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The Role of Trade in Faster Job Creation and Economic Growth in India: Some Lessons and Policy Recommendations

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Abstract

India currently faces the twin problems of slow job creation and slow economic growth. Even when economic growth has been rapid, India has made slow progress in the creation of quality jobs. To address these issues, I first draw inferences from India's post-independence economic history. The main lesson is that trade reforms have been followed by high rates of growth, while restrictive trade policies have led to slow growth. For the creation of quality jobs, I emphasize the importance of the exports of labour-intensive manufactures. To dig deeper, the evidence on structural change and its determinants is presented, followed by some relevant theory. Policy recommendations presented include tariff reductions, labour law reforms, setting up Autonomous Economic Zones (AEZs) and signing preferential trade agreements.

JEL: F13, F16, F43

Keywords: Autonomous Economic Zones, Trade liberalisation, Labour Laws, Export-led Growth

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I. Introduction: The Twin Problems of Slow Job Creation and Slow Economic Growth

India is in the initial phase of a period called "the demographic dividend", a period during which the working-age population (age group 15-64) exceeds in size the rest of the population. Based on the experiences of East Asian countries, including China, growth accelerates during this period. When a relatively large proportion of the population works and it has to feed a relatively small proportion of the population, then output produced, for a given overall population size, is higher while average basic consumption needs are lower, so investment to raise productivity can be significant.

However, an important condition for this demographic dividend to be a blessing or indeed at least a dividend is that everyone belonging to the working-age group has a productive job. In other words, for the government, it could turn into an unnecessary burden in that as more people are added to the working-age group every year, millions of good jobs will need to be created. Otherwise, unemployment or underemployment will rise, or additions to employment then will mainly take place in the low-productivity urban informal or rural agricultural sector. For example, as reported in the 2017 Economic Survey, India was able to add a total of only 135,000 jobs in 2015 in eight labour-intensive or export-oriented sectors surveyed (namely IT/BPOs; textiles and apparel; metals; gems and jewellery; handloom/power loom; leather; automobiles and transport). At the same time, the working-age population actually working or looking for jobs grew by over 10 million.

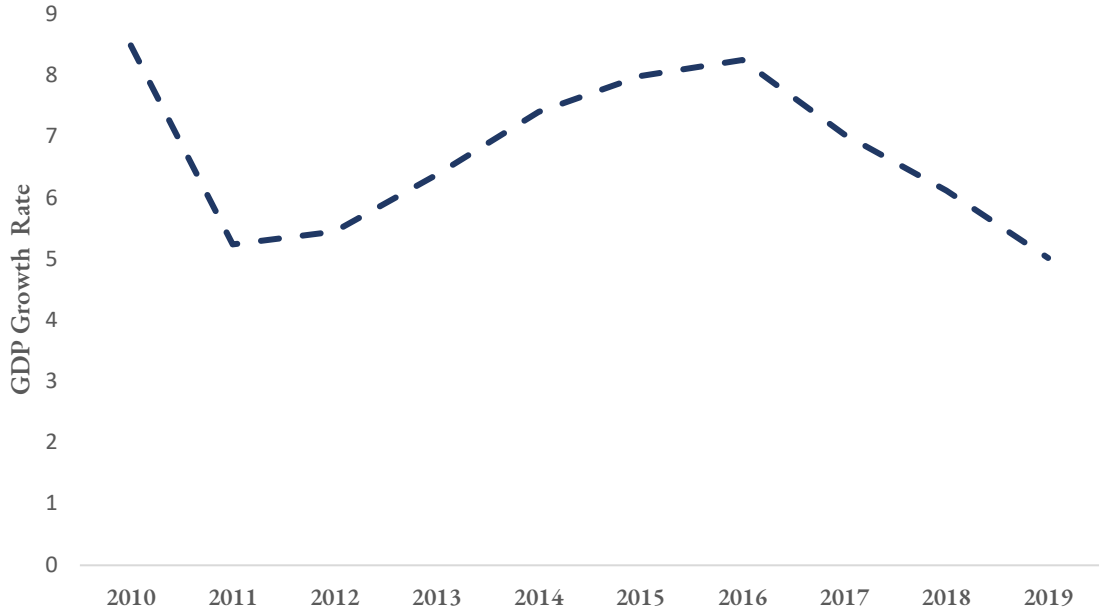
As mentioned above, the new jobs created should be of reasonable quality. The wide variation in productivity across different parts of the Indian economy is illustrated by a few important empirical facts listed in the Three-Year Action Agenda by the Niti Aayog (2017). Firstly, employing half of India's workforce, agriculture generates less than a fifth of the national income, implying that India's overall per capita income is 2.5 times the average income of a person employed in the agricultural sector. Secondly, employing 75% of all manufacturing workers, small firms (those with 20 or fewer workers) produce only a little over a tenth of the total manufacturing output. This implies that the average value added per worker in larger firms is 27 times that in small firms. Furthermore, with the largest service sector firms together producing almost 40 per cent of the service sector's output and employing only 2 per cent of its workers, their output per worker is 20 folds the average output per worker in the service sector overall. And, finally, the average wage of a formal-sector worker is six times the average wage in the informal sector, which comprises small, low-productivity, unregistered enterprises, to which most of the stringent labour regulations do not apply.

With respect to the share of the informal sector in overall non-agricultural employment, even by developing country standards, India's number seems to be very high at 83.6 per cent, but the predicted share, based on this share's estimated worldwide relationship with per capita GDP, is 60 per cent (ILO, 2012). The informal employment share for Brazil, Costa Rica and Uruguay, with approximately the same incidence of poverty as India's but higher per capita incomes, is only 40 per cent (ILO, 2012). Uganda, also with the same incidence of poverty but a lower per capita income than India's, has this share at 69.4 per cent (ILO, 2012). And, for those who like to make India-China comparisons, China's informal share sits at 32.6 per cent (ILO, 2012).

These facts together emphasize the importance of structural change in the Indian economy, through the movement of employment into formal manufacturing from agriculture and informal manufacturing, alongside an economywide efficiency growth.

Thus, the real economic problem and challenge India faces is the creation of good jobs for its fast-growing labour force. Addressing this problem is essential to make sure that the "demographic dividend" indeed remains a dividend. An obvious solution to this problem is the expansion of and specialization in labour-intensive manufacturing as an important component of a desirable structural change in which sectors with high labour productivity expand at the expense of low productivity sectors both as a share of GDP and employment. However, this solution sounds more like a desirable outcome and our solution needs to be deeper in that we need a path that will lead us to this desirable outcome (structural change). For that, we need to figure out what kind of structural change we have had during the last few decades and whether a course correction is required.

Figure1: India's GDP Growth rates during the current decade



Source: The World Bank

There is no doubt that for more good jobs to be created, a healthy rate of economic growth is essential. This allows the government to grow their tax revenues to finance infrastructure projects, that directly generate employment and that also lead to productivity enhancements, in turn indirectly leading to good jobs in the manufacturing sector. Of course, growth is only a necessary, not a sufficient condition for the creation of good jobs. Jobless growth is a possibility, that happens when the expansion in national output is capital intensive. But the first step in our investigation and analysis is to look at India's data on economic growth. For our purposes here, looking at the data for the last decade will be insightful. Starting in 2010 from a GDP growth rate of 8.5% per annum in Figure 1, we see that the economy crashes to a little above 5% in 2011 and then gradually and steadily recovers over the next five years to a little above 8% in 2016 and only slightly below the 8.5% we saw in 2011. After 2016, the trajectory of the growth rate has been downhill throughout, reaching a pre-pandemic growth rate of 5% in 2019. Things have become more difficult with growth going into the negative territory during the pandemic, with the growth rate plummeting to -23.9% in the first quarter of the current fiscal year and then rising to -7.5% in the second quarter. While bringing the pandemic under control and vaccinations will bring the growth rate to

positive territory, what India needs is a sustained growth rate of above 8% per annum and to make sure that growth is accompanied by job creation.

II. Openness and Growth: Lessons from India's Experience

Table 1: GDP and Per Capita GDP Growth Rate

Year	GDP growth	Per capita GDP growth
1951-1965	4.10%	2%
1965-1981	3.20%	0.90%
1981-1988	4.60%	2.40%
1988-2003	5.90%	3.80%
2003-2012	8.30%	6.70%

Source: Panagariya (2019)

Next, drawing heavily from Panagariya (2019) and building upon it, I describe the Indian experience with openness and growth and draw inferences from it.

Right after Independence, there was strong support from various corners for India to be self-reliant. Two things may explain this push. India had been under British rule for a couple of centuries. This rule was, in some ways, initiated by a trading company, namely the British East India Company. It is, therefore, quite possible that this made the government under independent India's first Prime Minister, Pandit Jawaharlal Nehru quite suspicious of international trade, as it probably also led to some fear of future economic imperialism. In addition, mainstream economics then believed in the virtues of free trade only for the developed world but infant-industry protection for developing countries. Thus, the blame often placed on Nehru for India's closedness is unfair. As documented in Panagariya (2008, 2019), Nehru's tenure as Prime Minister started off being reasonably open to both international trade and foreign direct investment. This explains a high trade-to-GDP ratio of slightly over 15% and the import-to-GDP ratio of 10% in 1957. But the balance-of-payments crisis, resulting in a foreign-exchange shortage, in 1958 led to a system of rationing or budgeting foreign exchange, leading effectively to a restriction on imports. The trade-to-GDP ratio fell to 9% by the mid-1960s. Due to the relatively open policy regime during the first half of the period 1951-65 and its lagged impact on growth, GDP growth for the entire period 1951-65 jumped up from under 1% prior to Independence to an average annual rate of 4.1%, with the per capita GDP growth being 2%.

The period 1965-81 has been the worst for India since its independence. Some of the impacts on growth, which sank to 3.2% for aggregate GDP and 0.9% for per capita GDP, came from the policies of the second half of the previous period as well as a couple of wars and a few droughts. But a large part of the impact came from India's move towards virtual autarky and anti-market policies during the late 1960s and the 1970s under Prime Minister Indira Gandhi. Severe restrictions were imposed on the type of importer, type of good that could be imported and source country of imports. There were also very strict restrictions on foreign exchange, including the banning of any foreign exchange holdings in India by domestic residents. Import licensing was expanded. There was a virtual ban on imports of most goods that could be produced domestically, amounting to a regime of import substitution on steroids. As a result, domestic substitutes of imported goods were expensive and of low quality. The import-to-GDP ratio

reached its trough in 1969-70 at roughly 4% and the trade-to-GDP ratio went south of 10%. Foreign investment in any firm was capped at 40%. The impact of a complete lack of economic openness was compounded by extremely restrictive labour laws, that virtually banned firing of workers and reassigning them from one task to another. Small scale industry reservations also severely restricted firm size in labour-intensive industries.

As it gradually became obvious how the lack of openness and the suppression of market forces were constraining India's economic growth, there were some attempts to bring about some incremental reforms, including some restricted opening up of the economy. Licensing restrictions were slowly lifted on goods not being produced in India by moving them to the Open General Licensing (OGL) list, starting in the late 1970s and expanding the list to include roughly 2000 capital and intermediate goods by the late 1980s. Tariff hikes on goods outside of the OGL list raised average tariffs considerably from 25% in 1980-81 to 67% in 1986-87 but the exemption of OGL goods from the statutory tariffs, to be imposed much lower tariffs, meant that effectively protection overall went down, as reflected in the rise of the trade-to-GDP ratio to over 17% by 1990-91. There were some other reforms in the areas of taxation, industrial licensing etc. Together with those reforms, a fall in oil prices, self-sufficiency attained in food grains, a devaluation in the late 1980s, and a somewhat irresponsible fiscal expansion (in the form of substantial government pay raises, subsidies, interest payments and defense spending, that finally led to a macroeconomic crisis in the very early 1990s) resulted in annual GDP growth of 4.6% and per capita GDP growth of 2.4% during the period 1981-88. The growth rate for the period from 1986-87 to 1990-91 was 5.6%.

The expansionary fiscal policies of the 1980s led to a bad macroeconomic situation, which soon assumed crisis-like proportions by 1990 when the external-debt-to-GDP ratio rose to 24.5% and the debt-service ratio (the proportion of export earnings required to service debt) rose to 27%. By that year, foreign exchange reserves could cover only a month's worth of imports in 1990-91. By July 1991, India was unable to borrow in external markets due to its extremely low credit rating. Upon request, the International Monetary Fund (IMF) agreed to provide India with considerable assistance but with some serious conditionalities attached, that required announcing reforms and their implementation. An important part of the reforms was on trade. The resistance to reforms was lower than expected due to several reasons: fall of the Soviet Union, the success of market-friendly economic reforms by China, and a general feeling among civil servants that India's earlier anti-market and isolationist policies might have been a mistake (Panagariya, 2019).

The policy of import licensing was lifted from most intermediate inputs and capital goods, but a similar policy for consumer goods took some time to emerge. The top import tariff rate was reduced from 355% in 1990-91 to 150% in 1991-92, then gradually to 50% by 1995-96 and 10% by 2006-07, with some exceptions in textiles and automobiles. The import-weighted average of tariff rates came down from 87% in 1990-91 to roughly 5% in 2007-08. Both bound and applied agricultural tariffs were very high, with the former averaging 115% and the latter averaging between 35% and 42% after the conclusion of the Uruguay Round of the GATT in 1993. By 1992, export controls on many products were also lifted. An 18% devaluation of the rupee relative to the US dollar also took place during the first year of the reforms initiated in 1991, moving to full convertibility of the rupee for current account transactions and partial convertibility for capital account transactions. Most restrictions on foreign investment were also eliminated.

The average annual GDP growth rose to 5.9% for the period 1988-2003, while the average annual per capita GDP growth rose to 3.8 per cent. This outcome reflects the impact of the slow and mild opening

of the entire economy in the 1980s (along with heavy government spending) and some impact of the big-bang reforms of the 1990s and early 2000s. The effects of these reforms probably showed up with a lag also in the subsequent period, 2003-12. During that period, the average annual GDP growth was 8.3% and the per capita GDP growth was 6.7%. Besides the trade and foreign investment reforms started in 1991 under the Congress government led by Prime Minister P.V. Narasimha Rao (with Manmohan Singh as the Finance Minister), there were further reforms in the form of extensive privatization, telecommunication reforms, highway construction, financial sector reforms etc brought about by the Prime Minister Atal Bihari Vajpayee led National Democratic Alliance (NDA) government, that was in power from 1998 to 2004. The reforms under the Rao and Vajpayee governments had an important role to play in delivering rapid economic growth during subsequent regimes. The two United Progressive Alliance (UPA) governments that followed were prudent enough not to reverse any of the reforms, even though they were not successful in bringing about any complementary reforms. While Prime Minister Modi-led NDA government has been able to make some headway on reforms related to labour, corporate taxation, GST etc, some of the trade reforms of the previous quarter century have been reversed and at the same time opportunities for further trade reforms in the form of joining regional trade agreements have not been taken.

Based on the sequence of events outlined above, it seems obvious that openness in trade and foreign investment most likely had a role to play in delivering an average growth rate north of 8% during the 2003-12 period. Also, during the current decade, until right before the pandemic, from 2010 to 2019, 3 out of the 10 years had growth rates of 8% or higher and 7 out of the 10 years had growth rates of 6% or higher. The remaining 3 years had a growth rate between 5% and 6%. The period starting 2016 has been one of declining growth rates and somewhat rising unemployment.

III. Structural Change in India and its Determinants

I next try to take a closer and deeper look at the determinants of the growth performance since the late 1980s. I try to further investigate the role of openness and other complementary policies. Here I first draw upon some of my joint work in Ahsan and Mitra (2016), where we use sectoral national product and employment data as well as state-by-sector data for India.

Our countrywide sectoral data for India are the National Income and Employment data for the period 1960-2004 from the Groningen Growth and Development Centre Database. The economy comprises 9 broad sectors: Agriculture; Mining; Manufacturing; Public Utilities; Construction; Wholesale and Retail; Transport and Storage; Finance, Real Estate and Business Services (FIREBS); and Community and Social Services.

Firstly, labour productivity is the highest in FIREBS and lowest in Agriculture across all periods. Manufacturing is third from the bottom. Its labour productivity starts with double the productivity in agriculture and by the end of the sample period, it is 4 times the labour productivity in agriculture. These differences in productivity clearly show the scope for increase in overall economywide productivity by moving labour from less productive to more productive sectors, which is what is called growth through "structural change" in the literature. However, lack of skills and other problems with mobility can prevent that from happening. Using the Mcmilland and Rodrik (2011) decomposition method, we find that, barring the decade of the 1970s, structural change has always made a positive contribution to overall productivity growth, while "within-sector" growth (growth that takes place within each sector) also makes a positive contribution. In other words, growth takes place through the movement of workers, on average,

from less to more productive sectors as well as through growth within the average sector. The contribution of structural change is a third of the overall productivity growth in 1980-89, around 45% of overall productivity growth in 1990-99 and just around 5% in 2000-04. However, overall productivity growth is the highest in the third period at 6.54% per year. Clearly, during the period 1980-2004, within-sector growth has been a bigger contributor to growth. These results are consistent with the results in Krishna and Mitra (1998) where we find a positive impact of trade liberalization on firm-level productivity growth. The limited contribution of structural change is consistent with the story that skills are limited and cannot be quickly acquired, along with the presence of barriers to mobility. Even though FIREBS employs a very small fraction of the labour force, it contributes the most to structural change, mainly by its labour productivity being 10 times the national labour productivity, so that even small movements of the share of labour force into this sector leads to a big change in average national labour productivity. The sector contributing the most "within-sector" growth is manufacturing, which is also consistent with the Krishna-Mitra study.

While the structural changes we have seen in India, even though not large enough, have been of the desirable kind (where labour moves from less productive to more productive sectors as opposed to the reverse). Then, what drive these movements of labour, despite mobility barriers and the scarcity of skills? We study this in Ahsan and Mitra by looking at the same 9 sectors during the period 1987-2004 across the 15 major Indian states: Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal. While the National Accounts data at the state level are from the Central Statistical Office (CSO), the employment data by sector are constructed using the NSSO Employment surveys of the four thick rounds spanning our sample period, 1987-2004.

Firstly, from our regressions, we find that the change in the employment share of a sector within a state is related positively to its productivity, in turn implying that, even at a more disaggregated level, labour moves from less productive to more productive activities, indicating once again that structural change is of the desirable kind. Further, these results show that workers are moving to better jobs. What triggers this desirable structural change or the movement to better jobs? Firstly, this positive relationship between the change in employment share and productivity is stronger after the 1991 reforms than before. In addition, the relationship is stronger in states that are more exposed to foreign competition by virtue of their employment composition (an employment-weighted average tariff rate, that is used, is an inverse measure of exposure to foreign competition). Thus, openness to trade seems to promote desirable structural change.

Our other results indicate that trade restrictions, restrictive labour regulation, the lack of basic education and low road density can come in the way of desirable structural change. There also seems to be a positive interaction effect between labour-market flexibility and trade openness in promoting desirable structural change.

IV. Micro-level Evidence from India on Trade, Productivity and Jobs

We next look at some more micro-level evidence. Hall (1988) and Domowitz et al (1988) extend the traditional growth accounting approach to a regression approach that includes imperfect competition and non-constant returns to scale. Using that approach, Harrison (1994) finds a strong correlation between trade reforms and firm-level productivity growth in Cote d'Ivoire. Extending that approach further to allow the returns to scale to be flexible and change over time for Indian firms, in Krishna and Mitra (1998),

we find some evidence of an increase in the growth rate of firm productivity after 1991, the year the big reforms in India were announced and started. Also, we find a reduction in the price-marginal cost mark-ups after the trade reforms, signifying the destruction of firm-level monopoly power and consequent improvements in efficiency and resource allocation.

Topalova and Khandelwal (2011) also confirm an increase in firm-level productivity in the Indian manufacturing sector due to trade liberalization, using a more updated dataset and more state-of-the-art production function estimation techniques to correct for endogeneity, measurement error problems and selection issues. They find evidence for a pro-competitive effect of final goods tariff liberalization as well as a cost-reducing impact of a reduction in the tariffs on input imports. Both these effects have been responsible for the increase in firm-level productivity, with the input tariff liberalization making the bigger of the two contributions.

There is also evidence from India that trade liberalization leads to greater intergenerational occupational mobility implying that sons of workers in low-skilled occupations are more likely to move to higher-skilled occupations when the economy faces greater exposure to import competition. This evidence is provided by Ahsan and Chatterjee (2017) who, using detailed information on occupations in NSSO surveys, determine for each son whether he has a job in a higher-ranked occupation than his father, where an occupation's rank is based on the education intensity of that occupation. What the authors find is that this kind of upward mobility is more likely in an urban Indian district with a greater exposure to trade liberalization, by virtue of its employment composition skewed more towards industries that have experienced deeper tariff cuts. Clearly, tariff liberalization moves families to better jobs over subsequent generations and trade seems to have a positive impact on job quality.

V. Theoretical Channels

The two main sources of comparative advantage that form the basis for international trade are technological differences (Ricardian) and differences in factor endowments (Heckscher-Ohlin). A country is supposed to have a comparative advantage in goods and services in whose production the country's wage advantage dominates their productivity disadvantage, which is normally the goods in which a country's productivity disadvantage is the lowest (or its productivity advantage is the highest). A country also has a comparative advantage in goods and services whose production is intensive in the use of the country's abundant factors.

International trade could also arise from economies of scale in the presence of product differentiation and imperfect competition (Krugman, 1979). Producing too many varieties in the same country prevents the exploitation of scale economies in any of the varieties produced. Scale economies can be taken advantage of when each country specializes in just a few varieties, but all citizens can consume through international trade all varieties produced all over the world. Melitz (2003) incorporates firm heterogeneity in productivity into a Krugman-type model. Trade leads to competition from foreign firms that lead to the least productive firms dropping out while providing market shares abroad to the most productive domestic firms. Some firms in the middle survive but lose their market shares to the most productive domestic as well as foreign firms. Thus, industry-level productivity, that is a weighted average of firm productivities, goes up.

Welfare gains from trade arise through efficiency gains from specialization based on comparative advantage, followed by an exchange. Additionally, the availability of larger varieties of final goods improves welfare directly, while a greater variety of intermediate inputs, that increases productivity

through greater division of labour and better input-output matching, increases welfare indirectly. Productivity in the Melitz model goes up through trade by the weeding out of the least productive firms and, among the remaining firms, increases in the shares of the most productive ones.

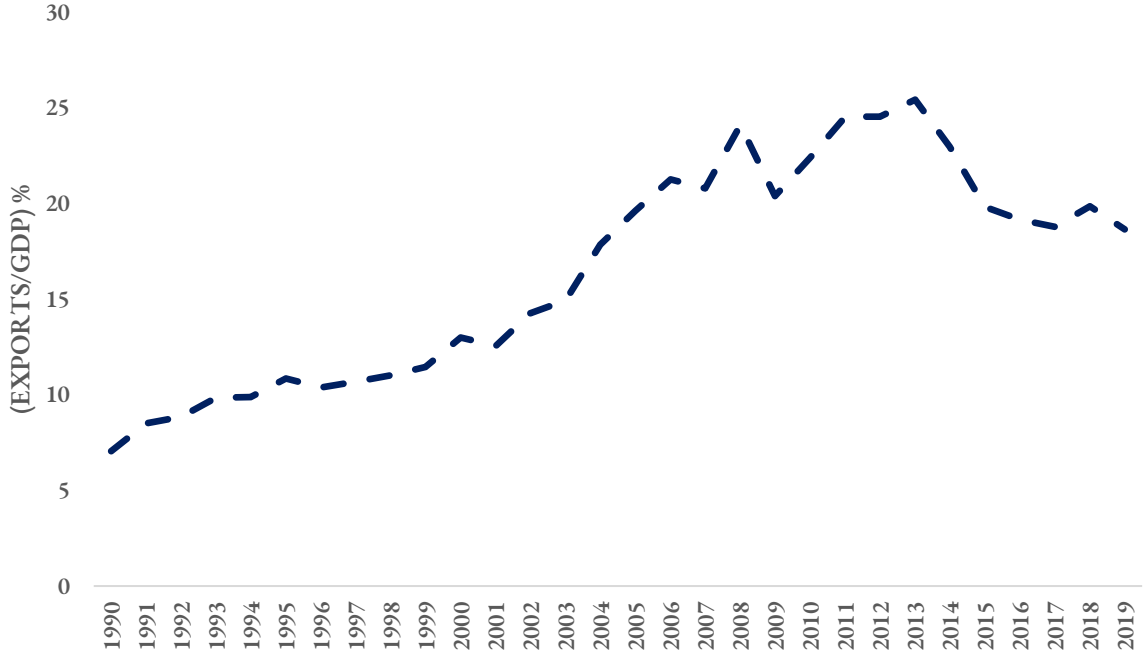
The empirical equivalent of the gains from trade result is a positive impact of international trade on real per capita income. Thus, lowering trade barriers is expected to take us to a higher real per capita income and lead to transitional growth, or, if there are other sources of growth, add to that growth during this transition.

The theoretical literature on trade and endogenous growth does not provide clear guidance on the relationship we should expect between trade and growth. Different models lead to different predictions, which means that results are extremely sensitive to model structure and assumptions. This theoretical literature, however, does identify quite a few channels through which trade might accelerate economic growth. For example, trade can stimulate innovation through industrial learning it facilitates through international exchange of technical information. International trade can also improve the efficiency of global research by eliminating the duplication of research efforts in different countries. Trade also leads to greater competition and this pro-competitive effect incentivizes domestic producers to innovate.

How might trade lead to better jobs or greater intergenerational occupational mobility? What is the theoretical channel in this case? Ahsan and Chatterjee argue that trade leads firms closer to the frontier to invest more in their productivity (through greater R&D) while it discourages firms far from the technological frontier from doing so, pushing the output and employment shares of the latter to shrink and those of the former to expand. Thus, there is job creation in relatively technologically advanced firms, leading to the next generation moving to higher-skilled occupations.

VI. Policy Implications and Recommendations

Figure 2: India's Exports of Goods and Services as a percentage of GDP



Source: The World Bank

In Figure 1, we saw that, starting in 2016, growth started declining and by 2019 fell to 5% before the start of the pandemic. The unemployment rate crossed 6% with a labour-force participation rate of 37%. But the real problem has been underemployment (Panagariya, 2020). Work that can be performed by one person is often performed together by a few people. This has always been true across all sectors, namely agriculture, industry and services, in India. Even during the first decade of this century, when growth was averaging 8% per annum, substantial underemployment existed. Unemployment rates were low, but so were labour force participation rates. The growth was considered to be "jobless" by many analysts and commentators. Job creation has failed to keep pace with the growth in the working-age population. There is also a serious problem with job quality, as mentioned earlier in this paper. A large majority of jobs within the manufacturing sector are informal, while in agriculture labour productivity is extremely low. Therefore, the twin problems of slow creation of quality jobs and slow economic growth need to be addressed.

The growth that we saw after the 1991 reforms and into the first decade and a half of this century was driven by the service sector and some manufacturing. But labour-intensive manufacturing like textiles, apparel, footwear etc had no role. In a highly populous country like India with low average levels of education and skills, service-led growth cannot last very long. In South Korea, Taiwan and then China, rapid growth for a long period was driven by labour-intensive manufacturing (Panagariya, 2019). When growth is driven by labour-intensive manufacturing activities, rapid growth and rapid creation of well-paying jobs happen simultaneously.

India's share in world population is 17 per cent, but its share in world GDP is only 3%. This obviously makes India a labour-abundant country. Adding to this India's low average education levels, one can call it a low-skilled labour abundant country. However, just a few years ago, India doubled its import duties on beauty aids, watches, toys, furniture, footwear, kites and candles. This was a clear acknowledgement of India's lack of competitiveness in these entry-level labour-intensive industries. Import duties on electronics and communications devices, such as mobile phones, televisions, and related inputs and parts were also doubled. Thus, India also seems to have failed in low-skilled labour-intensive input processing and assembly (especially in electronics), one of the engines of export expansion and growth in China. Hence, India has failed to grasp its natural comparative advantage, being outperformed not only by China but also by Bangladesh and Vietnam in labour-intensive textiles and apparel exports.

In addition, we have found evidence that even within many manufacturing industries India uses production techniques that are significantly more capital-intensive than other countries at similar stages of development (Hasan, Mitra and Sundaram, 2013). In some industries, India's production techniques are more capital intensive than China's, whose real per capita income is more than double India's.

Thus, in Figure 2, the graph of the share of exports of goods and services in GDP shows us, over approximately the last decade and a half, considerable stagnation of the exports-to-GDP ratio, followed by a decline. Unless India can specialize in labour-intensive manufactures and produce them at scale to reap considerable economies of scale and then export large volumes of those products, sustaining a growth rate of 8% or higher will be impossible. China was successful in doing that for a couple of decades, but there is a void now due to rising wages in China, the US-China trade conflict and rebalancing towards less openness under President Xi Jinping. But India has failed to take advantage of that, since manufacturing activities are moving to other Asian developing countries like Vietnam, Thailand etc.

I have argued in many of my writings that restrictive labour regulations hurt India's natural comparative advantage in labour-intensive manufacturing. Hasan, Gupta and Kumar (2009), in their insightful industry-by-state study, find slower output and employment growth in labour-intensive

industries in states with relatively restrictive labour regulations, the differences in labour regulations brought about by different state-level amendments to Central labour acts and different monitoring intensities. Pooling formal-sector and informal-sector manufacturing firms, Hasan and Jandoc (2013) find that while in rigid labour-regulation states 60% of labour-intensive manufacturing employment is concentrated in small firms employing 0-9 workers, this proportion is 40% for the remaining states. These proportions for large firms employing over 200 workers are 10% and 25% respectively for the rigid states and others. Thus, there is an indication of better exploitation of economies of scale and thus faster employment growth in states with relatively flexible labour markets.

Restrictive labour laws in India prevent adjustment of employment (in response to changing demand). Under the Industrial Disputes Act (IDA), firing workers is virtually impossible in formal sector firms above a threshold size of 100 workers in some states and 300 workers in others, even in the case of incompetence. The existing labour laws also place severe restrictions in formal sector firms on reassigning a worker from one task to another quite difficult. Thus, incentives are biased in favour of firms remaining small. Chinese manufacturing employment, however, is concentrated in large enterprises of over 1000 workers each, as opposed to India's in under-20 worker firms (Hasan and Jandoc, 2013). Thus, it is not surprising that India finds it difficult to compete in export markets for labour-intensive products.

Thus, reforms are urgently needed in labour regulations. There certainly have been some steps in the right direction taken in this regard over the last few years. One of them is the raising of the IDA threshold from 100 to 300 workers in Andhra Pradesh, Haryana, Madhya Pradesh, Maharashtra, Rajasthan and Uttarakhand. Additionally, Rajasthan has raised the threshold for membership of a union to 30% of a firm's employment. To minimize harassment by inspectors, a unified web portal at the central level has been instituted for the self-reporting of compliance with 16 central acts. Within the portal, there is a built-in algorithm, which looks for inconsistencies in reporting, which, if found, triggers an inspection. Fixed-term contracts and consolidation of the labour laws into four codes are some recent reforms

Further labour reforms are needed. Bhagwati and Panagariya (2013) have recommended the exclusion of non-confirmation of a worker on probation and downsizing in response to demand and technology shocks from IDA's definition of retrenchment. Also, firms should be allowed considerable flexibility in task reassignment within the Standing Orders Act. Both these changes will provide Indian producers more flexibility in response to shocks. Also, at most a single union should be allowed within any firm. The coverage of the newly installed self-reporting web portal needs to expand (in terms of the number of regulations covered). While the government has moved towards consolidating central labour laws into four labour codes, that is not enough unless and until the restrictions on hiring and firing and task reassignment are loosened. Firing with severance packages should be allowed (Panagariya, 2020). Fixed-term contracts are a welcome step. But the introduction of multiple minimum wages based on the skill level makes no sense whatsoever. The purpose of a minimum wage is to provide for at least a subsistence level of consumption, which should not vary by skill level (See Panagariya, 2020). It can certainly vary across regions depending on the cost of living. To prevent firms from remaining small the IDA threshold needs to be raised further, maybe somewhere close to 1000 workers, to allow labour-intensive firms in India to reach Chinese scales of production.

Another factor market that does not function well is the one for land. Land acquisition is a real problem, as several contiguous plots of land might need to be bought from separate owners for a firm to have an optimal scale of production. Towards this end, Panagariya (2020) has suggested a vertical expansion of firms through the relaxation of rules on floor space index (FSI). He also floats the idea of 5 or 6 Autonomous Economic Zones (AEZs), each spanning at least 500 square kilometres. In Jha and

Mitra (2002), we discuss this idea in considerable detail. We argue that India now needs a handful of AEZs, that are different from the 250 Special Economic Zones (SEZs) or so that have already been created in India under the SEZ Act of 2005 with a median size of around 0.30 square kilometres. In sharp contrast, the Shenzhen SEZ is currently at 1953 square kilometres covering a population of 13 million, which is considerably larger than Gujarat's large Mundra SEZ spanning 64 square kilometres.

In these AEZs, in Jha and Mitra, we propose greater flexibility in the retrenchment of labour and adjusting task assignments, along with mandating a living (minimum) wage and adequate social protection, in contrast to the recent announcements by some state governments to temporarily abandon labour laws that require safe working conditions and basic worker rights (collective bargaining, minimum wages, work hours etc).

A few additional features that can be proposed for these AEZs are greater floor space index, public-private partnerships to help with capital constraints and infrastructure development, and a minimum export requirement to prevent rent-seeking by firms to take advantage of the AEZ facility merely for cost reduction purposes (Jha and Mitra).

Further, as argued in Jha and Mitra, an AEZ may act as a coordination device for agglomeration or clustering of firms and economic activities. A firm that wants to downsize can fire a worker who will then quickly get hired by another neighbouring firm wanting to expand, effectively providing job security. This also ensures that firms always have access to a pool of well-trained workers, thus providing flexibility in labour adjustments in both directions. There will also be easy access to a variety of input suppliers located there, and agglomeration of firms will lead to higher productivity through spillovers of technical knowledge.

In Jha and Mitra, we also argued that instituting AEZs would create a large number of jobs right away for building infrastructure, especially in the construction of roads, bridges, airports, office buildings, parks, residence, schools, hospitals, and dormitory for workers to prevent the emergence of slums.

Often, policymakers have a mercantilist approach to promoting exports in that they believe they can do so by simultaneously restricting imports. In the Indian case, many often interpret Prime Minister Modi's call for "Make in India" to produce for exports as well as to manufacture domestically everything Indians consume. The impossibility of doing this is enunciated in the Lerner symmetry theorem, according to which an import tax (barrier) is equivalent to an export tax (barrier). Intuitively, with limited resources, when a country must produce more for domestic consumption, there are fewer resources left to produce for exports. Also, an import barrier reduces a country's demand for foreign exchange leading to an appreciation of the exchange rate of its currency, in turn making its exports more expensive in other countries and reducing demand for the country's exports in the rest of the world. Also, even producing for exports might require imported inputs. A tariff on such imports makes exports less profitable and more difficult. This is the case in many labour-intensive industries in India. High tariffs (20-25%) on artificial fibres and fabrics made from them adversely affect the exports of garments, whose production is intensive in the use of low-skilled labour.

Besides, high tariffs on final products can make domestic producers of such products inefficient due to the lack of competition. Many years of very high tariffs on automobiles, in the range of 60-125%, with much lower tariffs (around 12.5%) on auto parts and components, have made the automobile industry inefficient and uncompetitive in the world market. Thus, India's potential for automobile exports has not been realized. The lesson from all of this is that tariff hikes of the last few years need to be rolled back.

At the very least, along the lines Panagariya (2020) has argued, a uniform tariff of 7%-10% should be instituted, so that the producers of final goods are not disadvantaged and political pressure for tariffs is

diluted. An alternative could be a small range of 5%-12% tariffs. However, the narrower such a range, the better.

Success in exports is about winning the competition for access to external markets. After the US had free trade agreements with Canada and Mexico, we saw the EU also signing free trade agreements with Canada and Mexico to have access to those markets. That is why preferential trade agreements (PTAs) have expanded in number very quickly, which led Professor Jagdish Bhagwati to coin the term "the spaghetti bowl of regionalism." As a result, India's reluctance to sign trade agreements has left it handicapped in international markets where it competes with other countries that have received tariff concessions through trade agreements. India's refusal to join the Regional Comprehensive Economic Partnership (RCEP) is a case in point. The complication arises from the fact that market access has to be reciprocated and there is a fear of additional import competition that might result from such agreements. On the one hand, this problem stems from the lack of adequate factor market reforms, thereby making Indian labour-intensive manufactures. international uncompetitive. On the other hand, not signing trade agreements reduces the need for such domestic policy reforms. Thus, India gets stuck in a bad policy equilibrium, possibly even in the political-economy forces leading to the various reforms. Therefore, there is a need for various policy reforms in a coordinated way.

VII. Concluding Remarks

In this paper, I have highlighted the current problems of slow job creation and slow economic growth in India. While economic growth for long stretches since the 1990s has been fast, even during those periods, India has made slow progress in the creation of quality jobs. Thus, India's demographic dividend has become a demographic burden.

To address the twin problems of slow growth and slow job creation, I first draw inferences from India's post-independence economic history. Trade reforms have been followed by high rates of growth, while restrictive trade policies have led to slow growth. Other economic restrictions in the domestic policy arena have made matters worse.

I emphasize the importance of labour-intensive manufacturing and its exports. Also, I dig deeper into the channels that explain the trade-growth-jobs nexus, presenting some applications in this regard of existing theory, as well as looking at the evidence on structural change and its determinants.

Finally, a significant part of the paper is devoted to policy implications and recommendations. These policy recommendations include tariff reduction, labour law reforms, setting up Autonomous Economic Zones (AEZs) and signing preferential trade agreements. The rationale for these policy recommendations has been fully explained.

References

Ahsan, Reshad and Devashish Mitra (2016). "Can the Whole Actually be Greater than the Sum of its Parts? Lessons from India's Growing Economy and its Evolving Structure," in McMillan, M. D. Rodrik and C. Sepulveda (eds.), *Structural Change, Fundamentals and Growth*, International Food Policy Research Institute, Washington D.C., 39-79.

Ahsan, Reshad N. and Arpita Chatterjee (2017). "Trade Liberalization and Intergenerational Occupational Mobility in Urban India," *Journal of International Economics* 109, 138-152.
Bhagwati, Jagdish and Arvind Panagariya (2013). *Why Growth Matters: How Economic Growth in India Reduced Poverty and the Lessons for Other Developing Countries,* Public Affairs, New York, USA.

Domowitz, Ian, R. Glenn Hubbard, and Bruce C. Peterson (1988), Market Structure and Cyclical Fluctuations in U.S. Manufacturing, Review of Economics and Statistics 70: 55-66.

Gupta, Poonam, Rana Hasan and Utsav Kumar (2008). "Big Reforms but Small Payoffs: Explaining the Weak Record of Growth in Indian Manufacturing," *India Policy Forum* 5(1), 59-123.

Hall, Robert E. (1988). "The Relation between Price and Marginal Cost in U.S. Industry," *Journal of Political Economy* 96 (5), 921–947.

Harrison, Ann E. (1994). "Productivity, imperfect competition and trade reform: Theory and evidence," Journal of International Economics 36(1-2), 53-73.

Hasan, Rana and Karl Jandoc (2013). "Labour Regulations and Firm-Size Distribution in Indian Manufacturing," in Jagdish Bhagwati and Arvind Panagariya (eds.) *Reforms and Economic Transformation in India*, Oxford University Press, New York, NY, 15-48.

Hasan, Rana, Devashish Mitra and Asha Sundaram (2013). "What Explains the High Capital Intensity of Indian Manufacturing?," *Indian Growth and Development Review* 6(2), 212-241.

ILO (2012). *Statistical update on employment in the informal economy*, ILO - Department of Statistics June 2012, Geneva, Switzerland. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/presentation/wcms_182504.pdf

Jha, Priyaranjan and Devashish Mitra (2020). "How a successful 'AEZ Model' can remove India's structural bottlenecks," *The Economic Times*, May 19.
https://economictimes.indiatimes.com/news/economy/policy/view-how-a-successful-aez-model-can-remove-indias-structural-bottlenecks/articleshow/75834685.cms

Krishna, Pravin and Devashish Mitra (1998). "Trade liberalization, market discipline and productivity growth: new evidence from India," *Journal of Development Economics* 56 (2), 447-462.

Krugman, Paul R. (1979). "Increasing Returns, Monopolistic Competition, and International Trade," *Journal of International Economics* 9, 469-479.

McMillan, Margaret and Dani Rodrik (2011). Globalization, Structural Change and Productivity Growth," in Bachetta, M. and Jansen, M. (eds.) *Making Globalization Socially Sustainable*, International Labour Organization and World Trade Organization, Geneva.

Meltiz, Marc J. (2003). The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity," *Econometrica* 71(6), 1695-1725.

Ministry of Finance (2017). *The Economic Survey*, Ministry of Finance, Government of India.

Niti Aayog (2017). *Three-Year Action Agenda* (2017-2020), Niti Aayog, New Delhi.

Panagariya, Arvind (2008). *India: The Emerging Giant*, Oxford University Press, New York.

Panagariya, Arvind (2019). *Free Trade & Prosperity,* Oxford University Press, New York.

Panagariya, Arvind (2020). *New India: Reclaiming the Lost Glory,* Oxford University Press, New York.

Topalova, Petia and Amit Khandelwal (2011). "Trade Liberalization and Firm Productivity: The Case of India," *Review of Economics and Statistics* 93(3), 995-1009.