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Trade and Labour Market Linkages in India: Evidence and Issues

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Trade and Labour Market Linkages in India: Evidence and Issues

Rayaprolu Nagaraj

Introduction

India is world's second most populous nation, and the largest functioning democracy. Its economy accounts for about 1/12 of world output at purchasing power parity, though, in terms of per capita income it ranks about 120th. Indian economy and society is highly diverse and heterogeneous. As with most large countries, India tends to be relatively closed economy with foreign trade and investment playing a limited, though critical, role in its economic development.

This chapter documents the relationship between India's labour market and international trade in the recent decades. It looks at, in particular, how the relationship has evolved after India initiated the programme of structural reforms about a decade ago, with a view to raise questions for further research.

The chapter is structured as follows. Section I briefly sketches the evolution of Indian economic policy since the Independence. Providing an over view, Section II describes the structure and segmentation of the labour market in some detail. Section III shows how state intervention seeks to regulate labour market performance. How international integration has influenced the labour market is discussed in section IV. Before concluding, implications of greater international integration and issues for further research are highlighted in Section V.

II
Evolution of Indian Economy Policy

India attained its political independence in 1947; launched a process of planned economic development in 1951-52. Quite in tune with the consensus in the development profession at that time, India set forth a plan for increasing domestic saving and investment rates to initiate a process of self-sustaining growth path. In the mid-1950s, following Mahalanobis, emphasis in investment shifted to heavy industrialisation aimed at rapid import substitution with public sector filling in the role of "strategic entrepreneur" in a predominantly market economy. The plan was premised on (i) export pessimism and (ii) elastic supply of food grains in response to growing demand from the modern, industrial sector (Chakravarty, 1986).

In about a decade (1956-65), in a significant break from the colonial past, India was able to step up industrial growth to about 8 per cent per year, and sharply reduce its import dependence of capital and intermediate goods. However, such a rapid industrialisation could not be sustained for a number of (domestic and external) reasons - most important of which were perhaps the food shortage and the consequent rise in inflation rate in the mid-1960s. In response, resources were diverted for increasing food production - which fortunately coincided with the availability of high yielding varieties of wheat, and, with some lag, in rice.

For Indian economy, 1965 to 1980 was a period of numerous external and exogenous, (economic as well as non-economic) shocks. This period witnessed a "relative stagnation" of industry - reducing manufacturing sector growth to about 4.5 per cent per year. But there was a "wheat revolution" during this time, enabling the economy to overcome the food crisis. Soon, focus of import substitution shifted from machinery manufacturing to fertiliser production and commercial energy sources to mitigate the effects of external shocks. As the growth in domestic absorption was relatively low, there was a modest improvement in export growth, with an increasing share of manufactures. However, these achievements were modest relative to the growth in world trade, and export performance of many East Asian economies.

<u>Improved economic growth with industrial turn around</u> (1981-91):

Towards the end of the 1970s, India's domestic saving rate rose close to $1/5^{th}$ of GDP, with surplus food stock and comfortable level of foreign exchange - relaxing the two long-term, binding constraints on India's industrialisation effort. But industrial growth continued to be sluggish.

The 1980s witnessed initiation of trade liberalisation (shift from quota to tariff), revival of public investment in energy and infrastructure and, a slow but steady, deregulation of investment and output controls. In response to these policy changes - along with a significant improvement agriculture growth - industrial growth in the 1980s regained the lost momentum of the first fifteen years of planned economic development (Nagaraj, 1989). GDP growth rate in this decade accelerated to about 5.5 per cent per year, with manufacturing representing the "leading sector", growing at about 8 per cent per year (Nagaraj, 1990; Ahluwalia, 1992).

<u>Proximate causes of reforms</u>:

Faced with a balance of payment crisis, the newly elected minority government that took office in the mid-1991 launched a major stabilisation and structural adjustment programme. Whether unsustainable policies of the 1980s caused the crisis, or it was merely a short-term liquidity problem created by external, exogenous and political factors is a keenly debated issue. Similarly, whether the reforms of 1991 represent a sharp break from the *deregist* regime of the past four decades, or a continuation of the `creeping liberalisation' initiated in the 1980s, is a moot point (Nagaraj, 1997).

However, there is a reasonable consensus that the reforms represented an internally consistent set of policies that, on the face of it, sought to break from the past in a significant way. Further, the policy package was the same as what is popularly called the Washington Consensus, modified marginally to suit the context. Although the pace of reforms was modest in comparative perspective, they appeared very rapid by Indian record.

Economic Reforms of 1991:

In response to the crisis in the mid-1991, the following measures were initiated:

- Currency Devaluation: In July 1991, Indian rupee was devalued by about 18 per cent against the US dollar. Along with this, cash incentives for exports were with drawn.
- Fiscal Correction: Central government spending was cut to reduce the fiscal deficit from 8.4 per cent to 6 per cent of GDP in 1991-92.
- Increase in interest rate: State Bank of India's advance rate was hiked from 16.5 per cent to 19 per cent in 1991-92.
- Structural reforms:
    1. It mainly consisted of trade and industrial policy reform: replacing import licensing with tradable import permits, and a rapid reduction tariff rates - especially on capital goods (Table 1).
    2. Elimination of licensing for new entry and capacity expansion in manufacturing.
    3. Drastic pruning of industries reserved for public sector.
    4. Reduction in entry barriers for inward foreign direct investment (FDI).
- Mobilisation of exceptional financing: IMF stand-by credit of $2.3bn over a 20-month period.

As the economy turned around in about 18 months with an improvement in balance of payment situation, and a reduction domestic inflation, the programme of structural reforms got strengthened. In his letter to the World Bank President seeking structural adjustment loan the then finance minister, Manmohan Singh, outlined the following reform measures:

1. Convertibility of Indian currency on current account.
2. Tax reform - introduction of VAT; reduction in average tariff rates and reduction of their dispersion.
3. Disinvestment and memorandum of understanding (MOU) with public sector enterprises (PSEs) for better performance and reduction in budgetary support for them.[1]
4. Reduction in the role of public investment.
5. Trade and industrial policy reform: Abolition of investment and output controls; pruning the industries reserved for public sector; abolition of Monopolies and Restrictive Trade Practices (MRTP) Commission, fiscal incentives for investment in industrially backward areas.
6. Abolition of controls on FDI; portfolio investment permitted; access of international capital markets for large Indian companies.
7. Stock market reform: Abolition of the Controller of Capital issues; relaxation of norms for company listing in stock markets; Permission for non-resident Indians (NRIs) to invest in Indian stocks; development of modern institutions for stock market and the regulatory agency.
8. Financial sector reform: reduction in CRR and SLR; liberalisation of interest rates; entry of private sector banks, dilution of directed credit, withdrawing of lines of credit for Industrial Development Bank of India (IDBI) and Exim bank; development of market for

[1] Disinvestment refers to sale of government equity without giving up managerial control.

government securities; greater independence for the central bank; constitution of banking regulatory authorities.

9. National Renewal Fund for financing voluntary retiring scheme (VRS) in PSEs: While there has been much verbal support for changes in labour laws, the necessary legislation were not brought up as there was hardly any consensus for them. However the introduction of NRF for public sector legitimised lay-off and retrenchments in the organised private sector. Though the labour laws remained the same, their enforcement was substantially diluted, as government decided to ignore enforcement of labour laws.

Although the above list of reforms is a long one, perhaps the most of the reforms have been with respect to trade and foreign investment. Over the last decade many of these reforms have been implemented, although the precise extent of it may, in some cases, vary from the original intent.

II
Overview of labor markets

Structure and Segmentation of labour market:

India is a large agrarian economy with 2/3rd of its work force subsisting on agriculture. During the last quarter century, transformation of workforce from agriculture to non-agriculture has begun, though the pace of it is slow, and uneven across regions (Table 2). About a quarter of India's population is urban, the bulk of it concentrated in the metropolitan cities (Visaria, 1996). Rural-urban migration is largely to metropolitan cities, moderating urban wage rates, and causing considerable open (as well as disguised) unemployment in urban informal sector (Kundu and Gupta, 1996). However, migration, in relation to workforce, has been modest, gradually declining over the decades (Table 3) (Srivastava, 1998).

Organised (formal) sector constitutes less than one tenth of the economy's work force; it has marginally declined from 8.8 percent in 1977-78 to 8.1 percent in 1993-94 (Table 4).[2] Public sector constitutes about 2/3rd of the organised employment.

In the agrarian economy, vast majority of the population consists of cultivators and agriculture labour. About a 1/3rd of rural households are agriculture labour households surviving mainly on wage employment. Perhaps a slightly larger proportion of them is net buyer of food in the market, implying they are subsistence farmers.
Worker-population ratio for the economy as a whole has remained stable about 40 per cent, while it is about 28 per cent for women (Table 5). Reportedly, there is sizable underestimation in women's employment.

However, in the non-agriculture sector, education levels are better and diversified, mainly due to access to formal education and training facilities, mostly provided by the public sector.

[2] Organised sector broadly consists of the public sector, the private corporate sector, agriculture plantation, the factory sector spanning manufacturing, electricity gas and water, and repair services.

As large investments were made in higher and technical education in the early decades of planning to meet the potential man power requirement of planned industrialiation, India now has a substantial concentration of highly skilled engineers and science graduates. In recent years, this is becoming India's revealed comparative advantage as reflected in growth of computer software exports, and out-migration of software professionals to the developed economies in significant numbers.

Trends in the labor markets:

For the first three-quarters of the 20th century, proportion of work force depending on agriculture in India remain constant at about 75 per cent, despite a gradual diversification of the output growth and a fairly rapid industrialisation since 1950. This began to change in the last quarter of the century with a modest decline in the primary sector's share in work force to about 2/3rd in 1993-94. However, the workforce has shifted to the tertiary sector, and not to the secondary sector as was the case with most industrialised countries in their comparable stage of development.

Despite a steady and modestly accelerating growth in per capita output over the last five decades, there is no improvement in the worker to population ratio. In other words, unlike in rapidly industrilising economies of East Asia, - or, as in Eastern Europe and Soviet Russia in the earlier period - there has been no increase in workforce participation rates during the last half century. While it partly reflects greater educational effort, stagnant participation ratio perhaps partly reflects inadequate effort at utilising the existing workforce in securing extensive growth that has historically been crucial in achieving equity in the early phase of development. Improvement in participation rates for women is disputed.[3]

Although economic growth has improved since the early 1980s, to over 5.5 per cent per year on a trend basis - up from about 3.5 per cent for three decades earlier - there is an economy-wide decline in employment elasticity of output (Table 6).[4] Unemployment rates have broadly remained constant over the last quarter century, at about 12 per cent (Ghose, 1999).

In rural India, there has been a steady increase in landlessness and casualisation of workforce. In urban areas, share of the organised sector - and within it of the public sector - has marginally declined. Therefore, the bulk of additional employment generated in non-agriculture in the recent years has been in the unorganised sector (Table 4).
Participation ratio for children has steadily declined, though in absolute numbers they are still sizeable, in a comparative perspective. Moreover, they are visible, as they are concentrated in selected industries and locations, some of them producing luxury tradeable goods with international visibility.

Since the early 1970s, real wage rates in agriculture have steadily gone up, though there is considerable variation in it across the states (Table 7). This, perhaps, broadly reflects the

[3] As women's work outside their homes tend to be discontinuous and seasonal, they tend to get missed out.
[4] As 1987-88 was a drought year, growth estimates get vitiated. Therefore, one should compare employment elasticity during 1988-94 with 1978-93 to arrive at meaningful conclusions.

variation in labour productivity in food production. However, the wages are far from adequate to secure minimum nutrition to overcome poverty (Ghose, 1999).

Earnings per worker in registered manufacturing have steadily risen over the last two decades, quite consistent with the rise in labour productivity (Nagaraj, 1994). Earnings in public sector enterprises have risen faster than that in registered manufacturing, reflecting either their greater skill intensity, or greater bargaining power in oligopolistic industrial setting, or both.

III

Regulations governing labor market

Most labour laws in India are applicable to the organised sector. There are, however, many laws regulating conditions of work in the unorganised sector (starting with fixing minimum wages for different industries and trades), including agriculture. Since these productive activities are decentralised and geographically dispersed, government has little ability to administer these laws. Even where it is possible, enforcement is problamatic, as most of the employment contracts are informal, which cannot be verified in courts. Moreover, due illiteracy workers have little knowledge of their rights; even if they do, they are too poor to seek redress from administration or courts. Therefore, most of these laws tend to be inspirational in nature.[5]

There are many attempts to unionise the unorganised workers mainly to enforce state mandated minimum wages rules, mostly localised to a city or a state. But bargaining power of the unorganised workers is very limited, given the surplus labour in rural economy. There are exceptions, however. Unionisation of practically all segments of workforce has largely succeeded in Kerala for specific historical, social and political reasons.

The Factories Act, 1948 is the corner stone of labour regulation in manufacturing, electricity and gas; Shops and Establishments Act, a state legislation, for the tertiary sector. Factories Act is mandated for all factories employing 10 or more workers using power, and 20 or more workers without using power. As the factory size increases, the act becomes stringent with respect to offering benefits to workers, like provident fund, gratuity, provision of canteen in the work premises and so on.

<u>Collective bargaining in India:</u>

As per the Trade Union Act, any seven workers belonging to a factory can form a union and seek a registration to take part in the collective bargaining negotiations. However, reportedly, factories employing up to 100 workers usually do not have significant presence of durable trade unions, given their poor bargaining power vis-a-vis their employers. Considering the

[5] In a small, but carefully conducted, survey of about 60 unorganised industrial workers in Bangalore city in 1983, I had found that none of them were even aware of minimum wages act. Wage rates they were getting was a fraction of the officially stipulated minimum. Given their poverty and illiteracy, they were uninterested in knowing about it, let alone seeking enforcement of the law, for fear of loosing their livelihood.

poor record of enforcement of labour laws, both by administration and the courts, and given surplus labour situation, workers have very little protection against non-compliance of contracts or labour laws. There are however, exceptions in states like West Bengal and Kerala and in some industrial cities.

As per the Industrial Disputes Act, 1947, State intervenes in any dispute between employer and employees in the organised sector, apparently in the interest of the economy - popularly called the tripartite dispute settlement mechanism. Employers or employees are expected to inform the labour commissioner before declaring a lock out or going on a strike. In all such disputes, labour commissioner is, in principle, a party to the decisions. On the face of it, the rules of the dispute settlement mechanism are very stringent. For instance, to retrench even a single worker, an employer has to seek the permission of the state labour commissioner. Many of the welfare and safety regulations are the result of ILO conventions, to which India is a signatory.

As mentioned earlier, most of the labour market regulation in the organised sector, outside the central and state governments, are inspirational in nature. Apparently, even the verbal support for labour has declined in the last two decades as the organised workers steadily lost their significance in the political arithmetic. Consequently, the centralised industry or industry-region-wide collective bargaining mechanisms have declined over the decades. Though hard evidence is difficult to gather - due to deteriorating quality of labour statistics - there is an undeniable tendency towards decentralised, company based, collective bargaining arrangements (Bhattcherjee, 1999).

Safety Nets for workers:

India does not have a publicly funded universal unemployment insurance scheme. Therefore, most depend on family and traditional institutions for social support. Under these circumstances many of the populist, target-oriented, employment generation and skill development schemes in urban India, in effect, become disguised, temporary, meagre, dole programme for the selected few.

In the organised sector, there are provisions of severance pay for workers loosing their jobs. In recent years, voluntary retirement schemes are offered to induce workers to leave their permanent jobs. Effectiveness of these schemes in improving labour market performance is, however, not known.

In agriculture and in the unorganised non-agriculture sectors there are practically no safety nets for workers, barring in Kerala. In this state there are some modest provisions for pension for agriculture workers etc, whose effectiveness is not known.

As in the British and the French traditions, selections to the higher and middle levels of bureaucracy are highly competitive and have a high social prestige. All government employees enjoy high level of job protection. They have contributory pension or provident fund scheme for old age. Central government employees are covered for life for health under the Central Government Health Scheme.

Labour market flexibility:

Considering that India is a labour surplus economy with growing skill levels, there is always a downward pressure on nominal wages, unless protected by law or by oligopolistic market conditions. These conditions mainly apply to sections of the organised sector.

In the organised sector, government employees are assured of lifetime employment, with little credible threat of being fired. Given the cumbersome legal process, the threat of losing a job for non-performance is weak.

However, the same is perhaps not true for the organised manufacturing. Although in principle, it hard to fire permanent workers, it may not so in practice, unless workers have scarce skills. Given the poor legal system it is hard for a worker to seek justice in legal provisions. Moreover, with declining power of trade unions to protect the workers' interests during the last quarter century, labour market flexibility has improved in the recent years.[6]

In the organised manufacturing - which is mainly in the private corporate sector - workers do not have the same level of job-protection. Although, in principle, these workers cannot be fired at will as per the Industrial Disputes (ID) Act, the practice appears different.

Economic reforms and labour laws:

As noted earlier, bringing about a greater flexibility in labour laws was part of the structural adjustment programme initiated since 1991. But, the required changes in labour laws were not implemented for lack of political consensus.[7] On the face of it, the opposition to rationalisation of labour laws suggests that the existing laws have the necessary bite. But, such a view may be simplistic, especially in a fractious democracy like India, where law making is a very complex political and social process. The best one can say is that the existing legal status represents a complicated equilibrium of political forces whose outcome may not be simplistically in favour of organised labour, as is widely believed.[8]

Nevertheless, the reforms seem to have had some effect on the labour market practices. For instance, the introduction of national renewal fund meant for voluntary retirement scheme (VRS) in public sector signaled the government's approval of a similar initiative in the private sector. Therefore, reportedly, there has been a sizable retrenchment in private sector,

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[6] This issue has been a widely debated in India. Based on legal provision in IDR Act, Fallon and Lucas (1993) argued that job security laws are very severe in India. They sought to show that implementation of the law led to reduction in labour demand. Fallon and Lucas's reading of the law appears simplistic as industrial relations are not mainly or entirely governed by IDR Act. For instance there are many qualifications to this law that can permit retrenchment. And their evidence has been widely contested by recent research (Ghosh, 1994; Bhalotra, 1998).

[7] This was not the first time that such an attempt was made. In the 1980s, during the Rajiv Gandhi period, comprehensive legislation to change the labour law was mooted. It could not even be adequately discussed by lawmakers, let alone pass it, though the ruling party had a majority in the parliament.

[8] For instance, as Indian labour history suggests, employers have widely used the legal provision of forming a union with 7 workers to hoist a rival union to split the dominant one.

especially in older industries and locations, though quantitative dimension of this change, and its impact on workers' living conditions, is not known.

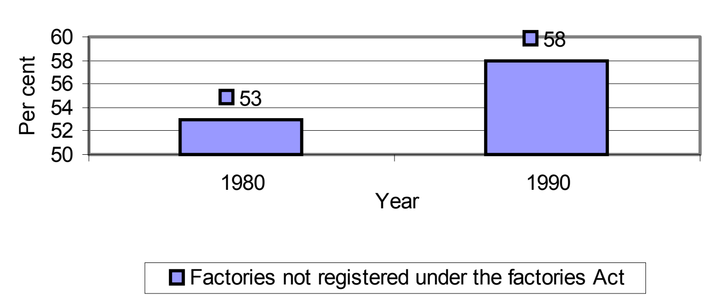
Similarly, considering the dominance of conservative view on industrial relations after the reforms, apparently, administration has overlooked its legally mandated role industrial disputes. Hence, the reforms, in effect, seem to have contributed to weakening the bargaining power of trade unions, thus permitting employers greater freedom in their industrial relations policies. Perhaps a good indication of the weakening of the trade union power since the late 1980s, in manufacturing, is that the number of mandays lost due to lockout has been greater than that due to workers' strike (Nagaraj, 1994).[9]

Evidence on enforcement of labour laws:

As mentioned earlier, on the face of it, legal provisions to protect interest of workers are very stringent in India. But a close reading of the relevant laws taken together would reveal that, by design, loopholes are build into it that offers considerable scope for discretionary behaviour. Moreover, enforcement of laws is very poor. Therefore, to understand how the regulatory framework enables (or hinders) working of the labour market, one needs look at the implementation of the legal system. We illustrate it with an telling example.

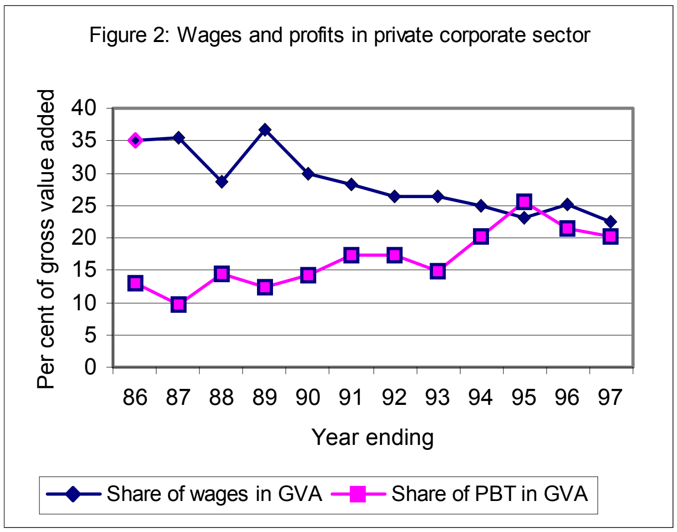
Factories Act is the basic building block of all legislations for workers' welfare and safety in India. The law is grossly violated. In 1990, 58 per cent of all manufacturing enterprises employing 10 or more workers did not get registered under the Act. This figure grew by 5 per cent between 1980 and 1990 (Figure 1). The magnitude of under-reporting is likely to have gone up further in the 1990s when enforcement of many legal provisions were given a go by under the euphoria of liberalisation. The fact that this law has been so widely and increasing violated shows how easy (and inexpensive) it is for employers to ignore labour laws in this country.

Figure 1: Evasion of factory registration



[9] Lock out is a temporary closure of plant by managements when their negotiations with workers unions fail. It is a mirror image of strike by workers. In labour economics, lockout is a proxy for employers offensive against workers.

We now provide some evidence on industrial labour market performance. All standard indicators of union strength show secular decline during the last quarter century, suggesting a steady improvement in labour market flexibility. First, there is no evidence of deteriorating industrial relations scene, as there is no trend in mandays lost due to industrial disputes as proportion of mandays worked over the period 1973-74 and 1988-89[10]. Second, Union density - proportion of workers unionised - has decreased from 45 per cent in late 1970s to 30 per cent in late 1980s. Third, proportion of mandays lost due to strike - as a proxy for workers' offensive - declined sharply in the 1980s; the trend has continued in the 1990s. Fourth, workers involved in industrial disputes has declined from 38 per cent of all industrial workers in 1973-74 to less than 10 per cent in 1988-89 (Nagaraj, 1994).



As is widely known in labour economics, composition of factories and firms has a bearing on labour market performance. In India, sizes structure of factories has secularly moved in favour of smaller size over the last five decades (Nagaraj, 1994). In the factory sector, average factory size has fallen steadily from 140 workers per factory in 1950 to less than 60 in 1976. This is true of most 2-digit industry groups. The trend has persisted in the 1980s as well. Since, on average, smaller factories pay lower wage rate, likely to have more informal contracts, with less likelihood of durable trade unions, workers tend to be more flexible compared to the workers in larger factories. This long term change in the size structure of factories would also contributed to increasing labour market flexibility.[11]

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[10] Looking at the absolute number of mandays lost in industrial disputes, Robert E B Lucas (1988) had argued growing inflexibility in industrial labour market in India. Such evidence over looks the fact that number of mandays worked has also grown. Therefore, one should examine trends in the proportion and not the absolute numbers.

[11] The decline in factory size could be due to number of factors including policy, resulting in reducing the strength of the workers unions. There is no evidence to suggest that this has meant loss of efficiency due to uneconomic scales of production.

Share of wages in value added has decline by 15 per cent from 35 per cent during the decade since mid-1980s. The same is true of the share of wages in gross output of the private corporate sector (Figure 2).[12]

Thus, we could infer that industrial labour market has undergone notable changes that have a bearing on the employee-employer relationship during the last quarter century. All of them seem to suggest declining power of unions that reportedly was the prime reason for the alleged inflexibility in the labour market.

IV
International integration and labor

Trade and investment liberalisation in the 1990s has been mostly with respect to manufacturing and infrastructure industries.[13] Trade in agriculture is still restricted, there has been a considerable effort to liberalise financial services, and most recent one is the insurance market. Foreign investment in agriculture and real estate is not permitted.

Neo-classical trade theory predicts that in a labour abundant country opening to trade should see a reallocation of factors of production to labour intensive tradable goods. There should be an increase in production and export of labour intensive goods and an increase in wages and/or increase in employment. Then, the question is, whether the conventional wisdom is valid, if not, why?

At least yet, there is no evidence of an improvement in the trend growth rate of India's GDP since the reforms were initiated (Table 8). Total manufacturing sector growth rate (constituting 16 per cent of GDP) shows a modest but statistically significant deceleration in output growth after the reform. The deceleration is entirely in unregistered sector (representing labour intensive manufactures), accounting for about a 1/3 of total manufacturing value added and 4/5th of manufacturing workforce (Nagaraj, 2000a)

During five years since the reforms in 1991-92, annual growth in merchandise exports, in dollar terms, was about 18 per cent up to 1995-96 - roughly the same as in the 5 years of the pre-reform period. However, export growth plummeted in the following 3 years (Figure 3), though there is a revival in 1999-2000 when the growth recovered to 12 per cent. However, during the last few years, India's invisible earnings (mainly software exports) have shored up India's balance of payment.[14] Slashing of import duties and restrictions on computer hardware in the early 1990s seems responsible for the spurt in software export and inflow of remittances by skilled workers.[15]

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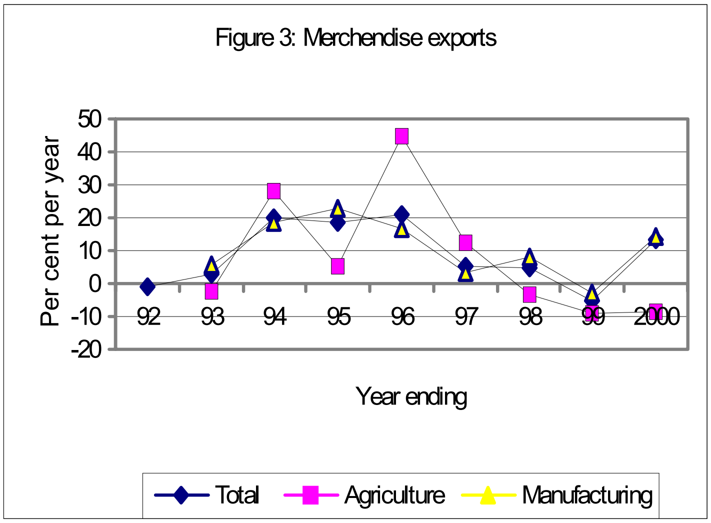
[12] Behviour of wage share is a widely used macroeconomic indicator of inequality in macroeconomics. See, for instance, Blanchard (1997), to understand European economic performance.

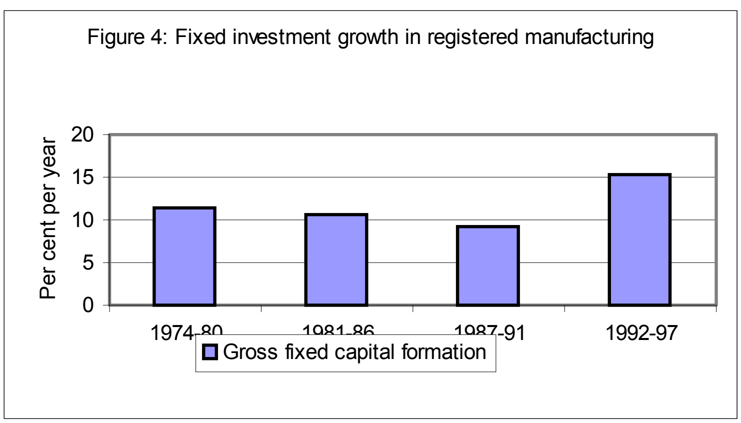
[13] For a comprehensive collection of official statements on policy reform see, *Handbook of Industrial Policy and Statistics 1999*, published by Ministry of Industry and Commerce, Government of India, New Delhi.

[14] Despite much euphoria, it needs to be appreciated, labour intensive manufactures still constitute bulk of India's exports.

[15] While there is doubt about the boom, the magnitude of it seems overestimated by the industry source. Government has not provided any independent estimates. The industry figures seem grossly over estimates that

Tables 9 and 10 provide estimates of trends in growth rates of total and registered manufacturing gross value added for 2-digit industry groups. They also report results of dummy variable test to find out if there has been any statistically significant break in the trend growth rates after the reforms. Total manufacturing, as mentioned earlier, witnessed a modest but statistically significant low down in growth rate after the reforms. In total manufacturing, while the growth rate of leather industry (NIC 29) improved after the reforms, industry groups, food (20-21), rubber (31), metal products (34), electrical machinery (35), miscellaneous (38) and repair services (39) experienced statistically significant deceleration in their growth rate after 1991-92.





In registered manufacturing, growth rate of clothing industry (NIC 26) improved after the reforms while all other industry groups did not experience any change in their growth rates.

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ignore expenditure on software imports and on expenditure abroad by software firms. If adjusted for these, software export, on a net basis, would not appear that rose.

However, registered manufacturing sector has witnessed an investment boom - growth in fixed investment jumped from 9 per cent per year in the 1980s to 15 per cent per year in the 1990s (Figure 4). But investment rate in unregistered manufacturing has come down. In terms of employment, this is an adverse development as unregistered manufacturing represents the labour intensive, export oriented, sector.

Since output growth has decelerated somewhat in the 1990s, there is growing excess capacity in registered manufacturing. Most of the investment is domestically financed as the realized inward FDI has been about $ 9bn since the liberalisation. Though this represents a significant increase over the 1980s, it is modest in comparison to the approvals as well as in comparative perspective. However, a greater part of the FDI represents acquisition existing industrial assets rather than capital formation, whose effects on efficiency and output growth are debatable (Nagaraj, 1997).

In registered manufacturing, employment growth turned around in the 1990s, after stagnation in the previous decade; but earnings per worker decelerated (Figure 5). As mentioned above, growth in employment is mainly because of investment boom since there is no association between growth in earning and employment across industries.

Figure 5: Employment and earnings in registered manufacturing

Does the demand for labour seem to be biased towards particular categories of labour? This question is hard to answer, for want of data. For registered manufacturing, Annual Survey of Industries (ASI) provide break up employees into workers and supervisors/managers. The ratio of supervisors to workers has been moving in favour of supervisors for a long time - perhaps over two decades. Therefore, it is hard to infer that this tendency is associated to the reforms.

In unregistered manufacturing, growth in employment, output and investment suffered after the reforms. This is perhaps related to decline in credit availability and increase in its cost in response to financial sector liberalisation (Nagaraj, 2001)

Poor employment growth and a sharp fall in the number of establishments (Table 11) adversely affect unregistered manufacturing. In principle, trade and investment reforms were expected to remove bias against labour intensive, export oriented manufacturing. But as export growth rate did not improve after the reform on a trend basis, and investment growth rate fell, unregistered manufacturing sector did not secure the expected benefits of the greater international integration.

As employment growth of unskilled workers (proxied by unregistered sector employment) did not improve after the reforms, the question of narrowing of earnings of skilled and unskilled workers does not arise. On the contrary, it is widely perceived that after the reforms, there is a growing divergence in earnings of skilled and unskilled workers. With the abolition of restrictions on executive compensation, their earnings have apparently gone up enormously, though hard evidence on it is not available.[16]
Moreover, within the skilled workers, earnings of managers and software professionals have increased significantly with growing services export embodying greater skills, while those with the traditional engineering skills in capital goods and chemical industries have reportedly declined in relative terms.

V
Implications for policy and issues for research

India is a large domestic oriented economy, with foreign trade (and investment) playing a limited, though crucial, role - the lubricant for the engine of agriculture led growth, to use Arthur Lewis's analogy. Exports form about a tenth of the value of production in total manufacturing. India's greater integration with the world economy in the 1990s has - at least as yet - not improved its GDP growth rate, not increased export growth on a sustained basis, or led to an improvement in labour market performance. Further, as inward FDI has been relatively modest, there is no perceptible improvement in fixed investment, as a proportion of GDP.

However, with trade and industrial policy reforms markets for industrial goods have perhaps become more competitive. Capital goods have become cheaper as price rise in capital goods is lower than the general price index in the 1990s (Nagaraj, 1997).

Though quantitative evidence is not yet available, it is widely perceived that the sharp reduction in tariffs adversely impinged on the domestic machinery manufacturing and machine tools industries, thus affecting workers in these industries.[17] As there are substantial sub-contracting relationships in these industries between the large and small firms, the real brunt of import liberalisation is perhaps borne by workers in small firms, about whom we know very little. In other words, perhaps the unorganised sector has borne much of the brunt of labour market adjustment.

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[16] Verifying this issue is difficult in India as executive compensation often takes varied forms, many of which are shown as company expenses. For example, company provided accommodation, travel, telephone, and the like are the usual ways of under reporting executive compensation.
[17] If Vordoon's law has any validity, then, quick displacement of domestic output by imports could have adverse consequence for productivity growth in capital goods industry, which in turn could affect capability in adaptive industrial R&D.

Though, as of now, India's labour market has a tenuous relationship with the pace and pattern of international integration, it would be reasonable to assume that the relationship will only grow with impending changes in global trading environment. With second largest workforce in the world, and largest stock of skilled workers with English language proficiency, India's share in world output and trade is mostly likely to grow, with mutual advantage. In such a scenario, more rational laws can significantly contribute to wage and employment growth.

What would constitute more rational industrial labour laws? These cannot be laid out in historical and institutional vacuum. Moreover, comparative experience suggests that a variety of institutional set up can be compatible with efficient outcomes. Therefore what we suggest could, in principle, overcome some of the shortcomings of the existing laws.

- As job security laws are perceived to be the major constraint on efficient use of labour in the organised sector, then this needs to be replaced with income security (Bardhan, 2001). The same principle in the unorganised sector, including agriculture sector, would translate into strict enforcement of minimum wage laws, though unlikely to succeed in foreseeable future.
- Employers can have greater freedom in hiring and firing of workers, provided the cost of business fluctuations are shared roughly equal to their relative economic strength. Laws should be strengthened to enforce the legal minimum separation benefits, in a transparent and in cost-effective manner, as workers do not have resources to fight prolonged legal battles. There must be tripartite mechanism for re-training of workers.
- Periodic elections should be mandatory to elect the representative union. Principle of secret ballot must be followed in deciding majority union to represent workers in wage negotiations.

In an economy with practically no social security, except for a tiny fraction of workforce in government services, with very limited public schooling, health care and re-training facilities, any move to induce greater labour market flexibility will be resisted. If poor and weak have to mainly bear the costs of adjustments, such attempts are bound to have negative distributional effects that potentially has adverse macroeconomic and social consequences.

<u>Issues for research</u>:

As noted on several occasions above, our understanding of industrial labour market in India appear to be limited. Some serious generalisations about the alleged rigidity have gained currency whose analytical and empirical bases seem suspect. We list below some issues that, in our view, deserve to be examined which could contribute towards a more informed discussion on policy issues.

a. The turn around in registered manufacturing employment in the 1990s provides a new information to re-examine the old question about the alleged labour market rigidity. While Goldar (2000) attributed the turn around to wage moderation, Nagaraj (2000) has questioned Goldar's findings on analytical and empirical grounds. Therefore, more careful analytical specification, and rigorous econometric testing, could contribute significantly to the on-going debate.

b. India's trade performance in the 1990s need to be analysed to find out if, how, and to what extent, alleged labour market rigidities could have adversely contributed to the export growth.
c. Trade in services involving skilled workers - computer software, back office services for financial firms like GE Capital, "Tele working", medical transcription jobs and the like - are emerging as new sources of invisible earning for India. To begin with a careful documentation of these trades could be of value for formulating public policy for them.
d. Reportedly, as mentioned earlier, there have been fairly large-scale retrenchments and lay offs of workers in the organised sector. If true, this is a significant change that needs to be documented, and its implications analysed for labour market performance. Carefully identified locations and industries could be studied to gain insights into how the reforms have affected labour market out comes.
e. Based on our observation, we hypothesise that firms that have followed a cooperative behaviour with workers, and have shared productivity gains in seemingly fair manner, and have offered income security do not face resistance from workers or their unions.

VII
Conclusion

This paper makes a preliminary examination of trade and labour market linkages in India. According to the mainstream economic theory, with greater openness to international trade, India's labour intensive manufactures and their export should get a boost while the capital and technology intensive industries would contract in relative terms. Then the central question is, has it happened, if yes, how much; if not, why not?

Before analysing this question, this chapter provides a synoptic view of the evolution of Indian economic policy and the economic reforms initiated since 1991. Then, we provide an over view of India's labour market, focussing mainly on industrial labour. As the alleged rigidities in this market are held responsible for much of the ills of industry and trade, we examine the available evidence to assess the validity of the widely held views.

Coming to the core of this chapter, it is shown that the reforms, at least yet, did not have the expected result of faster growth of labour intensive output and exports. On the contrary, growth rate of unregistered manufacturing, representing labour intensive sector, witnessed a statistically significant slow down in output growth and decline in fixed investment growth, and a negative growth in employment. There is no evidence of any improvement in merchandise exports on a sustained basis. However, import liberalisation of computer hardware seems to have spurred a boom in skill intensive services exports, enhancing invisible earnings.

Perceiving the potential for trade in an increasingly open trade environment, we suggested policies that could contribute to a more rational labour market policies. The chapter concluds by raising some questions that would contribute in improving our understanding of labour market performance and its implications for trade.

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Table 1: Tariff Structure

(Per cent)

	Mean Tariff					Import weighted average				
	90-91	92-93	93-94	94-95	95-96	90-91	92-93	93-94	94-95	95-96
Whole economy	128 (41)	94 (34)	71 (30)	55 (25)	42 (21)	87	64	47	33	27
Ag. Products	106 (48)	59 (49)	39 (39)	31 (30)	26 (21)	70	30	25	17	15
Mining	n.a.	n.a.	71 (24)	48 (25)	37 (18)	n.a.	n.a.	33	31	30
Con. Goods	142 (33)	92 (42)	76 (36)	59 (33)	43 (21)	164	144	33	48	39
Intermediate goods	133 (42)	104 (25)	77 (22)	59 (17)	45 (15)	117	55	40	31	24
Capital goods	109 (32)	86 (26)	58 (24)	42 (20)	35 (13)	97	76	50	38	30

Note: Standard deviations are in brackets. In 1990-91 and 1992-93 miming is included in intermediate goods.
Source: World Bank (1995)

Table 2 Workforce distribution in India, 1977-78 to 1993-94

Sector	Workforce distribution in 1977-78	Percentage change in workforce distribution		
		1983 over 1977-78	1987-88 over 1983	1993-94 over 1987-88
Primary	71.2	(-) 4.2	(-)2.2	(-)1.4
Secondary	12.1	1.6	1.7	0.8
Tertiary	16.7	2.2	0.8	2.3

Source: Nagaraj (1997)

Table 3: Internal Migration in India, 1981 and 1991

	1981	% to population	1991	% to population
Intercensal migration	80.1	12.2	81.0	9.7
Lifetime migration	195.8	29.5	222.6	26.6

Note: Lifetime migrants are those that were enumerated at places other than that of their place of birth.
Source: Srivastava (1998)

Table 4: Distribution of Employment by status

(Percentage distribution)

Category	1977-78	1983	1987-88	1993-94
1 Aggregate economy	100 (242.6)	100 (266.7)	100 (291.9)	100 (337.9)
1.1 Self-employment	56.5	54.2	53.2	51.7
1.2 Regular wage employment	15.3	15.3	16.0	15.1
1.2.1 Organised sector	8.7	9.0	8.8	8.1
1.2.2 Unorganised sector	6.6	6.3	7.2	7.0
1.3 Casual wage-employment	28.2	30.5	30.8	33.2
2 Agriculture	100 (167.8)	100 (177.0)	100 (182.2)	100 (207.8)
2.1 Self-employment	54.8	52.1	51.1	49.0
2.2 Regular wage employment	4.6	3.8	3.6	1.7
2.2.1 Organised sector	0.7	0.7	0.8	0.7
2.2.2 Unorganised sector	3.9	3.1	2.8	1.0
2.3 Casual wage-employment	33.8	36.2	26.8	41.6
3 Industry	100 (31.9)	100 (38.2)	100 (47.1)	100 (53.0)
3.1 Self-employment	NA	40.6	NA	35.7
3.2 Regular wage employment	26.0	28.8		28.9
3.2.1 Organised sector		24.1	20.2	18.3
3.2.2 Unorganised sector		4.7	NA	10.6
3.3 Casual wage-employment	NA	30.6	NA	35.4
4 Services	100 (42.9)	100 (51.5)	100 (62.6)	100 (77.1)
4.1 Self-employment		42.9		46.9
4.2 Regular wage employment	27.3	43.9		42.7
4.2.1 Organised sector	NA	26.4	23.6	21.1
4.2.2 Unorganised sector	NA	17.5	NA	21.6
4.3 Casual wage-employment		11.9	NA	9.0

Source: Ghose (1999)
Note: Figures in bracket refer to absolute numbers in millions.

Table 5: Worker population ratio, 1972-73 to 1993-94

Year	Persons	Male	Female
1972-73	41.3	53.5	28.2
1977-78	42.2	54.2	29.3
1983	42.2	53.8	29.6
1987-88	41.1	53.1	28.1
1993-94	42.0	54.5	28.6

Source: NSS publications

Table 6: Employment elasticity of output, by industry

1-digit industry group	1977-78 over 1972-73	1983 over 1977-78	1987-88 over 1983	1993-94 over 1987-88
1. Agriculture	0.54	0.49	0.26	0.54
2. Mining	0.95	0.67	0.81	0.36
3.Manufacturing	1.05	0.68	0.35	0.39
4. Electricity	1.67	0.74	0.74	0.53
5. Construction	0.35	1.00	3.43	0.01
6. Transport storage & comm.	0.76	0.92	0.39	0.62
7. Trade, hotel and restaurants			0.76	0.59
8.Services	0.80	0.90	0.52	0.68
8.1 Services including trade			0.39	0.76
9. Total	0.61	0.55	0.32	0.47

Source: Bhalla (1997)

Table 7: Growth in real agricultural wages, 1973-74 to 1990-91

(Average of annual growth rates in per cent)

Region	Growth rate
1. Andhra Pradesh	5.1
2. Assam	3.5
3. Bihar	3.3
4. Gujarat	2.8
5. Haryana	3.0
6. Karnataka	1.9
7. Kerala	4.1
8. Madhya Pradesh	4.3
9. Maharashtra	5.9
10. Orissa	3.6
11. Punjab	2.2
12. Rajasthan	2.5
13. Tamil Nadu	2.8
14. Uttar Pradesh	3.9
14. West Bengal	4.2
All - India	3.3

Source: ILO-SAAT (1996)

Table 8 (i): Trend growth rate of GDP and its principal sectors, 1980-81 to 1999-2000.

(Per cent per year)

Sector	1980-81 to 1990-91	1980-81 to 1999-2000	Dummy variable	
			Sign	Significance
Primary	3.4	3.2	-	Not significant
Secondary	7.0	6.8	-	Significant**
Tertiary	6.7	7.1	-	Not significant
GDP	5.6	5.7	-	Not significant
GDP#	5.6	6.2	+	Not significant

Note: Data for 1999-2000 represents the revised estimates, released in June 2000.
Excluding 1991-92
** Statistically significant at 99 per cent confidence interval.
Source: NAS, various issues, and the official press releases.

Table 8 (ii): GDP growth rates - disaggregated trends, 1980-81 to 1999-2000.

(Per cent per year)

Industry (1-digit NIC)	1980-81 to 1890-91	1980-81 to 1999-2000	Dummy variable	
			Sign	Significance
1. Agriculture and allied	3.1	3.1	-	Not significant
2. Mining	7.7	5.8	-	Not significant
3. Manufacturing	7.4	7.0	-	Significant**
3.1 Reg. Mfg.	8.3	7.7$^{\tau}$	-	Significant
3.2 Unregd. Mfg.	6.1	5.8$^{\tau}$	-	Significant
4. Electricity, gas and water	8.9	8.3	+	Not significant
5. Construction	4.6	5.1	+	Not significant
6. Trade, hotel and restaurant	6.1	7.3	-	Not significant
7. Transport, communication	7.3	6.2	+	Not significant
7.1 Railways	4.1	3.4$^{\tau}$	-	Not Significant
8. Finance and real estate	7.4	8.1	+	Not significant
8.1 Banking and Insurance	13.0	13.1$^{\tau}$	+	Not significant
9. Services	6.5	6.2	-	Significant
9.1 Public admin. And defense	7.7	6.2$^{\tau}$	-	Significant
GDP	5.6	5.7	-	Not significant

Source: Nagaraj (2000)
τ - These estimates are for the period, 1980-81 to 1997-98, based on the *NAS*.
Source: *NAS*, *Economic Surveys*, various issues, and the official press releases.

Table 9: Growth rate of GDP in total manufacturing, 1980-81 to 1998-99, at 2-digit industry groups

(Per cent per year)

code	Industry name	1981-99	1981-91	1992-99	Dummy variable	
					Sign	Significance
20-21	Food	7.3	9.0	8.4	-	Significant
22	Beverages	6.0	4.8	8.7	+	Not Significant
23-26	Textiles	2.5	4.1	(-) 1.1	-	Do
27	Wood	(-) 0.9	(-) 2.1	3.7	-	Do
28	Paper	7.1	8.6	6.6	-	Do
29	Leather	6.5	4.7	6.3	+	Significant
30	Chemicals	10.2	9.6	10.8	+	Not significant
31	Rubber	11.6	15.6	8.5	-	Significant
32	N.M. minerals	7.9	9.7	8.0	-	Not significant
33	Metals	7.6	5.2	11.6	+	Do
34	M. products	4.3	6.2	6.9	-	Significant
35	N.E. M/c	5.9	6.2	7.4	-	Not significant
36	Elec. M/c	9.0	12.7	7.4	-	Significant
37	Transport eqip	7.2	6.2	12.2	-	Not significant
38	Others	7.3	11.4	8.7	-	Significant
39	Repairs	5.6	6.8	8.4	-	Do
	Total	6.9	7.4	8.5	-	Do

Table 10: Growth rate of GDP in registered manufacturing, 1980-81 to 1998-99, at 2-digit industry groups

(Per cent per year)

Code	Industry name	1981-98	1981-91	1992-98	Dummy variable	
					Sign	Significance
20-21	Food	8.0	10.1	9.3	-	Significant
22	Beverages	8.2	8.6	7.6	-	Not significant
23	Cotton	2.5	3.6	2.8	-	Do
24	Wool, silk	7.6	6.2	9.9	+	Do
25	Jute	0.6	(-) 1.8	4.1	+	Do
26	Textile products	15.3	12.0	8.6	+	Significant
23-26	Textiles	5.4	4.4	6.0	+	Not significant
27	Wood	1.3	4.9	(-) 0.2	-	Do
28	Paper	6.7	6.6	7.3	-	Do
29	Leather	11.7	10.0	7.2	+	Do
30	Chemicals	10.4	8.9	11.7	+	Do
31	Rubber	11.8	16.6	6.8	-	Do
32	N.M. minerals	8.3	10.6	4.2	-	Do
33	Metals	7.0	4.2	15.9	+	Do
34	M. products	5.9	4.3	12.2	-	Do
35-36	N.E. M/c	7.2	7.2	8.7	+	Do
37	Transport eqip.	7.5	4.9	16.9	+	Do
38	Others	12.7	9.3	15.9	+	Do
39+97	Repairs	12.5	13.9	12.2	+	Do
	Total	8.4	7.6	11.0	+	Do

Table 11: Growth in number of establishments and employment in unregistered manufacturing, 1985-1994-95 for all India.

(Percentage change over the previous period)

Year	Establishments	Employment
1978-79		
1984-85	15.1	12.8
1989-90	3.9	-0.8
1994-95	-9.5	-1.3

Source: Lalitha (1999)