major factor influencing the new geography of growth and investment. It creates many opportunities for emerging economies, basically for those that invest in high quality education and training.

There is evidence that a highly skilled work force is one of the key determinants of investment flows, once other fundamentals of the investment climate are in place. *So the competitive bet of India, and the hopes for a successful revitalization of its industrial development, has to be very strongly based on the upgradation of its vast human resources.* Along with the accelerated improvement of infrastructure, a massive education and skills upgrading drive will be a key determinant of India's capacity to succeed in its industrial development aspirations. I will come back to this theme in a few minutes.

**Third**, there is a very strong and ever wider global consensus around the objective of shifting to energy-efficient, low carbon growth paths. Green growth paths will induce major adjustments in labour markets, creative destruction similar to trade. There are great opportunities in green jobs, but also job destruction in non-competitive, unsustainable technologies. Green growth and climate change also pose major challenges for skills development, as skills bottlenecks and mismatches can be a major obstacle to green growth.

The **fourth** contextual element I would like to mention is that there is a brave new world of new technologies and smart machines out there and this has an impact on manufacturing and on the future of jobs.

Robots, computers, automation are changing the potential of manufacturing to create jobs. The implication is that manufacturing can be a major contributor to GDP and productivity, but even if a country turns into a manufacturing powerhouse, one cannot but expect a more modest contribution to job creation than the peaks in employment obtained by the successful industrializers of the past. Several countries, including Japan and even Germany have experienced

declining manufacturing employment. The US lost 34% of its manufacturing jobs from 2000 to 2009 and employment in manufacturing has risen only 4% since 2009. Although part of this was a result of the crisis, a significant part was also due to the impacts of new technologies and automation.

Having said this, this brave new world of exponential technologies must be seen more as full of promise and opportunities than threats. And it is here where the bet on technology and innovation for a country like India can have a strong payoff, if the right policies and institutions are put in place. This is the promise of smart cities, technological corridors and science and industrial parks coupled with massive investment in human resources.

## **II. Lessons from the international experience**

Let me now turn now to a short list of lessons from the international experience. Most of them are directly aligned with, and relevant for, key components of the Make in India programme.

I will group them in seven categories of issues.

### **1. Attracting Investment and maximizing benefits from it**

First, attracting investment. This is a major thrust of the new policy and a classic theme in development economics, but there is now a wealth of accumulated experience.

The ***Make in India*** objective of having an attitudinal shift in how India relates to investors, not as a permit-issuing authority, but as a true business partner is a good approach validated by international experience. Costa Rica and Ireland, for instance, very successfully used a focused approach with dedicated teams to guide and assist first time investors as well as a focused targeting of companies across sectors.

Capable agencies for investment attraction provide very useful services and can make a huge difference in the investment decision of multinational corporations as well as in providing post establishment facilitation services and trouble shooting. This is all the more important in the present conditions of India still characterized by onerous and complicated procedures and permits. Focused attention and problem solving for MNEs also raises awareness and sets a standard which can have positive externalities economy-wide to the extent that efficiencies and simplification is applied to all companies, national and foreign, and is not just an exercise in extending a red carpet to foreign investors.

The relevant lessons are, of course, not just good practices and methodologies to attract a critical mass of foreign companies but also about how to maximize their contribution to the national economy. The classic challenges have been two: how to promote backward and forward linkages, and how to maximize technology transfer. In other words, the challenge of economic upgradation.

In a world of GVCs and heightened global awareness and standards, the management and upgradation of the social and environmental dimensions have also become key elements of managing supply chains for companies and of industrial policy for governments.

But let me stay with the tools to promote the economic and technological benefits for a few minutes. There is a hard and a soft policy approach, and the debate about the relative merits of both is far from settled.

The ***hard policy approach*** is via the use and enforcement of performance requirements for local content (minimum amount of local purchases for instance) and the negotiation of other conditions, including the requirement of joint ownership with local investors, or joint ventures. This approach has been more successful in the case of MNE seeking presence and market share in the local market of large economies. If you are a small economy your negotiating power for this is quite small. China has used performance requirements quite effectively in some sectors such as railways and others. But some of them have also been gradually relaxed.

However, MNEs are often interested in establishing a local presence not just for gaining a share of an attractive and large local market, but also as a platform for outward-oriented growth. In this case the argument for the effectiveness of performance requirements weakens.

Theodore Moran has done quite detailed research on this question.<sup>3</sup> He contrasted the experience of countries that have used plants from foreign investment to substitute imports with countries that have used them for outward-oriented growth and found that MNEs responded to host country strategies of import substitution with the creation of plants just large enough to meet local needs. In the auto industry and computer industries, for instance, domestic content requirements did lead to some manufacture of indigenous components but as a rule local suppliers did not have orders large enough to support the technology that was standard in world class auto parts or computer parts fabricators. It was also found that Joint Venture requirements provoked the parent MNEs to use older technology.

The alternative approach, that is, attracting MNE investors to produce goods for export, rendered quite different results. As MNEs built factories that were integral to their ability to compete in international markets, they generally designed the plants to take advantage of all economies of scale, and incorporated the most advanced production technology and quality control procedures known to headquarters.

Under this outward looking approach, to ensure their ability to have a coherent multi-country strategy, MNE headquarters normally insist on having wholly-

---

<sup>3</sup> Theodore Moran (1998) *Foreign Direct Investment and Development*, Institute for International Economics, Washington, DC; T. Moran (2001) *Parental Supervision: The New Paradigm for Foreign Direct Investment and Development*, IIE, Washington D.C.

owned or majority owned affiliates that are free from domestic content requirements.

In the auto industry, MNE plants in Mexico and Brazil were given responsibility for high performance engines that were perfect substitutes for the best produced in the United States, Europe, or Japan. MNE auto exports of vehicles and parts from Mexico grew from very small numbers in the 1970s to more than \$42 billion per year in 2006, employing one out of every eight workers in the Mexican manufacturing sector.

As regards backward linkages some outward oriented MNEs have a good record of setting up, or responding to government programmes to set up, “vendor development programmes” searching out indigenous parts suppliers and providing them with advice, drawings, design specifications, equipment recommendations, quality control procedures, etc in order to create a viable component base. And when this happens the purchase orders are typically large enough to allow local suppliers to reach full economies of scale. This is actually the soft approach to promoting linkages.

There are then two contrasting approaches on how to maximize benefits of MNE investment in host countries: one that uses intensively performance requirements and one that leaves MNEs quite free to design their competitive strategy. In a number of industries the latter seems to be a superior method of maximizing the benefits of technology transfer and developing local suppliers.

So, industrial policy in India will have to navigate these dilemmas on how to strike the right balance between soft and hard policy approaches, while also taking into account that international trade rules to which India has committed tend to limit some instruments of the hard approach.

## **2. Industrial Policy in a world of Global Value Chains (GVCs)**

A new reality in the world is the way international production is organized in global production networks. And a second category of lessons is found around the question about what type of IP can be helpful in achieving effective and beneficial integration into GVCs?

The hard and soft approaches I just mentioned are part of this. But for greater insight it is also important to distinguish two types of GVCs, producer-driven and buyer-driven:

- Producer-driven value chains are controlled by industrial Multinational Enterprises, for example, Ford automobile plants in Mexico, or the INTEL plant in Costa Rica. These plants are owned and operated by the industrial MNEs.
- Buyer-driven value chains are controlled by commercial capital, for instance, Walmart, Nike, Starbucks, etc, and their business model is

different, what they do is international sub-contracting to nationally owned industrial suppliers.

Some authors, like Gary Gereff and Wil Milberg argue that the buyer-driven business model allows a superior dynamics for local technological upgrading, either by capturing more value in the chain by producing more local inputs, or by escalating up the value chain towards higher sophistication, design and branding, which allows higher capabilities in national enterprises.

I already commented on the two traditional intervention models to increase host country economic benefits in producer-driven value chains.

In a paper in a book I co-edited this year, Milberg, Jiang and Gereffi<sup>4</sup> argue that, in general, GVCs require more, not less industrial policy interventions, and that these interventions are quite detailed and granular at the level of specific activities along the value chains. In other words, more rather than less selectivity and targeting is required.

IP in a world of GVC also requires a very good understanding by governments and local suppliers of the corporate strategies of the Leading Multinational firms in the value chains. GVCs generally have a reduced number of leading firms at the top and many real and potential suppliers at the base, in other words, they have very asymmetric market and governance structures. This forces governments and local enterprises to understand corporate strategies of the leading firms with whom business is to be done or targeted for attraction.

As I already suggested, policies of integration into GVCs require a focus on the social upgrading and the governance frameworks of the value chains and not just on the economic upgrading. The social dimension includes employment, wages, working conditions and compliance with international labour standards.

Managing the social dimension requires strong labour inspection institutions but also strong cooperation and social dialogue between international brands, local suppliers and workers. The ILO has developed good models on how to do this. In the textile and apparel sector the Better Work Programme is well known and operates in several countries. There is a difficult question about how far the leading company responsibility for respect to labour standards extends along its supply chain. And there are a variety of good practices where leading companies see their suppliers as partners and involve themselves quite closely on labour dimensions, as part of a positive approach to have high productivity, high quality suppliers. Corporate Social Responsibility is important but insufficient.

In conclusion, a key part of modern industrial policy are the institutions and measures to ensure compliance with norms and standards, and this includes the areas of products, technology and economic upgrading processes, but also labour and environmental standards.

---

<sup>4</sup> W. Milberg, X Jiang and G. Gereffi (2014) "Industrial Policy in the era of vertically specialized industrialization" in Salazar-Xirinachs, JM; I. Nubler and R. Kozul-Wright (2014) *Transforming Economies: Making Industrial Policy Work for growth, jobs and development*, ILO-INCTAD, Geneva.



### 3. The building of domestic capabilities

So far I have emphasized FDI and engagement with GVCs. But another clear lesson from international experience is that an effective industrial policy must be concerned first and foremost with building domestic capabilities.

The capabilities approach to IP is very powerful and brings great insights. This is an approach in which my ILO colleague and co-editor of the book, Irmgard Nubler has done important work.<sup>5</sup>

Capabilities are the cumulative result of the knowledge, skills and competences which the labour force, institutions and enterprises collectively have in a country, province, region or city. They are the backbone of competitive advantage. And it is the collective capabilities that matter most for growth and development. As Hausmann and Hidalgo have stressed, capabilities are enhanced by increasing the **variety , diversity and complexity** of the knowledge and production base. The more complex and diversified the knowledge and production base, the more dynamic an economy can be to adopt more complex technologies, diversify into a wider range of products, and accelerate the speed of productive transformation.

The development of capabilities is essentially a **process of learning, of collective learning**. And learning in a society occurs at several levels and places: in formal education and vocational training, in enterprises, in value chains, in public and private organizations, and in social networks. Joe Stiglitz has argued that modern competitive societies must be learning societies, and must have clear learning strategies at all these levels.<sup>6</sup> This is a powerful way to express what productive development and industrial policy is, and should be all about. It makes clear that it is about human capital and social innovations.

The capabilities and learning society approaches are a rich source of insights and policy guidelines for productive development. One aspect they make clear are the risks of putting all your eggs in the basket of Foreign Direct Investment.

Let me give you an example. My own country, Costa Rica has had consistently pro-active policies and strong institutions for three decades to attract FDI, and it is hailed as “model of development”, a “success story” in terms of export growth and diversification. And it is. With a GDP per capita of US\$13.000, more than three times that of India, the bet of FDI has paid off. But if one looks at domestic capabilities the growth model has serious problems. Export success has not translated into unequivocal development success.<sup>7</sup>

---

<sup>5</sup> See I. Nubler (2014) "A Theory of Capabilities for Productive Transformation: Learning to Catch-Up", in Chapter 4 in Salazar-Xirinachs, et. al. (editors) op. cit.

<sup>6</sup> Joseph Stiglitz and Bruce Greenwald (2014) *Creating a Learning Society*, Columbia University Press, New York.

<sup>7</sup> For more details see Eva Paus (2014) "Industrial development strategies in Costa Rica: When structural change and domestic capability accumulation diverge", in Salazar-Xirinachs, et. al., op. cit.

Social capabilities such as education, infrastructure and other public service institutions, have not kept up with the needs of the private sector. Growing deficiencies in education, innovation and infrastructure have become binding constraints on broad based upgrading and a risk of middle-income trap.

Consistently proactive policies to attract FDI, while successful, contrast with lack of coherent and proactive policies in support of local firm capabilities. There is a disconnect between FDI and local capability accumulation. There has been limited capability accumulation in local firms and SMEs and limited technological spillovers from foreign producers. Most technology acquisition happens only by capital goods imports, not by local innovation.

Despite significant initiatives in science and technology too many actions have been short-lived, underfunded and uncoordinated and there is no coherent, comprehensive and sustained S&T Strategy.

In summary, there are at least two lessons from my country for industrial policy:

- 1) First, FDI can make an important contribution particularly in a small economy, but there is nothing automatic about technological spillovers from FDI. Maximizing these spillovers requires proactive policies, and
- 2) Second, if all the emphasis is on FDI, the country ends up having a dual production structure, with a relatively small modern internationally competitive sector, and a large much more backward, low productivity sector.

#### **4. Enabling environment and the entrepreneurial ecosystem.**

A fourth category of lessons is around the enabling environment and entrepreneurship. A healthy entrepreneurial ecosystem is one of the main capabilities a country needs for catching up growth and development. It can certainly bring about a lot of economic transformations.

There are important insights and very concrete policy guidelines from the entrepreneurial ecosystems approach.

There's no exact formula for creating an entrepreneurial economy, there are only practical roadmaps. The checklist of elements is long, and this is the reason why the biological metaphor is very adequate. I will not go through all of them. For a good and insightful summary let me recommend to you the 2010 article by Daniel Isenberg, Director of the Babson College Entrepreneurial Ecosystem Project in the Harvard Business Review entitled "How to promote an entrepreneurial revolution".

The ease of doing business comes first and foremost and it is a major impediment to further industrialization in India. From the tax to the land acquisition regimes, and from access to credit to the administrative, legal and

regulatory environments, there is a huge agenda for simplification and improvement with massive potential benefits. According to one estimate 92% of MSMEs lack access to formal sector finance. Land acquisition remains the largest cause of project delays in infrastructure. The business registration process needs simplification. Labour regulations are also a major problem in India.

These and other enabling conditions are well identified in a number of studies, including in the survey by the Institute for Human Development.

The IHD study also points out that the abolition of the "licence raj" left intact the "inspector raj", which is a major obstacle to doing business and particularly onerous for medium to small units. The study adds that, "If medium to small units found street-level bureaucrats leading to delays and payments, large units are affected by the difficulties and delays in securing clearances for large projects from the multitude of departments whose permission is required." <sup>8</sup>(p 135).

IP, particularly IP based on Pigouvian taxes and subsidies or tariffs, are frequently criticized by the risk of *private sector capture*. In India, the legacy of past policies is rather a serious case of "*bureaucratic capture*" that remains to be fully addressed.

A very important point to stress is also that in terms of job creation, the evidence is clear that in a healthy economic system, most new jobs are created not just in SMEs, but in young SMEs, that is in startups. Hence the importance of a good ecosystem for start-ups that include incubators, credit, venture capital, business services, mentoring, etc.

## 5. The role of education and skills

The fifth category of lessons is the role of education and skills. India's major source of potential wealth and competitiveness are its vast human resources, and to make the most of it the gaps in quantity and quality must be addressed. This is a large topic, I only want to stress two important points.

First, recent research by my ILO colleague and co-editor Irmgard Nubler shows a clear relationship between formal education and productive diversification outcomes. Irmgard defines three types of Educational Achievement Structures (EAS):

An Educational Achievement Structure with a *strong middle*: That is, with high proportions of students in secondary education. She finds that these are the structures that offer the broadest range of options for industrial development and diversification. They are common in successful Asian countries.

---

<sup>8</sup> ILO-Institute for Human Development (2014) *Promoting Employment and Skill Development in the Manufacturing Sector in India*, August, 2014; forthcoming.

The second type is an EAS with a ***missing middle***: These are the ones with a low proportion of students in secondary education, and high proportions in the primary and tertiary levels. These structures offer limited options for industrialization. Countries with such structures show some products and exports of high or medium technological level, but do not have a broad industrial base. This structure is common in Latin America and is one of the characteristics that can lead to the middle income trap.

The third category is an ***L-shaped*** EAS. That is, high proportion of students in primary education, but relatively low proportions in secondary and tertiary. The research finds that countries with this type of structure are the ones with less industrial development and diversification. This type of structure is common in the least developed countries.

So where is India located in this spectrum? I consulted the international comparison of India's enrolment rates in the *2011 OECD Economic Survey of India*, and it shows that while India has made significant progress in enrolment at all levels of education in recent decades, and particularly in the primary level, enrolment rates at the secondary and tertiary levels remain low, particularly the latter. Both these rates are lower than in Brasil, the Russian Federation, Indonesia, and China, for instance. And this is without talking about the quality dimension.

The message here is that unless India increases its enrolment rates in its secondary and tertiary levels of education, it will be challenged to succeed in its aspirations for broad based industrialization.

This also means that what India presents is not just a problem of the much talked about skills mismatch in some sectors, but a more generalized problem of low education and low skills in the capabilities of its labour force.

My second observation is about vocational training. If I may put it in a nutshell, the "killer app" here are apprenticeship systems modeled on the dual vocational training systems of countries like Germany, Switzerland, Austria, Denmark and others. India would do well to consider advancing towards a more structured dual apprenticeship system of this type.

## 6. The challenge of productivity

A sixth area of lessons is around productivity growth. Another vast subject. I would like to focus on one aspect only, that comes out very clearly from Latin America.

A recent major diagnostic study by the Inter-American Development Bank,<sup>9</sup> the equivalent of the Asian Development Bank, on the challenge of productivity

---

<sup>9</sup> Carmen Pages (editor) (2010) *The Age of Productivity: Transforming Economies from the Bottom Up*, Inter-American Development Bank, Washington D.C.

growth in Latin America was motivated by the fact that in the last 30 years, despite significant rates of growth of GDP, in contrast with several Asian countries, the growth of productivity of Latin American countries has been lower than the growth of productivity in the US.

In other words, not only has the productivity gap not narrowed, it has been widening, and at present the Productivity of LA is 55% that of the US. The IDB calls this the tragedy of Latin America. The only exception is Chile, which has had a slight convergence. And Brasil has had roughly the same rate of growth of productivity as the US.

There are several factors that explain this. One of them is particularly important for Latin America, and I would argue that the same applies to India.

This is the fact that not only is productivity highly heterogeneous between different sectors, a syndrome that the Economic Commission for Latin America and the Caribbean has long been pointing out and calling the structural heterogeneity of Latin American economies, but also the fact that LA is characterized by a very strong predominance of micro and small enterprises.

For example, in Mexico and Bolivia 91% of manufacturing enterprises have less than 10 workers. The region suffers from a deficit of middle-sized enterprises. There is a missing middle in the distribution of enterprises by size.

The economic evidence around the world shows that there is a strong relationship between productivity and company size: the larger enterprises have higher productivity. This means that from the point of view of productivity "small is not beautiful". The study estimates that if Latin America as a continent had the same profile by enterprise size of the US, both productivity and GDP would double.

And the problem is that policies to increase the productivity of micro and small enterprises per se have a very small pay-off in terms of increasing aggregate productivity. What is needed is an entrepreneurial ecosystem that allows a critical mass of micro and small enterprises to grow into mid sized enterprises. This also involves promoting the transition to formality. All barriers and hurdles to the growth of small enterprises must be removed.

I do not know of any study that has estimated this effect for India, but I suspect it would not be very different, in fact, the effect would even be bigger, as in India the predominance of micro and small enterprises is even higher than in Latin America.

## 7. Institutions, coordination and public-private collaboration for effective collective action

I will finish with some comments on the lessons regarding institutional design and coordination mechanisms for effective industrialization.<sup>10</sup>

Like all policy-making, IP has both a *technocratic* and a *political economy* dimension.

Technocratic knowledge means one needs to have a dedicated and qualified bureaucracy with good knowledge of the portfolio of policy instruments, and capacities for evaluation of performance and negotiation with all stakeholders. One needs to build such a bureaucracy.

The political economy dimension is related to the fact that, like any other policy, IP agencies and bureaucrats are embedded in economic, political and social arrangements. Much has been learned about how to design incentives and institutions to avoid abuse and capture, some of them include: Standard setting, automatic sunset clauses, built-in programme reviews, monitoring, establishment of clear benchmarks for success or failure, and periodic evaluation exercises. Their application requires competent agencies, so that they lead to discipline and accountability.

But as I say, most of the literature is concerned, and sometimes obsessed with private sector capture. In India, in addition to this risk there is a well-documented syndrome of bureaucratic capture, a legacy of past policies and practices.

Another lesson is that to be successful, IP must mobilize not just business leaders and public policy-makers but also academics, trade unions, civil society groups, not only at national, also regional and municipal levels. All these actors have a legitimate role to play.

The effective and consistent exercise of this role requires effective coordination mechanisms such as: National Competitiveness Councils, sectoral councils or committees; informal networks of communities of practice, public-private partnerships.

Many public private partnerships have been found to fail not because lack of interest by the private sector, but because of failure of public-public coordination between different ministries and agencies, leading to disappointment by the private sector.

---

<sup>10</sup> For excellent recent treatments of the institutional challenges of industrial policy, organizing public-to-public and public-private coordination and collaboration see: Inter-American Development Bank (2014) *Rethinking Productive Development: Sound Policies and Institutions for Economic Transformation*, Washington D. C.; Robert Devlin and Graciela Mogueilansky (2011) *Breeding Latin American Tigers: Operational Principles for Rehabilitating Industrial Policies*, ECLAC-World Bank; Jorge Cornick, "The organization of public-private cooperation for productive development policies, Inter-American Development Bank, August, 2013.

What all this means is that structural transformation requires some specific forms of social dialogue to build consensus on policy formulation and support effective implementation. Institutions for consultation, discussion, participation and social dialogue are key for effectiveness, transparency and accountability.

To conclude, on each one of these basic headings, I have given a few insights into lessons from international experience. Each one of these is a vast subject.

If I have provoked you to discuss some of these issues my task is accomplished.

Thank you for your attention.