

LABOUR MARKET REALLOCATION IN THE ERA OF TRADE LIBERALISATION: THE INDIAN CONTEXT

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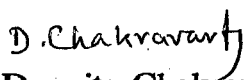
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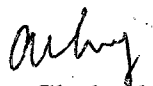
I hereby affirm that the research for this dissertation titled *Labour Market Reallocation in the Era of Trade Liberalisation: The Indian Context* being submitted to Jawaharlal Nehru University for the award of the Degree of Master of Philosophy in Applied Economics, was carried out entirely by me at the Center for Development Studies, Thiruvananthapuram.

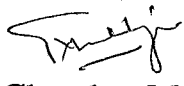
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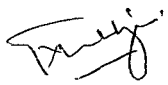

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Certified that this dissertation is the bona fide work of Deepita Chakravarty, and has not been considered for the award of any other degree by any other university.

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Chapter I: Introduction

The aim of this study is to analyse the impact of trade liberalisation on the labour market in India. Changes in macroeconomic policies in general are supposed to work through their effects on the markets for various goods and services as well as the principal factors of production such as land, labour, and capital. The success or failure of such policies thus crucially depends on how various markets respond to policies. In this overall context a study of the responsiveness of the labour market to changes in the trade policy regime assumes particular importance because one major component of the structural adjustment programme that has been followed in India since 1991 is a more liberalised trade regime.

In India, the process of liberalisation of trade and industry, to a limited extent, had in fact begun even before the structural adjustment programme was initiated in 1991. In 1985/86 a series of measures were undertaken to ease restrictions on imports of capital goods. There was also some replacement of quantitative restrictions on imports by tariffs, mainly in areas where there was no domestic competing industry. From the middle of 1986/87, however, the pace of reforms slowed down because of strong resistance from various quarters against such reforms. By the end of the decade the fragility of the underlying macroeconomic situation became apparent, and as a response to the severe and unsustainable macro-economic imbalance, mainly due to irresponsible government expenditure throughout the 1980s (Bhaduri et al, 1996), India, like many other developing countries, was almost forced to take up a macro-economic stabilisation programme combined with fiscal adjustment and structural reform. The policy reforms featured prominently in the conditionality attached to the World Bank's adjustment lending as well as to International Monetary Fund's stabilisation loans.

Stabilisation policies are aimed at an orderly reduction in the level of aggregate demand and purchasing power in the economy, especially through curbing demand emanating from the government. Thus the policies of stabilisation are most likely to reduce growth and employment in the short run. In fact, in the Indian context, it has been shown that there had been a sudden increase in the poverty ratio in the post stabilisation phase of the early 1990s

(Sen, 1996 and 97). The contraction of demand in the stabilisation phase is often combined with a devaluation of the national currency to facilitate exports and curb imports, which can help to get rid of the balance of payments crisis. While stabilisation is considered to be a short term policy measure, structural adjustment is a medium term policy involving reforms in the industrial sector, trade regime, foreign investment, foreign technology, public sector and financial sector. In a sense the structural adjustment policy seeks to shift the production process from the non-traded goods sector to the traded goods sector, and within the latter, from import competing activities to export activities. Thus, trade reforms form a major policy issue under the structural adjustment programme. Main instruments of trade policy reforms are relative prices such as exchange rates and tariff policy.

While economists disagree with each other on the question of severity of the macroeconomic crises that 'forced' India to initiate structural adjustment, the reform process is now increasingly being viewed as irreversible. What is needed, therefore, is to examine how successfully the economy can make the adjustment without adversely affecting output and employment. And this, it is argued, depends on the 'flexibility' of the labour market in a crucial manner. Countries pursuing adjustment policies are expected to have 'flexibilisation' of their labour markets by removing various rigidities (I.L.O, 1987). Flexibility is seen as the necessary precondition for efficient allocation in the labour market.

Any policy reform can be viewed as producing two kinds of outcomes as far as the labour market is concerned: First, improvement in resource allocation in a static sense, and secondly, the distributional outcome. While any reallocation that improves allocative efficiency is likely to have a positive impact on the possibilities of long term growth, it does not guarantee a favourable inter-personal distribution of welfare.

A shift from the import substituting policy regime to an export promoting one involves a corresponding shift in factors of production towards certain sectors. And it is the labour market through which the sectoral composition of labour use is altered. With this change the final distributional outcome will be shaped by the nature and extent of reallocations between different labour markets - skilled or unskilled, organised or unorganised.

While, with more trade orientation, there is a possibility of employment generation in the exportable sector, there is also a possibility of reduction in production and consequently employment in the sectors of import substitutables due to cheaper imports made possible by tariff reduction. The World Bank¹ argues that the unemployment shock may not be severe, if enough flexibility can be assured in the labour market by removing the rigidities. Surely, the Bank has made a very important point. But the rigidity identified by the Bank almost exclusively refers to the organised sector trade unionism. While it is possible, at least in the case of India, to question seriously the alleged rigidity in the organised labour market, there exist some other types of rigidities, such as segmentation, which perhaps affect labour allocation in a more subtle way. Furthermore, too much emphasis on the organised sector labour market rigidity often loses sight of the important fact of rising incapability of this sector to absorb labour force, irrespective of the degree of flexibility the sector has.

The broad objective of the study is to understand the analytics of labour force reallocation as a response to the shift in the trade policy regime. The problem can be addressed empirically from two ends. We can start with sector specific analyses of trade liberalisation and study the consequent employment impact. Alternatively, we can start with the changes that have taken place in the labour market as a whole over the reference period and then examine the relationship of this restructuring (if at all) with the trade policies.

A careful look at different trade policy measures of the government and the data on employment in the period under study points at the difficulties involved in a straightforward application of standard quantitative techniques. We follow, therefore, a narrative style which is supplemented by quantitative information as and when required. The strength of our approach particularly lies in its pragmatic way of connecting a theoretical framework to some of the empirical features of the Indian economy.

The specific objectives of the study can now be stated. The first objective is to depict the important changes in the labour market in the reference period from 1980/81 to 1993/94 and examine the reallocation process across different segments of the market, primarily between organised and unorganised sectors. The study will also focus on the reallocation process

¹ For details see, Freeman, 1992.

within the unorganised sector, as there is not much possibility of reallocation within the organised sector². In this connection, the so-called rigidities working in different labour markets and their importance in determining the extent of reallocation will be examined.

As India's trade sector is still insignificant compared to the size of the national economy, establishment of a direct relationship between the trade policy reform and the labour force reallocation in terms of an economy-wide analysis may not be possible. While the import substituting activities mainly come under some specific sub sectors of organised manufacturing, export activities are still predominantly an unorganised sector phenomena. Our fourth objective, therefore, is to examine the impact of rising imports due to trade liberalisation on the output and employment of the specific sectors of import substitutes.

To have a successful export oriented growth, India needs to increase the percentage share of her exports to GDP on the one hand, and, in the world market on the other. Consequently, this needs an increasing participation by the large organised factory sector manufacturing units in export activities and to achieve and restore international competitiveness. But these achievements will not necessarily generate employment, because that will depend on the process of production in the manufacturing sector and the relative incentives/disincentives the producers face due to government policies. Thus, our fifth objective is to see, how far Indian organised manufacturing has the preconditions for being internationally competitive exporters together with generation of employment.

The arguments will be developed in four successive chapters. The second chapter will contextualise the problem in theory. Theoretical understanding of the problem involves several issues. The discussion begins with a trade model, which also takes into account the question of employment in its purview. On the basis of this model, a probable framework for analysing reallocation of labour force due to trade liberalisation in the context of third world specificities has been suggested. As it is felt that the specificities, which often take the

² It has been shown that the possibility of new employment generation in the organised sector is bleak in the 1990s (Visaria, Minhas, 1991). Also, segmentation by skill within the different organised activities is likely to pose barriers on the reallocation process within the organised sector.

form of rigidities, are quite important to explain the impact of trade liberalisation, this chapter ends with a brief theoretical introduction to the problem of rigidity.

Chapter three and four deal with the empirical analysis. Chapter three starts with a review of the existing empirical discourse on the structure of employment in India, with a view to justify the need for a new study in this over trodden field with a somewhat different framework. The discussion through the different sections will emphasise the process of labour force reallocation primarily involving organised and unorganised sectors. In the process, the question of rigidity will crop up naturally.

The fourth chapter is devoted to examining the relationship of the changes perceived in the labour market with the change in the policy thrust in the trade regime. This chapter begins with a brief discussion of the analytical connection between export oriented growth, international competitiveness and employment. The second section seeks to examine the possibility of the organised manufacturing to behave as a competitive exporter which could also generate employment. In order to examine the impact of rising imports due to tariff reduction specifically on the import substitutable sector, the third section takes up some sector specific analysis. And finally, chapter five sums up the problems we have dealt with in the previous chapters.

Chapter II: In Search of a Theoretical Framework

Introduction

This chapter introduces a theoretical framework which would relate trade issues with labour market outcomes. The theoretical literature on the impact of trade liberalisation on an economy does not adequately address the question of employment. The first section of this chapter therefore will be devoted to a brief discussion of the most appropriate theoretical trade model in this context, which explicitly deals with the question of employment. On the basis of this modified version of Ricardo-Viner model, we present a theoretical framework in the second section for the analysis of the impact of trade liberalisation on the labour market. The proponents of structural adjustment usually argue that much of the warranted results from the policy reform programmes are hindered because of the structural specificities of the labour markets. The modified version of Ricardo-Viner model, mentioned here, takes into account the only distortion of the sector specific wage rigidity as a consequence of the existence of trade unionism. The framework developed in section II mentions some other types of rigidities too.

Policy implications of the reform programmes in general and trade liberalisation in particular on the labour market crucially depend on the structure of the labour market. And hence it is important to discuss these specificities which often turn out to be as rigidities. The third section takes up these issues for further examination.

Section I: Modified Version of the Ricardo-Viner Model

Much of the policy literature on structural reform and liberalisation of the external sector has tended to sidestep the question of unemployment.¹ Moreover, in studies which more or less follow the simple Heckscher-Ohlin model, the issue is completely non-existent. According to the simplest textbook approach, in a small developing economy with capital intensive imports, fully mobile factors of production and flexible prices, the reduction of

¹ There are however few exceptions such as Krueger (1983) discusses the empirical relation between trade orientation and employment in developing country context.

import tariffs will have no effect on total employment even in the short run. In this set up, the only effect of trade liberalisation on the labour market will be a reallocation of labour out of the importable sector and an increase in the real wage rate. In reality, however, there are reasons why these text book conditions will not hold and why tariff reforms can lower employment in the short run.

The Ricardo-Viner model with real wage rigidity provides the simplest framework for illustrating the possible short run employment consequences of a tariff reform. We start our discussion with the standard Ricardo-Viner model with flexible prices and no market distortions.

Let us assume that there is a small country divided into three broad macroeconomic sectors of importables (M), exportables (X) and nontradables (N).² In this model the price of exportables is the numeraire. We denote the price of importables in terms of exportables as p , and of nontradables as q . There is a government, which imposes tariff t^* on imports. The revenue from tariffs is handed back to the consumers in a lump sum fashion. In the short run, labour is assumed to be the only factor of production which is perfectly mobile between sectors. The equilibrium conditions are simple in this general equilibrium framework.

$$R(1, p, q; L, K, G) + t(E_p - R_p) = E(1, p, q, U) \dots (1)$$

(where a subindex refers to a partial derivative)

This equation is a budget constraint. R is the revenue and E is the expenditure function. U is the given level of utility and L, K and G are labour, capital and natural resources respectively. The nontradable sector's equilibrium condition can be represented as:

$$E_q = R_q \dots (2).$$

²

The distinction between the two types of tradables and a non-tradable good is important to understand the analytics of modern open economy macro economics. In practice however it is not easy to determine which good is tradable and which is non-tradable. One way of distinguishing may be on the basis of physical nature of the good. At the simplest level it can be argued that (at least) a large percentage of the services sector of an economy is constituted by non-tradables.

The relationship between domestic price of the importables and the import tariff is:

$$p = p^* + t^* \dots (3).$$

In this set up of fully flexible real wage, an import liberalisation reform which reduces the import tariff and thus causes a reduction in the domestic price of importables, generates **production crunch in this sector and consequently unemployment**. On the basis of the assumption that the three goods are gross substitutes in consumption and that income effect does not exceed the substitution effect, we can say that the price of non-tradables will fall as a result of tariff reform relative to that of exportables. With this lower real wage rate, the exportable sector will increase its production. Whatever unemployment is generated in the import substituting and nontradable sectors will be absorbed in the exportable sector. Thus, labour force will be clearly reallocated from the import substituting sector to the other two sectors.

Because of its lucid nature, this dependent economy framework has provided a useful starting point for several attempts to model the labour market behavior incorporating various specificities. In many developing countries, real wage rigidity is a well-known fact. It may be either economy wide or sector specific. We start with the situation where economy wide real wage rigidity prevails (Cox-Edwards, 1986 in Edwards and Edwards 1994). Then we discuss in detail the most relevant model with a sector specific wage rigidity and a certain amount of initial unemployment (Edwards and Edwards, 1994).

The economy wide minimum wage \bar{W} leads us to define a restricted revenue function:

$$\bar{R} = \bar{R}[1, p, q, L(1, p, q, \bar{W})]$$

The reason for taking only L in the function is that, this analysis is essentially a short run analysis, the assumption being in the short run, labour is the only variable factor of production. Again the amount of labour employed is a function of both total production and economy wide exogenously fixed wage rate (which is endogenous, when the downward real wage rigidity is absent). In the case of non-tradable market equilibrium, it will be, $\bar{R}_q = E_q$.

In this situation of the existence of the minimum wage, some amount of unemployment is already present. The tariff reduction reform only increases the volume of unemployment in the economy. Since the reduction of real wage is not possible owing to institutional factors the adjustment will occur through quantities, and total employment will be reduced.

In a typical developing country, sector specific wage rigidity is more common than an economy wide wage rigidity. But, the models which have taken care of sector specific wage rigidity (Sachs, 1987) is not satisfactory in the case of initial unemployment. An elegant way of solving this problem is by introducing a Harris-Todaro kind of mechanism (Harris and Todaro, 1970; Harberger, 1971)³.

It is true that Harris-Todaro mechanism has been used in a different context, but by incorporating it into this mechanism we can easily get an equilibrium wage differential between the two sectors with initial unemployment. Because of the high wage rate in the protected sector, there will always be some persons who will migrate from the unprotected to the protected sector. The Harris-Todaro mechanism tells us that this migration will stop only when the marginal productivity of the unprotected sector is equal to the wage rate of that sector which, in turn, equal to the expected wage rate of the protected sector. This position will be achieved only with some amount of unemployment.

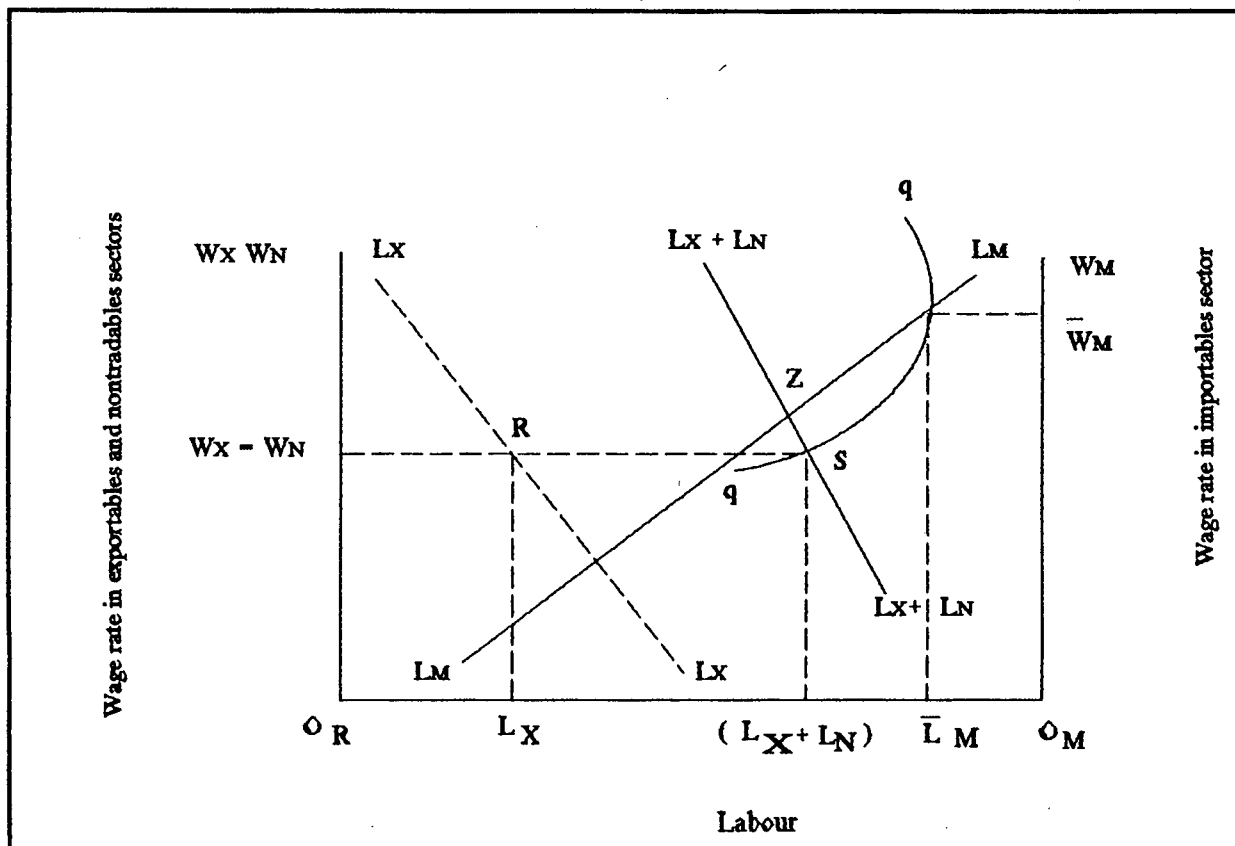
Edwards and Edwards in 1994 modified the Sachs model by incorporating Harris-Todaro mechanism. In figure 2.1, the schedule L_X and $L_X + L_N$, on the left hand side, denote demand for labour by the exportable and the non-tradable and exportable sector together respectively. Schedule L_M , on the right hand side, denotes the demand for labour for the import substitutable sector. The import substitutable sector is the protected sector which is ^(known as the Harris-Todaro locus) covered by the binding wage. The rectangular hyperbola qq_λ will give us the equation,

$$W_N = W_X = \frac{\bar{L}_M}{\bar{L}_M + U} \bar{W}_M$$

Where U is equilibrium level of employment.

³ For the use of this frame work in the context of a two sector economy, see Cordon and Findly, 1975; Neary, 1981.

Figure 2.1: Sector-Specific Wage Rigidity and Unemployment



This is possible only at the points on the qq curve. In the absence of a minimum wage, equilibrium is attained at point Z . With a minimum wage, however, the intersection of $(L_x + L_n)$ with the rectangular hyperbola qq at point S gives the wage in the uncovered (no minimum wage) sectors, employment in each sector, and total unemployment. The distance $O_R L_x$ is total employment in the exportable sector, $L_x (L_x + L_n)$ is employment in non-tradables; $O_M L_m$ is the employment in the covered sector and finally the distance $(L_x + L_n) L_m$ is the initial equilibrium level of unemployment.

11

Section II : The Suggested Framework

As a response to the economic difficulties of the late 1980s and early 1990s, India as well as many other developing countries undertook trade policy reform as part of their structural adjustment effort. The main instruments of trade policy reform are relative prices such as exchange rates and tariff policy. Both from the historical perspective and also from theoretical point of view as mentioned above, it has been shown that trade liberalisation entails adjustment shock which often takes the form of increased aggregate unemployment in the short run.

The Ricardo-Viner model with real wage rigidity at least sheds some light on the impact of trade liberalisation on the labour market. A serious objection can, however, be raised against this theoretical framework. One of the key assumptions of these models is that labour in the short run is the only factor of production which is perfectly mobile between sectors. This implies that labour has been taken as homogeneous. And if this homogeneity is not valid, even without any kind of wage rigidity, the mobility of labour will be barred and result in inevitable unemployment. As all labour markets show inequality of some degree, and especially in a third world country like India where segmentation by skill and gender is pervasive, perfect mobility of the labour force cannot be expected. Keeping this in the background, the following framework has been suggested to address some of these issues.

Conceptually, we can think of a developing economy divided into three broad macro economic sectors of importables, exportables and nontradables. After trade liberalisation, tariff on the imported goods will be reduced and consequently, the prices of these goods will be more competitive. As a result, the prices of the import substituting sector goods will decrease which, in turn, will tend to decrease output in this sector. But usually this sector is highly organised and protected. Hence production curtailment leads to a kind of restructuring of the work force the burden of which mainly falls on the casual workers and new entrants. Not only that the generation of new employment is likely to stop, there will be pressure to lay off the existing workers too. The institutional rigidities will make it almost impossible to retrench the permanent workers. Casual workers and the new entrants who are yet to be confirmed will therefore be the target. As a result of the employment shock generated in the organised sector, considerable number of unemployed, possibly having

better skill and experience, will be forced to enter the unorganised sector labour market. It is expected that competition in the unorganised labour market will be more intense because of this additional supply of labour.

The other two sectors of the economy, nontradables and exportables are mainly unorganised except the public sector services of the nontradable sector. Let us start with the probable impacts of tariff liberalisation on the non-tradable sector. In a liberal trade regime, the import of consumer goods is expected to be increasing and these consumer goods are more or less substitute to the indigenously produced consumer goods. Therefore, trade liberalisation will create a production and employment crunch in this sector too. As a result of the unemployment created in the organised sector and the consumer goods sector, the wage rate in the unorganised sector will be declining. It can therefore be expected that, with this reduced wage cost, export sector production and consequently employment will be increasing. We can also expect a labour force reallocation from formal to informal sector predominantly of the male because usually formal sector employment is dominated by male workers. Moreover, formal sector employment requirements are usually more rigid than those of the informal sector. Thus, segmentation by skill will not affect the reallocation of labour force from formal to the informal sector. With a reduced wage rate production in the capital goods sector of the non-tradables may also increase and consequently employment opportunity for the jobless. It may so happen that with this reduced wage rate, very few of the unemployed will actually be absorbed because, even in the case of unorganised sector the money wage cannot fall beyond a limit. Even with a moderately flexible wage rate full employment in the economy may remain an impossibility. This is definitely contradictory to the standard neoclassical argument. Besides the Keynesian type macro-economic explanation for this downward rigidity of wages, there are microeconomic explanations from individual's point of view within the neoclassical paradigm itself. We take up these issues in the next section.

Usually unskilled female labourers dominate the consumption goods branch of the nontradable sector. Therefore, the unemployment generated in this sector will affect female labourers disproportionately. Because of the entry of the organised sector employees, the competition in the unorganised sector will be increasing and the chances of getting a job for a woman will be weaker, simply because they are less advantaged in a competitive labour

market. Unequal initial conditions such as differential access to education, access to information and access to credit prevent women from taking advantage of new opportunities. As a result, women are driven out of the better non-farm employment to the relatively worse farm employment, and this is likely to increase disguised unemployment in agriculture. In fact there may be a reallocation of labour force from non-farm to the farm sector in general. This may happen owing to the fact that the general increase in employment or underemployment will take place in the unorganised sector as discussed above and the unorganised sector is disproportionately dominated by agriculture. In the third chapter, we verify this proposition empirically. Standing (1989) argues that the international evidence suggest an increasing female labour market participation rates in the newly emerging export sectors in the context of liberalisation because of the fact that both the "aspiration" and "efficiency" wage for the female workers is much less than the males. Thus we may also expect the retrenched female labourers to get employment in the newly emerging sectors of exportables, but only at a lower wage rate than the going one in that sector. Relatively more casualisation of the female labourers, depicted in the third chapter, may be an indirect proof of this process. Due to lack of appropriate data base in the Indian context, it is not easy to directly verify this model empirically. In the next chapter we take a look at the pattern of reallocation of the work force in general.

As we have already argued, the unemployment shock created by trade liberalisation affects different segments of the labour market differently, and therefore, the overall implications of trade policy reforms will depend specifically on the structure of the labour market. The above framework suggests that two different types of rigidities can be easily traced: first, the institutional factors like trade unionism operating in the organised sector, which can be called the modern institutional rigidities (Kannan, 1994); and secondly, the more subtle ones, the factors which prohibit a section of the labour force from having some specific job opportunity. The second set of rigidities cannot be explained exclusively in terms of economic rationale because the social setup itself has a major bearing on it. In the next section we examine these different types of rigidities in some more detail.

Section III: Labour Market Rigidity In Theory: A Review

We start with the organised sector rigidity, or, in other words, the effect of trade unions on the labour market outcomes. The standard neoclassical argument about the effects of the trade unions and collective bargaining on the allocation of resources is as follows: it is widely accepted that unions have the power to raise wages in the establishments where they enjoy strong bargaining positions. This power comes from their ability to impose costs on management through strikes, slowdowns, or other pressure tactics which, in the short run, are greater than the costs of the wage increases made possible through collective bargaining.

The existence of a relative wage effect implies the existence of a relative employment effect. If worker is made more expensive in the organised sector, management will have added incentives to save such labour through the use of additional labour saving capital investment. Such substitution will minimise, but not eliminate, the addition to cost created by union wage gains. The remaining addition to average unit cost will tend to increase the price of final products and services produced in the union sector. Relative employment in the union sector should therefore decline for two reasons: (a) the substitution of other factors of production for union labour and (b) the substitution by consumers of cheaper final product. Thus, there will be a reallocation of resources such as labour and capital in the unionised sector. (Rees, 1963)

But the facts regarding the labour markets of Indian organised sector in general and organised manufacturing in particular, do not support the standard version of the neoclassical argument. In chapter three and four we will discuss these issues with empirical facts. We will see that enough evidence exists which raises doubt about the alleged organised sector rigidity as the cause of decrease in the labour absorptive capacity. The analysis will also show the possibility of reallocation of the labour force, in absolute terms, from organised to the unorganised sector. Empirical evidence from other countries (Bell, 1997; Currie and Harrison, 1997) has also shown that, in spite of generally stringent labour laws, labour markets are actually quite fluid. Even from a different theoretical perspective (Coase, 1960) it is possible to show that, there is no necessary relationship between existence of trade unions and distortions in the labour market.

Suppose two institutions – a firm and a trade union – are the two agents in a market. To get hold of all the factors of production, the firm has to make several contracts with the owners of these factors of production. For the resource labour, the firm has made a contract with a registered trade union. If the firm directly establishes contract with the labourer without going through the trade union mechanism, the firm is likely to dominate the terms and conditions of employment and maximise its own interests. On the other hand, the firm has certain advantages from making the contract with the trade union. First, in a market structure, where the information is not perfect, it is always difficult to get some extra worker whenever the firm needs it. Secondly, establishing a contract in each case separately can be possible in a small enterprise but not in the case of a large firm. Finally, in fact, most importantly, the responsibility of an institution is always much more than an individual. The establishment of a contract with a registered trade union will guard the firm from the risk of sabotage. Now the firm will go for the contract with the trade union only if the cost from the harmful effect of a trade union is less than the cost otherwise it has to bear by not entering into the contract with the trade union.

The bargaining between the two parties, given the well-defined rights, can, in fact, result in the increase in the total value added through reduction in the transaction costs. However, the resulting distribution of income and wealth will be dependent on the specific way property rights are defined. Let us take, for example, the issue of wage setting between the two parties. The trade union is interested in maximising the level of real wage. In other words, the trade union is interested in maximising the purchasing power of the money wage in terms of the wage goods only. On the other hand the firm is interested in minimising the product wage, that is the money wage in terms of their own product. The employer will be willing to pay any amount which is less than the costs that he may have to incur without the agreement with the trade union. The trade union will be ready to accept any amount of increase in the money wage which can cover the impact of the wage good's inflation. Thus there is always some room for successful and productive bargaining. From the employer's part, the payment would not be so high that the entrepreneur will have to take the decision of shifting resources in favour of capital. On the other hand, the payment would not be so low that the labour will quit the market.

Now, in this case, the firm has certain property rights and the trade union has also achieved some rights through its long history. Any rearrangement of these property rights will be the result of a complex interplay between market and non-market forces which involve significant transaction costs. Clearly, once the costs of market transactions are taken into account, such rearrangement will take place only when the increase in the value of production is more than the cost of making this rearrangement. Here the problem occurs because, these property rights are not well defined by the legal system properly. And it may so happen that in this situation one rearrangement of rights can result in more value added than the existing arrangement, but the cost of market transaction is so high that it is not possible through private initiatives. Only when the property rights are well defined by the legal system, the problem can be solved. Thus, it is not true that the existence of a trade union necessarily distorts the efficient operation of the labour market. The non-existence of the clear statement of the legal rights actually creates all the hassles mistakenly argued as the harmful effects of the institution, trade union. Once the legal rights are well defined, such as the minimum wage and so on, the firm and trade union can reach an arrangement which would lead to an efficient operation of the economic system.

Usually, in the developing countries, the proportion of employment in the organised sector is very low. But even in the unorganised sector, where little institutional pressure exists, a persistent unemployment together with a downward sticky wage rate is a common fact. In our analysis, we have seen that unorganised sector employment elasticity, in terms of usual status, is much smaller than one (discussed in the third chapter). Theoretical explanations are as follows. We can divide the explanations clearly into two parts, first, from the point of view of the employer and secondly, from the point of view of the worker. The employer notices that workers often have some control over their productivity. They produce more when they are strongly motivated. Efficiency wage theory (Leibenstein, 1958) tells us that one way of motivating the workers is to pay more than what other employers do. But the rationale for giving more wage than what is given by others is true for all the entrepreneurs. Therefore, competition among the entrepreneurs to pay more will merely bid up the wages with no employer being able to establish a lasting favourable differential. In the end, the wage will be driven to the levels at which full employment is not possible. Another explanation is that the group of experienced workers in a firm -the insiders - are not likely to be perfectly substitutable for the unemployed workers - the outsiders (Lindbeck, 1988).

So, the insiders can hope to achieve a wage higher than the level that would allow the firm profitably to employ any number of unemployed workers. We give a tentative empirical support to this hypothesis, in the fourth chapter, in terms of data on the organised manufacturing in India.

But these models have failed to explain why the unemployed do not at least try to compete for existing jobs by offering to work at less than the going wage rate. Solow (1990) argues that, there may be some sort of social norm or behavioral injunction that forbids undercutting the going wage rate as a strategy for the unemployed workers.

Although it is true that the job opportunity in the unorganised sector is much more than the organised sector, the nonexistence of the trade union makes the working conditions in this sector extremely vulnerable. Due to some very typical rigidities working in the old societies of the developing countries, women are less likely to get a scarce organised sector job than men, and secondly, in the unorganised sector, women are usually in a more vulnerable and disadvantaged position than their counterparts. If there is some new job opportunity, it is fully rational to choose a person who is most appropriate in terms of skill and experience. So far as skill and education are different no question of discrimination arises. And in almost all the developing countries women are less skilled and less educated. So, within the labour market as such, there is no irrational behaviour against women except in a few cases where some employers may have prejudices against women in spite of the latter's comparable skill levels. The causes of the rigid nature of women's employment in terms of sector specificity and strong immobility can be explained with the help of less accessibility of women to different opportunities, coming from some social bias against women outside the labour market. The social construct of a woman assigns her a position which is lower than a man and so also for the girl child.

Thus the labour market on its own does in fact behave efficiently. The alleged rigidities of the labour markets of a developing country are actually misplaced. In the face of the argument that the labour market inflexibility and distortion is a major hindrance to the successful performance of the structural reform policies, there is real need to rethink about the "rigidities". Otherwise there is every possibility of adopting totally unwarranted policy measures.

Conclusion

The modified version of Ricardo -Viner model with sector specific minimum wage and initial unemployment suggests a way to incorporate the employment aspect in the context of trade liberalisation. But, at the same time, the model has certain limitations. It has assumed perfect mobility of the labour force between sectors which is in no way possible in the context of a developing country. Also, the sector specific minimum wage is the most simplified version of the various specificities a developing country has. Taking into account all these difficulties, an attempt has been made to construct a hypothetical framework by adding some more assumptions to contextualise the problem.

In the face of trade liberalisation the new framework suggests the following reallocation in the labour force within the domestic economy. We can expect a labour force reallocation from the organised sector to the unorganised sector predominantly by male. Because of the strong presence of trade unions, only those persons yet to be confirmed will be retrenched. Due to the competition arising out of the organised sector, women labourers will be forced out of their better non-farm employment to farm employment simply because of the various socio-economic rigidities which make women less capable to compete. Women can get employment in the newly emerging sectors of exports only with a lower wage rate. Thus it is quite clear that the "labour market specificities" are extremely important in analysing the probable impact of trade liberalisation on the labour market.

However, a thorough analysis of the labour market specificities or the so called rigidities, suggests that much of the imperfection originates outside the periphery of the labour market. And if that is so, the policy implications of not only trade liberalisation but also the whole reform packages should be examined with a more cautious approach.

Chapter III: Labour Market Reallocation

Introduction

The main objective of this study is to examine reallocation of the labour force (if at all) in the era of trade liberalisation. One way of looking at this reallocation might be in terms of organised and unorganised sectors¹. Another kind of movement has recently attracted attention of researchers, i.e. between farm and non-farm sectors. However, given the nature of intersection among these different segments, we make our discussion broad enough to cover more than one kind of sectoral classification.

In this chapter, we do not address the question of the impact of trade liberalisation on the labour market directly. We will instead depict the leading changes in the labour market which have taken place in the context of a series of liberalisation policies started in a modest way in the mid 1980s and got accelerated from 1991 onwards.

The period of study, as mentioned earlier, starts from 1980/81 and ends with 1993/94. On the basis of the major shifts in the trade policy regime, we have divided the reference period into three sub- periods. The first period spans the years 1980/81 to 1984/85. We can call it the pre-liberalisation period. Next comes the first phase of liberalisation covering the years from 1985/86 to 1990/91 and finally, the second phase of liberalisation ranging from 1991/92 to 1993/94. Organised sector time series data for employment can be easily available from the Labour Bureau Publications, Ministry of Labour. For the unorganised sector, we have

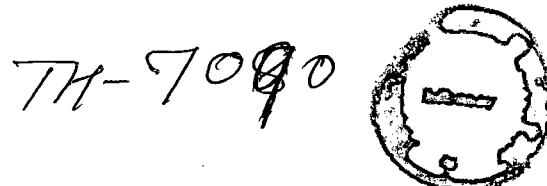
¹ In India, the National Accounts Statistics (NAS) classifies the organisational pattern of the economy under two headings: the organised and the unorganised sectors. The organised sector is taken to comprise the public sector and broadly speaking, the incorporated private sector. The unorganised sector is taken to comprise, broadly speaking, the unincorporated private sector and agriculture. By organised/unorganised sector this study refers to the NAS definition. However scholars have tried to define the unorganised sector in several ways. One definition refers to unorganised sector as one which comprises of own account workers and also casual labour employed in establishments. (Parthasarathi, 1996). Unorganised sector is also being characterised by (a) insecurity of employment, (b) low wages, (c) absence of proper contract, and (d) absence of social security benefits. (Jhabvala, 1998)

used NSSO data which are available only for four different time points. So, for this sector, the periodisation is of slight difference.²

Already quite a considerable volume of literature related to the issues of employment and unemployment exists both at the macro and micro levels. A new study in this field with a different framework can be properly justified if we can contextualise the findings and the consequent analysis in the discussions that have been going on for several years. Therefore in the first section of this chapter, the existing discourse will be introduced in brief.

The failure of the organised sector, particularly the organised manufacturing sector to absorb the growing labour force has been a matter of concern for the Indian economists for a long time. The strong hold of trade unions along with the resulting institutional rigidity of the organised sector is alleged to be the main cause of rising substitution of capital for labour. In section II, we discuss these factors. The increasing incapability of the organised sector to absorb the growing labour force over time has left the labourers with the only option to go for the unorganised sector. But, how far the unorganised sector can give employment, at least in terms of usual principal status or even usual status, is a matter of serious concern. What will be the possible impact of the new economic reforms on the unorganised sector employment and what will be the possible restructuring of the labour force in the economy in general and within the unorganised sector in particular? These questions will be taken up in the third section. We sum up the major arguments and consequently the broad conclusions of this chapter at the end.

Section I: The Existing Discourse



If one takes a look at the literature on the employment/ unemployment scenario in India at the macro level, one is sure to recognise the voluminous work done on non-farm employment. The increasing incapability of the organised sector and agriculture to create sufficient "gainful" employment in the course of planned economic development may be the motivation behind the enthusiasm regarding the newly emerging phenomenon of non-farm

² On the basis of the Quinquennial Surveys of the NSSO, for the unorganised sector the periodisation is as follows: 1977/78 to 1983, 1983 to 1987/88 and finally, 1987/88 to 1993/94.

DLs
X:(Z):9.44 N9
N8

employment. Since the early nineties, with the new reform policies, Indian economic scenario is supposed to have gone through a dramatic change. In this context some of the studies have attempted to examine the possible impact of structural adjustment and stabilisation policies on employment and poverty both in the short and the long run. As these studies have direct relevance to the present study, we discuss them briefly.

The spectacular growth of non-farm sector employment in the recent period, especially in the rural areas, is definitely a factor to be noted. Most of the studies on sectoral and regional trends in the employment are based on NSSO and Census data. Depending on these sources Visaria and Basant (1994) have noted three broad trends in rural non-agricultural employment in India. First, during 1961-1988 the share of the rural nonagricultural sector in the total rural labour force has increased (the trend being more evident among male than among female workers). Secondly, within the rural non-agricultural sector, the increase in the share of the tertiary sector exceeds that of the secondary sector. And finally the bulk of the increase in the rural non-agricultural sector is explained by the increase in the proportion of casual workers. In a series of papers, Bhalla (1993a and b, 1996, 1997) analyses the changes in the structure of work force using the Censuses of 1961, 1971, 1981 and 1991 and comes to almost the same conclusion.

There was a steady increase in the share of rural male and female work force engaged in non-agricultural employment by usual status during the period 1972/73 to 1987/88. This trend was also observed through weekly and daily status employment estimates³ (Chadha, 1993). In 1993/94, however, while the proportion of male work force in the non-agricultural sector continued to record a rise, that of the female work force declined (Unni, 1996). Within the rural non-farm sector, in terms of employment generated between 1971 and 1981, the biggest segments were manufacturing, trade, hotels and restaurants and services. The areas of high employment growth for the male have been construction, transport, communication, services and mining and quarrying while for the female workers, the sectors of construction, trade, and services have shown high growth of employment. The manufacturing sector has shown better growth prospects for the rural females (Basant and

³ The NSSO uses three approaches to estimate employment, the usual status, the current weekly status and the current daily status for the reference periods of a year, a week and an average day in the reference week respectively.

Kumar, 1994; Visaria, 1994; Unni, 1991; Chadha, 1993 and 1997). Studies have also addressed the pattern of growth of non-farm employment in different areas of the country.⁴

There are mainly three possible explanations which have been given for the growth of non-farm sector employment in India. First, a demand led growth of both agricultural and non-agricultural sectors was postulated by Mellor (1976). As a result of the green revolution technologies, increasing agricultural productivity and incomes of the farmers would take place. This would occur through multiple production and consumption linkages of firm to non-farm sectors. Attempts at empirical validation of these linkages in the Indian context resulted in countering the position of agriculture led growth of non-farm sector and the need to look for the prime movers which operate from outside the agricultural sector was emphasised (Bhalla, 1993a). Some of these factors outside agriculture, identified in the literature, are urbanisation, growth of rural infrastructure and more recently, public expenditure on rural development and poverty alleviation programmes. And finally, Vaidyanathan (1986) suggested that rural non-farm activities tended to act as a sponge for the surplus labour which could not be absorbed in agriculture. This has been termed as the residual sector hypothesis that suggests a distress-induced growth of the non-farm sector. Quite a few studies, both at the macro and micro level have been done which attempt to analyse the validation of the above mentioned motive forces behind the growth of non-farm sector employment.⁵

- ✓ The idea that non agricultural employment is "residual" is now somewhat discredited because not only are average wages seen to be higher in such employment than in agriculture, but, more importantly, agricultural wages have also increased as non agricultural employment has grown. This suggests that, what is involved is a pull factor which tightens the agricultural labour market (Chandrashekhar, 1993; Sen, 1996).

Much of both farm and non-farm activities comes under unorganised sector. Thus, the above discussion will be relevant, when we take up the issues involving the process of reallocation within the unorganised sector.

⁴ For example, Bhalla, 1993b, Chadha, 1997.

⁵ For example, Vaidyanathan, 1986; Dev, 1990; Unni, 1991; Shukla 1991, 1992a, 1992b; Harris, 1991.

It has been generally argued that under the impact of stabilisation programmes, employment scenario in the nineties would be badly affected and would lead to an increase in poverty and deterioration in the standard of living. Mundle (1992), using different growth scenarios possible under stabilisation, had estimated the increase in unemployment rates up to 1993/94. The estimates of demand for labour were arrived at by using a constant employment elasticity (with respect to GDP growth) computed for the period 1983/84 to 1987/88. Unemployment was computed by subtracting these from labour supply, which was calculated by applying a constant labour force participation rate to population estimates for each year. Mundle's prediction is that the major reduction in employment is likely to be in the unorganised non- agricultural sector.

Bhattacharya and Mitra (1993), unlike Mundle used the sectoral employment elasticities and computed unemployment as the difference between projected work force (based on census growth rate) and employment. According to them such unemployment can be expected to persist for a long time instead of being a transitory phenomenon. Papola (1994) is of the opinion that as a result of restructuring of the economy new employment opportunities may occur in the unorganised sector, which is in contrast to Mundle's observation and supported by the recent empirical evidence.

Some indirect insights regarding employment can be gained from studies which have dealt with the impact of stabilisation on poverty. Ghosh (1995) and Sen (1997) argue that the significant fall in the poverty ratios during the eighties is due to the rapid expansion of the non-farm employment significantly related to massive public expenditure, while the increase in rural poverty and fall in non-farm employment in 1991/92 was the result of the reduction in government expenditure in rural areas. According to Tendulkar and Jain (1995), economic reforms were not directly responsible for the sharp increase in the rural poverty in the early nineties. Abhijit Sen (1996 and 1997) counters them by arguing that rural poverty is likely to be affected in two ways by the policies of structural adjustment. Increasing agricultural output and controlling inflation are likely to reduce poverty. Alternatively, structural adjustment acts adversely on the poor because of the policy induced rise in the relative price of food and contractionary stabilisation policies to reduce inflation

will lead to contracting non agricultural employment and falling wages in the unorganised sector.

While analysing the impact of new economic reforms on employment, what all these studies have focused on is the impact of stabilisation, which is necessarily a short term measure. On the contrary, the present study attempts to examine both static and dynamic implications of structural adjustment (which intends to restructure the economy at the macro as well as micro levels) on the Indian labour market. In the Indian case, however, it is difficult to separate the stabilisation and structural adjustment components of recent policy reforms.

Section II: The Myth Of Indian Organised Sector Labour Market Rigidity Re-examined.

It is well known that the condition of the organised sector workers is much better than that of the unorganised. The security of employment, the wage rate and the conditions of work in this sector are often significantly better than the unorganised segment of the Indian labour market. This is even true to a large extent of the female workers of the organised sector. Due to this fact it is always attractive for a labourer to enter the organised sector. Unfortunately, a very small proportion of the Indian work force is employed in the organised sector.

Table 3.1 : The share of Organised sector in the total employment⁶

Year	Percentage share of organised sector
1977/78	7.73
1983/84	8.20
1987/88	8.29
1993/94	7.20

Note: For total employment, usual principal status have been taken.⁷

Source: Calculated from various Labour Bureau publications, Ministry of Labour, several issues of Sarvekshana, and the NSSO Report.

⁶ For the calculation of total employment, see Appendix A-3.1.

⁷ The total employment is also calculated considering the usual (principal + subsidiary) status work participation rates (see: Appendix-3.1). Organised sector employment becomes little lower as a per cent of total employment than it is in the case where only usual principal status WPR is considered, see, Table A.3.1.1.

Table 3.1 shows that the share of organised sector employment was quite low and it was around 8 per cent up to 1987/88 but it has become even lower around 7 per cent by 1993/94. Let us now consider the labour absorptive capacity of the organised sector in the economy. The percentage share of the organised sector together with the employment elasticity of this sector will give us some idea about the employment creating potential of this important sector.

Table 3.2 : Organised Sector Employment Elasticity⁸

Year	Elasticity (General)	Elasticity Female)
1980/81 to 1984/85	0.22	0.37
1985/86 to 1990/91	0.18	0.51
1991/92 to 1993/94	0.08	0.41

Source: Calculated from Labour Bureau Publications and various issues of National Accounts Statistics.

Note: Elasticities are calculated as the ratio of the rate of growth of employment and output.

The employment elasticity of the organised sector, depicted in Table 3.2, is not only much below unity but also declines over the successive periods. This implies that the rate of growth of employment is much lower than the rate of growth of output in this sector. The declining trend over time implies less and less labour absorptive capacity of this sector. The possibility of new employment generation in this sector is therefore dim.

On the contrary, though the percentage share of female employment in the organised sector is significantly lower than in the total, both Census and NSSO data show that the percentage share of female employment increases over the relevant period of time (Kundu, 1997). Compared to the organised sector employment elasticity in general, the organised sector employment elasticity for females is much higher in all the concerned periods (Table 3.2). The increasing participation in higher education and consequently, increasing participation in the public sector employment by the middle class and lower middle class women, especially in the sectors of education and health, indicate an important change over the past few decades. This factor may explain the phenomenon of increasing female employment

⁸ For the detailed calculation of the elasticities, see Appendix-3.2.

share in the organised sector on the one hand and relatively higher employment elasticity of the females, on the other. But as it is evident from Table 3.2, even in this case, the increasing trend of employment elasticity has become reversed in the latest period after reaching its peak in 1987/88 confirming the general tendency of this sector.

At a more disaggregated level, the organised sector does not show any different trend than the sector as a whole (Table 3.3). The main components of this sector are, manufacturing, electricity, transport, mining, and services. The elasticities of all these sectors individually are not only much lower than unity but they also show a decline over time. Among these sectors, electricity and services sectors show generally higher absorptive capacity than the organised sector as a whole. While the services sector elasticity declines marginally over periods, the elasticity figures for the electricity sector suggest sharp decline.

Table:3.3 Organised Sector Employment Elasticity⁹ (Industry wise)

Year	Manufacturing	Electricity	Services	Transport
1980/81 to 1984/85	0.05	0.36	0.36	0.31
1985/86 to 1990/91	0.03	0.26	0.29	0.11
1991/92 to 1993/94	-0.05	0.13	0.28	0.04

Source: Calculated from the various issues of Labour Bureau Publications and various issues of NASs.

Manufacturing, the most important within the organised sector shows the lowest elasticity among all. But the more interesting point to note here is the negative employment elasticity of the manufacturing sector in the latest period from 1991/92 to 1993/94. In fact, the rate of growth of employment in the manufacturing sector in the last period is negative. Retirement alone cannot explain the decrease in the absolute figures to this extent. Thus the figures give hints of some amount of retrenchment in the highly organised sector of manufacturing.

The decline in the rate of growth of employment in the manufacturing sector particularly in the registered manufacturing sector in the eighties is by now an accepted fact (Nagraj, 1994). In one sense, the above analysis confirms this in terms of the organised sector in

⁹ For the details about the calculations of the elasticity figures, see Appendix 3.2.

general and the manufacturing sector in particular. It is widely believed that the rapidly increasing organised sector labour market rigidity which leads to the large scale substitution of capital for labour is mainly responsible for this low and declining labour absorptive capacity of the organised sector. The World Bank (1989), while claiming that the real wage rate has increased to 7.2 per cent per annum in the first half of the 1980s, argues "... employers responded [to the increase in wage rate] by virtually stopping new hiring and retrenching existing workers to the extent possible". The study added: " The estimates ... point to a significant trade off between the higher real cost of labour and employment. This suggests that the faster growth of real wages in 1980s indeed did play an important role in slowing employment creation" (The World Bank, 1989:109-10).

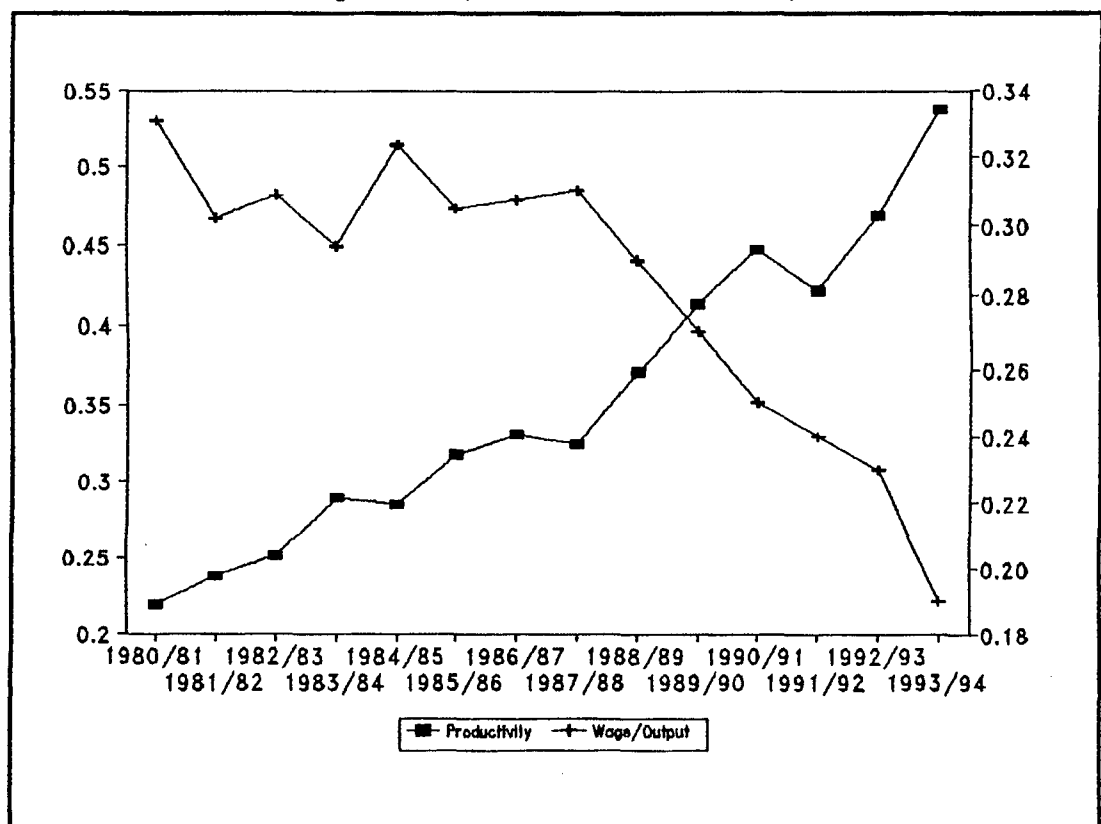
In their 1991 paper, Visaria and Minhas have argued that, as a result of the excessively protective labour legislation, organised private sector strongly prefers maximum use of capital in the place of labour. The argument also suggests that the efforts of the labour unions to protect the interests of those already employed in the organised sector make it extremely difficult to retrench a person who has been employed for 240 days. And this affects the entry of the workers, including the new, into the organised sector. Thus they conclude that the large majority of nearly 80 million people who would join labour force during 1990-2000 would have to find employment in the unorganised sector as self employed casual workers. Papola (1994), as already mentioned, has indicated the same pattern of employment as Visaria and Minhas did. However, they have not mentioned any possibility of labour force reallocation from the organised to the unorganised sector through a significant amount of laying off of the labour force in the organised sector (which is not possible for the alleged rigidity of the labour market).

The World Bank and other studies which have argued about the organised sector rigidity on the basis of the fact that real wage is increasing continuously over time, have used *Annual Survey of Industries (ASI)* data on wages to calculate wage rate per worker. But in *ASI*, the definition of wages does not only contain the basic wage and the dearness allowance, it includes all kinds of payments like the additional remuneration for worker's additional effort. Conceptually, total earning per worker is a function of the wage rate for the standard working day; remuneration for additional hours of work (and more shifts) and incentive income for more intensive work are linked to output. Nagraj (1994) argues that

in the early years of the decade starting with 1979/80, when the rate of growth of employment in the factory sector became negative, total man-days work in the registered manufacturing sector and consequently the man-days per worker recorded a positive trend growth rate. He claims that the increase in earnings per worker at least partly represents her/ his compensation for greater effort and does not necessarily imply an increase in the wage rates. He has emphasised a completely different set of issues to justify the cause of increase in the substitution of capital for labour. However, the evidence he has presented and the argument he has put forward lead to question the hypothesis of the so-called organised sector rigidity.

While the rising trend in the real wage of the registered manufacturing sector was still present in the late eighties as well as in the early nineties, some of the other "structural" ratios might suggest some interesting facts which can show that rising real wages on its own does not mean much. Figure 3.1 and Figure 3.2 show the two ratios of net value added (NVA) per worker and wages to net value added from 1980/81 to 1993/94 both in the case of factory sector and the public sector within the factory sector respectively.

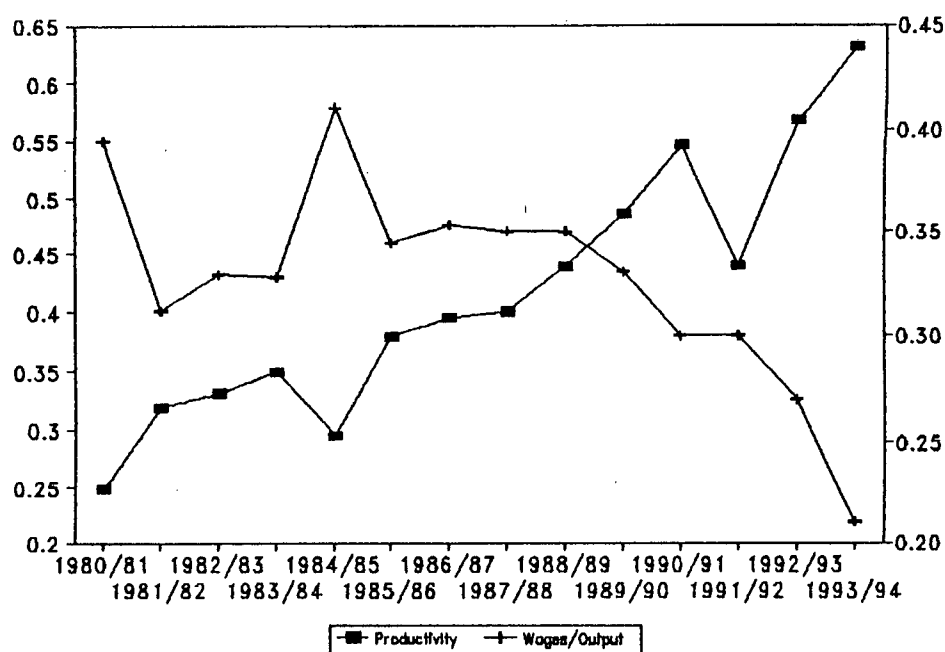
Figure 3.1: Trends in Labour Productivity and Wages/Output in the Factory Sector



For the factory sector, data clearly suggest two different stories before and after 1987/88. It is true that the NVA per worker shows a increasing trend from the very beginning, but the year 1987/88 has marked a sharp increase compared to the earlier years. On the contrary, the other ratio, i.e. wages to net value added, does not show a clear trend before 1987/88, but after this point a significantly sharp decline can be identified. NVA per worker is a standard measure for labour productivity and the rising trend from the very beginning clearly documents the increase in productivity in course of time.

The frequent fluctuation in the number of labourers (see Table A-3.3...) does not permit any conclusion about a steady relationship between the total wage and the total work force. Thus, in the face of the rising real wage rate, the decline in the ratio of wages to net value added implies that the rate of growth of net value added should be much higher than the rate of growth of wages over time. The public sector (which is supposed to be the most inflexible one) within the factory sector also shows the same picture with the factory sector in general (see Figure 3.2). We can conclude that the labour productivity is rising

Figure 3.2: Trends in Labour Productivity and Wages/Output in Public Sector



continuously and at the same time the share of the labour force to total net value added has been significantly declining at least from 1987/88 onwards. Now, if the trade unions are very strong, (as they are claimed to be) why do they let this situation persist?

Besides this indirect macro evidence, there are some case studies which directly contradict the notion that organised sector workers in India are generally in a better position due to the collective bargaining strength of unions. Roychoudhury (1996), in a detailed case study on Ahmedabad textile mills, has argued that around 50,000 textile mill workers were retrenched in the Ahmedabad city during the time period 1984-94 due to widespread closure of mills. In her study, the empirical evidence suggests that in almost all the cases retrenchment compensation were either negligible or absent. Secondly, the decreasing scope for employment in the organised manufacturing sector in Gujarat would imply that these retrenched workers were pushed to the unorganised sector. And finally, she has shown that the charter of demand raised by the Textile labour Association for retrenchment compensation and for employment generation were just not addressed by the government. Apart from these 50,000 workers, considerable number of workers have had to leave their organised sector employment through the Voluntary Retirement Schemes necessitated by the need for restructuring the public sector units. At least 60 public sector units have gone through this process. In the case of the private sector, some firms which have successfully modernised themselves, have adopted the Golden Handshake strategy in order to rationalise the number of workers. The Gandhi Labour Institute in 1984 conducted a sample survey of 5,733 displaced workers who have lost their jobs between 1983 and 84 in Ahmedabad city (Patel, 1988). They found that 58.68 per cent of the total sample were engaged in self employment in the unorganised sector of trade, manufacturing, processing and repair and service and contract related activities. Forty one per cent were reported as wage workers in the informal sector.

In a separate study, Roychoudhuri (1997) documents that during 1987-90, over 45000 organised textile mill workers in West Bengal were retrenched from their employment as a result of lockouts in 15 mills. Many of these mills were closed down by their proprietors without due payment of provident fund and ESI to the employees. She argues that since this sector is "highly organised", several massive strikes have taken place in the course of time, but, ironically, the real gains achieved by the workers have been very little. "During the

period of lockouts, ownership of several such mills changed hands. In several of the jute mills which were sold, the new owners offered significantly lower wages to the work force as a condition for reopening the mills. Faced with the prospect of unemployment, workmen frequently accepted such offers and mills were reopened." The irony precisely lies here. With the appearance of the so-called institutional rigidity, the economic laws play through the downward adjustment of wage to secure clearance of the concerned labour market in the context of excess supply.

The wide fluctuations in the absolute number of workers, over the time period considered, both in the case of total factory sector and in the public sector under the factory sector (see Table A-3.3) suggest frequent retrenchment of workers whenever needed. In a case study on the basis of a large textile unit in Bombay, Dutta (1996) has mentioned, "The presence of a significant percentage of substitutes (badli workers) and temporaries in the work force helps the management to meet the fluctuations in the market demand for the product and takes care of the absenteeism problem, and thus makes the labour market (in spite of so-called rigid labour laws of India and the presence of a strong union in the mill) highly flexible both in terms of wage flexibility and numerical flexibility." (Dutta, 1996: L-2) The definition of worker in the *ASI* covers all types of workmen including casual and contract labourers. Many studies (Nagraj, 1994; Roychoudhury, 1996) have shown that the share of casual workers in the total work force in the registered factory sector is increasing continuously in the context of a so-called strong trade union base.

The indirect macro evidence presented first and the evidence from different case studies subsequently mentioned suggest that there is an increasing need to probe into the validity of the standard argument of organised sector labour market rigidity which is claimed to be the main cause of rising incapability of the organised sector to create employment. The flexibility both in terms of wage and rationalising the labour force has been prominently increasing at least from the late eighties. In fact, the empirical evidence can support the claim not only that employment generation in the organised sector has been declining over time, but also that a certain amount of laying off in this sector (which is apparently unlikely) has taken place.

Section III: Reallocation in Unorganised Sector Re-examined

In each year, as the NSSO data suggest, labour force participation rate by both male and female increases. And, on the other hand, we have seen in the previous section that the organised sector is not only incapable of generating new employment but has also retrenched workers. At the same time, the unemployment rates according to usual status approach have gone down during the time period 1987-93 (Kundu, 1997). In this context, let us have a quick look at the overall employment scenario of the Indian economy emerging mainly from the four rounds of NSSO quinquennial surveys starting from 1977/78 and ending with 1993/94.

We present here an analysis of the data on employment from four quinquennial rounds of NSSO (1977/78, 1983, 1987/88 and 1993/94).

We have chosen the work force participation rates (WPR) for the age groups 5+ and 15-59 together with all age groups.¹⁰ It should be mentioned here that, the fourth quinquennial survey year 1987/88 was a severe drought year when agricultural output and consequently employment was adversely affected. Thus for trend analysis, the data for 1987/88 should be considered with some caution.

For all age groups, usual status WPR for all the categories have increased in the time period 1983-1993 except for the rural females (Table 3.4). If the year 1977/78 is also considered, the WPR is observed to have increased only for the males. On the contrary, if we consider WPR for the age group of 15 to 59 we get a different picture. The WPR has decreased for all the age groups in the ten-year period of 1983-93 except for the urban females, ^(Table 3.5) for whom the WPR remained constant. The same trend can also be observed if we consider the 5 and above age group.

¹⁰ The work force participation rate for all age groups is not quite adequate for drawing any inference on the actual trends from the data set. It may be worth noting here that NSSO does not report employment status for the age group 0 to 4. Also a decline in work force participation rate for the age group 4 to 14 years can be attributed to increased schooling. Similarly, if the work force participation rate for the 60+ age group decreases, we can take it as an indication of a better economic well-being of the households, at least in the case of rural India.

Table: 3.4 Percentage of Rural Work Force in different NSSO rounds by usual status

Year	Rural Male		Rural Female	
	Principal only	Principal+ Subsidiary	Principal only	Principal+ Subsidiary
All Ages-				
1977/78	53.7	55.2	24.8	33.1
1983	52.8	54.7	24.8	34
1987/88	51.7	53.9	24.5	32.3
1993/94	53.8	55.3	23.4	32.8
5 and Above				
1977/78	62.3	64.1	28.8	38.5
1983	61.3	63.5	28.7	39.3
1987/88	59.6	62.2	28.3	37.2
1993/94	61.7	63.4	26.8	37.6
15-59				
1977/78	90.2	92	40.7	54.2
1983	88.4	90.4	40.1	54.5
1987/88	86.2	88.7	39.8	51.6
1993/94	86.5	88.4	36.7	51.6

Reproduced from Amitabh Kundu, 1997.

Table: 3.5 Percentage distribution of Urban Work Force in different NSSO Rounds by usual status

Year	Urban Males		Urban Females	
	Principal only	Principal+ Subsidiary	Principal only	Principal+ Subsidiary
All Ages				
1977/78	49.7	50.8	12.3	15.6
1983	50	51.2	12	15.1
1987/88	49.6	50.6	11.8	15.2
1993/94	51.3	52	12.1	15.4
5 and above				
1977/78	56.2	57.5	14	17.8
1983	56.7	58.1	13.8	17.2
1987/88	56	57.2	13.4	17.2
1993/94	57.4	58.1	13.6	17.3
15-59				
1977/78	79.6	81	19.3	24.6
1983	79.5	81	18.7	23.4
1987/88	77.9	79.3	18.3	23.5
1993/94	78.8	79.7	18.4	23.4

Reproduced from Amitabha Kundu, 1997

In fact, for the 5 and above age group urban female WPR has slightly increased. Interestingly, if the year 1977/78 is considered, the WPR for the adult age group has declined for all the four categories. From the above evidence, it may be concluded that for the period 1983 to 1993, the work participation by adult males has decreased.

At the same time both from the Censuses (1981 and 1991) and NSSO (1983 and 1993), it can be shown that the percentage share of female employment to total employment has increased over the period. In almost all the countries, both developing and developed, the absolute as well as relative increase in the percentage share of female workers in the process of economic development is a common experience. In order to comment meaningfully on this issue, we need to analyse wage data and certain other factors. Kundu (1993) has argued that the increase in women employment in the eighties should in fact be a matter of concern. He shows that much of the women employment has taken place in the sectors of low productivity and low wage. Acharya ^{et al} (1991) also observes that there is a distinct gender differentials in wages. Thus, the increasing work force participation by women does not necessarily mean decrease in the bias against females.

As against the usual status work force participation rate, if we consider the current status participation rates, we get a somewhat different picture. In the period 1977-93, the current weekly and daily status WPR for all age groups have increased for all the four categories (Table 3.6 and Table 3.7).

Table:3.6 Percentage distribution of Work Force by Current Weekly Status

Year	Rural Male	Rural Female	Urban Male	Urban Female
All Ages				
1977/78	51.9	23.2	49	12.5
1983	51.1	22.7	49.2	11.8
1987/88	50.4	22	49.2	11.9
1993/94	53	26.7	51.1	13.9
15-59				
1977/78	87.1	37.7	78.6	19.6
1983	85.4	36.4	78.3	18.4
1987/88	84	35.3	77.3	18.5
1993/94	85.1	42	78.2	20.9

Source: Reproduced from Kundu 1997

Table:3.7 Percentage distribution of the Work Force by Current Daily status

Year	Rural Male	Rural Female	Urban Male	Urban Female
All Ages				
1977/78	48.8	19.4	47.2	10.9
1983	48.2	19.8	47.3	10.6
1987/88	50.1	20.7	47.7	11
1993/94	50.4	22	49.8	12
15-59				
1977/78	81.5	31.4	75.7	17.1
1983	80.2	31.6	75.2	16.5
1987/88	83.5	33.2	75.1	17
1993/94	80.9	34.3	76	18.1

Source: Reproduced from Kundu, 1997.

For the adult age group, an overview of ten years between 1983 and 1993 gives a mixed picture. The current weekly status WPR for the adult males has declined but it has increased for their female counterparts. Inclusion of 1977/78 - the first year - confirms the same trend. The current daily status WPR for the adult age group has increased for all the categories in the period 1983-93. Even if we consider the year 1977/78, we observe the WPR to have increased for all the categories except for the rural males (Table 3.7). It has been already argued that the usual status employment growth rate has gone down in the years from 1977 to 1993 for the adult age group. We have also argued that the current weekly

status employment for the adult females has increased and the current daily status employment for all the categories has increased. From these two pieces of evidence it may be concluded that the volume of employment has increased in the economy, but the nature of the employment is essentially of short term and casual. The hypothesis of increasing casualisation of the labour force in the Indian economy may be supported through these trends. The increase in current weekly and daily status WPR for the adult women also throws some light on the nature of female employment in the recent years.

The above analysis suggests that employment has been generated in the unorganised sector. If we consider the usual principal status employment elasticities of the unorganised sector, we will observe some interesting phenomena.

Table:3.8 : Unorganised Sector Employment Elasticity¹¹

Year	Employment Elasticity
1977/78 to 1983	0.31
1983 to 1987/88	1.34
1987/88 to 1993/94	0.47

Source: Calculated from various issues of Sarvekshana and NSSO Reports, Labour Bureau Publications, and issues of National Accounts Statistics.

Table 3.8 gives the unorganised sector usual principal status employment elasticity for the three periods. It is quite evident that the elasticities are clearly much higher than that of the organised sector elasticities in each of the concerned periods. In fact, this piece of evidence confirms that employment is being generated mainly in the unorganised sector, and perhaps the further possibility of new employment generation also lies in this sector only. Interestingly, these findings contradict Mundle's (1991) prediction about the trend of the employment growth in the era of stabilisation. On the other hand, these findings confirm Visaria and Minhas (1991) and particularly Papola's (1994) prediction that most of the new employment will be generated in the unorganised sector of the economy characterised by casual nature of work. These studies have not explicitly dealt with any kind of reallocation of labour force from the organised to the unorganised sector. In contrast, the present study

¹¹ If we take the usual status work force participation, the trend of the unorganised sector employment elasticity remains same. For details, see Table A-3.2.1.

claims not only that the newly entered labourer is likely to find job only in the unorganised segment, but also that a sizeable number of retrenched organised sector labourers (who are expected to be better equipped) will end up in the unorganised segment, thus making the competition both qualitatively and quantitatively more fierce.

What is probably more interesting is that the employment elasticity for the unorganised sector may be significantly higher than that for the organised one, but both in the first and the third periods it is much less than unity. Only the period in between shows a greater-than-unity employment elasticity. This is the period when profligate social sector expenditure by the government reaches its peak, which ultimately leads to the crisis of 1991. Sen (1996) notes, "... the 1980s were a period when, along with a rapid increase in all sorts of subsidies and transfers to households from government, there was a very large increase in revenue (as opposed to capital) expenditure on agriculture by state and the central governments, and this was also a period when the expenditure on rural development expanded manifold." (Sen, 1996; 2463) He mentions that 60 per cent of the total increase in the rural no-farm employment in the year 1987/88 was created by the government which led to almost 80 per cent of the increments in such regular jobs during the decade covered. Therefore it may be argued that even in the unorganised sector, the scope for expansion of the usual principal status employment is scanty in normal situations and only some kind of superficial effort like populist government policies of the eighties can suddenly increase the labour absorption capacity of this sector.

No significant increase or decrease in the work force participation rates for all the categories can be discerned from the data set analysed above. But in terms of sectoral division of the work force, as suggested by the various researchers already mentioned, there should be some changes at least in the unorganised sector. To understand the labour force reallocation across the sectors in the course of time, we have to consider the major sector wise disaggregation of the employment data.

The data show maximum concentration of work force in the sectors of agriculture, manufacturing, and services (Table 3.9). At the same time the percentage share of agriculture to total employment in terms of usual principal status is clearly declines over the period up to 1987/88. If we consider both principal and subsidiary status almost the same

trend can be discerned.

On the other hand, not only that the percentage share of services has increased, but also the sectors of trade and construction have come up in a major way (Table 3.9).

Table: 3.9 Percentage share of some important sectors in total employment

Year	Agriculture	Manufacturing	Services	Trade	Construction	Others
1977/78	70.90	9.94	8.32	6.11	1.81	2.92
1983	66.78	10.91	9.48	6.66	2.46	3.71
1987/88	62.05	11.74	10.31	7.77	3.99	4.15
1993/94	62.14	10.82	11.21	8.00	3.56	4.28

Source: Calculated from various issues of Sarvekshana and NSSO Reports.

Several scholars have documented that this process of work force diversification from agriculture to non-agriculture started taking place in the mid seventies, though in a very slow pace. While the share of industry in national income has increased significantly, employment in the industrial sector remained more or less constant in the course of the development process. The modern manufacturing sector, which has traditionally been viewed as the main engine of economic growth, serving as a primary source of labour absorption from the traditional agricultural sector, has failed to operate in a desired manner. It has also been documented by several scholars that the diversification has taken place mainly from the primary sector to the tertiary sector of services, trade, construction etc.

The important point that emerges out of Table 3.9, presented above is that the percentage share of agriculture has remained almost constant in the time period from 1987/88 to 1993/94. However, the rising trends of the non agricultural sectors are more or less present. Among them the services sector shows a clear increase. Though the percentage share of agriculture has remained constant in the last period, it would be too hasty to conclude that the process of the structural shift from agriculture to non-agriculture has been stalled. The reason for this apparent constancy probably lies in the fact that the year 1987/88, as mentioned above, was a severe drought year when 47 per cent of the total land area was affected. As a result, agricultural employment was affected adversely and showed an

unusual decline in that year. If we compare 1993/94 data with those of the years 1977/78 and 1983, it is possible to observe the declining trend in the percentage share of agriculture (Table 3.9).

Table: 3.10 Percentage share of female employment by different sectors to total female employment

Year	Agriculture	Manufacturing	Services	Others
1977/78	80.25	8.56	6.61	4.57
1983	78.86	9.00	6.99	5.15
1987/88	74.18	10.19	7.85	7.78
1993/94	74.98	9.89	9.12	6.01

Source: Calculated from various issues of Sarvekshana and different NSSO Reports

Considering the percentage share of female agricultural employment to total female employment (Table 3.10), the concentration of employment in agriculture is even higher than in general (Table 3.9). But, at the same time, it is clearly evident from the above table that the percentage share of female agricultural employment had been declining up to 1987/88. In the case of female employment, the year 1993/94 was in fact showing a clear increase over the year 1987/88. In this context, Unni (1996), on the basis of NSSO data, has argued that more recently a setback has been observed in the trend of female non-agricultural employment. But at the same time 1993/94 figure is clearly lower than the 1983 and 1977-78 figures. This can be explained in terms of the same argument of drought. As the employment concentration of women in agriculture is much higher than that of men, women will be disproportionately affected by any kind of adverse effect on agriculture. So, the slight increase in the percentage share of female agricultural employment in 93/94 over 87/88 does not lead to any conclusion of reverse trend.

In India, agriculture is still predominantly of unorganised nature. On the other hand, almost all the structural shifts in the occupation from farm to non-farm take place within the unorganised sector. Therefore it may be useful to analyse the employment elasticities of the different sectors within the unorganised segment. Although all the classified 9 industries have an unorganised component, the sector mainly consists of agriculture, manufacturing,

trade, construction, transport and services. Table 3.11 gives the detailed sector wise employment elasticities within the unorganised segment.

Table:3.11 : Unorganised Sector Employment Elasticity (Industry wise)¹²

Year	Agriculture	Manufacturing	Construction	Trade	Transport	Services
1977-78 to 1983	0.08	0.46	negative	0.60	2.23	0.44
1983 to 1987/88	negative	0.92	3.48	1.25	0.59	2.03
1987/88 to 1993/94	0.48	0.23	0.06	0.51	0.50	1.05

Source: Calculated from various issues of Sarvekshana and NSSO Reports, Labour Bureau Publications, and National Accounts Statistics.

Note: Elasticities are calculated as the ratio of the compound growth rates of employment and output.

All the sectors other than agriculture show high elasticities in the relevant time period as expected. In the case of agriculture, the rate of growth of output was negative in 1987/88. The sharp rise in the elasticity for the construction sector is worth noting. In fact, during 1983-88, the number of rural workers engaged in construction, increased by 74 and 292 per cent among males and females respectively (Visaria et al, 1991). This is understandable as there was a massive expansion in the government sponsored construction activities in rural areas, particularly in Gujrat and Rajasthan because of the severe drought in 1987/88 as noted above. We already noted that in this period government revenue expenditure had peaked up in the rural areas. The policies were aimed at generating new employment through the spatial employment programmes and creating more self employment opportunities either directly through the government's own rural development schemes or by instructing the banks to extend more credit (Sen, 1996). These factors can precisely explain the increase in the employment elasticities in the sectors of trade, manufacturing and

¹² Here we have considered usual principal status for the calculation of the unorganised sector employment elasticity. We get the same trend in elasticities by taking usual status as well. For details, see Table A-3.2.2. The elasticity figures are generally lower than Bhalla's (1993a) study may be because of the reason that, she has not divided the nine industries into organised and unorganised segments.

even in the case of services. However, these elasticities are only an indirect and superficial proof of something that has happened in the rural areas in this time period.

If we consider the last period, it is evident that in the two major sectors of manufacturing and trade the employment elasticities have declined, not only from the preceding period but also compared to the first period. The sectors of construction and services have also shown a sharp decline in the last period compared to the second period. Government expenditure in poverty alleviation programmes had started in fact in the late seventies and reached its peak in the mid eighties, leading to the economic crisis. So, even the first period was also not totally free from government's profligate concern.

On the contrary, there is no explicit mention about the distributional concern in the stabilisation part of the economic reform policies which the government started pursuing from 1991 onwards. The reform policies not only made employment generation stagnant in the organised sector, both private and public, but it also involved: (1) actual declines in Central government expenditure on rural development, including rural employment and anti poverty schemes, (2) declines in public infrastructural and energy investments which affecting the rural areas; (3) reduced transfers to state governments which have been facing a major financial crunch and have therefore been forced to cut back their own spending, particularly on social expenditure such as on education and on health and sanitation; (4) reduced spread and rising prices of the public distribution system; and finally, (5) financial reform measures which effectively reduced availability of credit, especially in the rural areas and particularly to small borrowers. As a result, in the early 1990s there was a reversal of many of the government sponsored schemes for employment generation affecting the non-farm sector employment and consequently, poverty adversely (Sen, 1996). Thus the fall in the elasticities other than agriculture in the time period 1987/88 to 1993/94 can be very well explained.

But the more important fact is, when all the sectors are showing declining elasticity in the latest period, agriculture shows an increase. The employment elasticity in agriculture in the latest period is, in fact, significantly higher than even the first period. It may be expected that, if these trends of various elasticities persist, a reverse trend of moving back to agriculture will take place shortly. But, in order to reach a firm judgement as to how far this observation can be related to the macro-economic restructuring, more empirical support is

required. However, the empirical facts suggest enough scope to conclude that the shift from agriculture to non-agriculture has not taken place for the factors within the agricultural economy; rather it is a result of conscious government policy intervention which superficially increased the employment opportunity outside agriculture.

It may be also concluded that, with the reform package not having much space for the social sector consideration, the shift from agriculture to non-agriculture will be a considerably long term phenomenon. If the trade policy measures within the reform packages can really promote exports of manufactured goods and if those exports were labour intensive, then only can we expect a more sustainable shift of labour force from agriculture to non-agriculture. But that will be again extremely vulnerable to the external conditions rather than the government expenditure.

Conclusion

The above analysis shows that the restructuring of the work force is not only a theoretical assertion, it can also be empirically supported. It is generally argued that as a result of the excessively protective labour legislations, organised private sector strongly prefers maximum use of capital in the place of labour. Interestingly, both macro and micro evidences which have been discussed, create ample scope to contradict the alleged rigidity of the organised sector labour market. Data suggest not only that organised sector is failing to generate new employment but also that a considerable amount of laying off of the labourers is taking place. In the next chapter, we try to single out the sectors under organised manufacturing which are actually responsible for labour displacement. ✓

These jobless labourers have nowhere to go except the unorganised sector. Usual principal status employment elasticity of the unorganised sector is generally much higher than that of the organised sector. So, the hypothesis of growing labour absorption by the unorganised sector is generally true. But even in this case, the elasticity is significantly lower than one in the first and third periods and, only in the period in between it is higher than one. This is the period, when profligate social sector government expenditure has reached its peak which leads ultimately to the crisis of 1991. Therefore, it may be argued that, even in the unorganised sector, the scope of usual principal status employment is scanty in normal

situations and only some kind of superficial effort like populist government policies of the eighties can suddenly increase the labour absorption capacity of this sector.

It is argued that the government expenditure actually influenced the non-farm part of the unorganised sector employment. It can be expected that, with the stabilisation policies (where, the main objective is to curb demand especially emanating from government expenditure), social sector government expenditure will fall and consequently the number of employment in the non-farm sector will be affected. The only alternative left for the jobless would then be to go in for agricultural employment. And, this may lead to increase in disguised unemployment in the farm sector.

We shall try to see the relationship between reallocation of the work force depicted above and trade liberalisation in the next chapter. In the context of the rising shortage of employment in the economy, we attempt to analyse the distributional consequences (in terms of employment generation) of the change in the thrust of the trade policy regime from its inward to outward orientation.

Appendix to Chapter III

Appendix 3.1: A Note on the Derivation of the Total Number of Workers

We have used the National Sample Survey Organisation (NSSO) quinquennial rounds on employment/unemployment for the years 1977/78, 1983, 1987/88 and 1993/94. NSSO does not give total figures for the working population. It gives, per thousand work force participation rates for the four categories of rural male and female and urban male and female in terms of three different approaches of usual principal and subsidiary, current weekly and current daily status. We have considered the usual principal status and usual (principal + subsidiary) status participation rates.

NSSO asks the question of work participation only to the persons aged five years and above. But the work participation rates given by NSSO is in terms of the whole population. This may lead to an under reporting of the work participation rates. We have calculated the work participation rates in terms of the population aged five years or above to avoid this problem. We have deducted the number of population below five years (which is given as figure of per thousand distribution of population) from thousand, and by that number divided the per thousand distribution of work force participation rates for rural female, male and urban female and male. As a result, our work participation rates have become little higher than the reported ones.

The figures of projected total population, rural-urban and male-females, are available from various issues *Sarvekshana*, NSSO Reports etc. After getting the population figures, we have applied the respective work participation rates to the specific groups and got the approximate total figures.

The industry wise work force participation is given separately for rural/ urban and gender wise. So, as the next step, we have applied all these rates to the respective groups of workers and got the total number of workers industry wise as well as gender wise. The figures for the organised sector employment in standard nine industry classification is available from the publications of the Labour Bureau. We have deducted organised sector employment figures from the total to get the unorganised sector employment figures. Within these

sectors they have mentioned the organised finance sector employment separately than the services sector. But, NSSO gives employment figures for this sector only in the year of 1993/94. For this reason, we have clubbed the two employment figures of finance and community services together.

Organised sector female employment data are available from *Employment Reviews*, and *Statistical Profile of Indian Women* (1993) published by Labour Bureau, Simla (Ministry of Labour). But female employment industry wise data for the organised sector for each year are not available. Thus industry wise total employment figures for the females can not be calculated.

Considering usual (principal + subsidiary) status work force participation rate for the calculation of the total employment, the percentage share of organised sector employment in total employment figures are given in Table A-3.1.1.

Table A-3.1.1: The share of organised sector in total employment

Year	Percentage share of organised sector
1977/78	6.95
1983	7.32
1987/88	6.96
1993/94	6.43

Source: Several Issues of Sarvekshana, NSSO Reports and Labour Bureau Publications.

Appendix 3.2: A Note on the Calculation of the Production Figures and the Employment Elasticity

To calculate output elasticity of employment we need data for both output (gdp) and employment. We have already discussed the methods we have used to get the employment figures. Thus, we start with the gdp figures. National Accounts Statistics (annual publication of CSO) gives total gdp and ndp data at factor cost, for different sectors, both in current and 1980/81 prices. But if we want to get further classified data of organised and unorganised within those sectors, NAS will give only ndp at current prices for organised unorganised divide. Over the relevant time period, in all the sectors the percentage of

depreciation to gdp is more or less constant. Thus we have taken ndp figures as a proxy for the total production figure in the place of gdp.

We also assume that the price effect is same for the organised and unorganised sectors. We have organised sector ndp (ndpo) and unorganised sector ndp (ndpu) at current prices. If the price effect is same, we can apply the proportion of ndpo is to ndpu at current prices to the total ndp at 1980/81 prices to get ndpo and ndpu at constant prices.

The reference period starts with 1977/78. NAS gives gdp and ndp data for 1977/78 both in current prices and 1970/71 prices because, only in 1985/86 they have changed the base year to 1980/81 in the place of 1970/71. So, we had to convert this data into 1980/81 prices. Now, 1980/81 data is also given both in current and 1970/71 prices. At first all the implicit gdp and ndp deflators taking 1970/71 as the base are calculated. Then we changed the base to 1980/81 and got the relevant index to get 1977/78 gdp and ndp at 1980/81 prices.

The *National Accounts Statistics (NAS)*, annually published, reported no gdp or ndp data for the unorganised sector of electricity, gas and water up to 1986/87. But from our calculation we saw certain amount of employment has to be there in this sector. Even, in his 1996 study, G.Parthasarathi has mentioned that, this sector is totally organised and reported no ndp for the unorganised part. However, in 1994, NAS has published an issue on Factor Incomes (1980/81 to 1989/90), where they have reported the net value added for all these ten years for unorganised electricity sector. But I could not find the data for unorganised electricity sector for the year 1977/78.

As we have yearly data for the organised sector employment and output, we have calculated the annual average rate of growth of employment and output from 1980/81 to 1993/94. Then on the basis of periodisation, we again take the average growth rates for the separate periods. Trend growth rates were not taken because the periods were very short. To get the employment elasticities for the three periods, we have divided the period wise rate of growth of employment by the period wise rate of growth of output. In the case of the unorganised sector, the employment figures are available only for four discrete time points depending on the NSSO survey years. As a result, in this case, we have to use compound growth rates.

Considering usual (principal + subsidiary) status work participation rates for the derivation of the total employment figures, the employment elasticity for the unorganised sector as a whole and industry wise are reported in the following Tables.

Table A.3.2.1: Unorganised Sector Employment Elasticity

Year	Employment Elasticity
1977/78 to 1983	0.34
1983 to 1987/88	1.25
1987/88 to 1993/94	0.49

Table A.3.2.2: Unorganised Sector Employment Elasticity (Industry-wise)

Year	Agriculture	Manufacturing	Construction	Trade	Transport
1977/78 to 1983	0.17	0.44	negative	0.65	2.09
1983 to 1987/88	negative	0.81	5.00	1.13	0.55
1987/88 to 1993/94	0.49	0.32	negative	0.55	0.53

Source: Several issues of Sarvekshana and NSSO Report and several publications of the Labour Bureau.

Note: For the total employment figures, usual status work participation rates have been considered.

Table A-3.3

Appendix 3.3 \ :Trends in Productivity, Share of Workers and employment in the Factory Sector, and Public and Private Sector within the Factory Sector During 1980/81 to 1993/94

I: Factory Sector			
Year	No of workers (in 000)	NVA/worker (in Rs)	Wages/NVA
1980/81	6047	21943	0.33
1981/82	6106	23836	0.30
1982/83	6315	25170	0.31
1983/84	6159	28985	0.29
1984/85	6091	28553	0.32
1985/86	5819	31884	0.30
1986/87	5807	33159	0.31
1987/88	6062	32549	0.31
1988/89	6026	37249	0.29
1989/90	6327	41371	0.27
1990/91	6307	44707	0.25
1991/92	6269	42148	0.24
1992/93	6649	46854	0.23
1993/94	6632	53811	0.19

II: PUBLIC SECTOR			
Year	No. of workers In 000)	NVA per worker In Rs	Wages/ NVA
1980/81	1502	24818	0.39
1981/82	1571	31890	0.31
1982/83	1632	33144	0.33
1983/84	1675	34946	0.33
1984/85	1798	29498	0.41
1985/86	1626	37931	0.34
1986/87	1626	39473	0.35
1987/88	1676	40024	0.35
1988/89	1709	43889	0.35
1989/90	1619	48628	0.33
1990/91	1689	54685	0.3
1991/92	1564	43982	0.3
1992/93	1760	56830	0.27
1993/94	1632	63158	0.21

III: Private Sector			
Year	No of workers (in 000)	NVA per worker Rs	Wages/ NVA
1980/81	4545	20993	0.31
1981/82	4535	21045	0.30
1982/83	4683	22391	0.30
1983/84	4484	26758	0.28
1984/85	4293	28157	0.29
1985/86	4193	29540	0.29
1986/87	4181	30703	0.28
1987/88	4386	29693	0.29
1988/89	4317	34621	0.26
1989/90	4708	38877	0.24
1990/91	4618	41057	0.23
1991/92	4705	41539	0.22
1992/93	4889	43264	0.21
1993/94	5000	50760	0.18

Source: Annual Survey of Industries, Summary Results for the
Factory Sector

Chapter IV: Changing Trade Policy and Labour Market: An Assessment

Introduction

In this chapter we address the question as to how far the recent changes in the allocation of work force across different sectors could be related to the overall shift in the trade policy regime in India. In the context of increasing unavailability of organised employment, which is evident from the decrease in the employment elasticity in the organised sector, increasing reallocation of labour force from organised to the unorganised sector and in the increase in the incidence of casualisation, this chapter also examines possible dynamic implications of the recent change in policy thrust especially in the trade regime.

The most important component in the Indian export basket consists of manufactured items which account for around 75 per cent of the total exports (*Economic Survey*, 1994/95). But a substantial portion of these exports still comes from the unorganised sector (Jhabvala, 1998). It is clear that for India, a successful export oriented growth would imply increasing the percentage share of her exports to GDP on the one hand, and, in the world market on the other. Consequently, this needs an increasing participation by the large organised factory sector manufacturing units in the export activity and also achieving and retaining international competitiveness. But these achievements will not necessarily generate employment because that will depend heavily on the process of production in the manufacturing sector and the incentives that the sector faces because of government policies.

The first section brings out the analytical connection between generation of employment and international competitiveness in a changed economic scenario and the pre-conditions of an export oriented growth together with the generation of employment. The second section will be devoted to the question as to how far Indian organised manufacturing sector is capable of performing in the manner set by section one.

The discussion in the third section focuses on some specific sectors under manufacturing which primarily produce import substitutes and the sectors for which the export content to their total sales is considerable. Since the import substituting manufacturing activities are

primarily organised factory sector phenomena, the *Annual Survey of Industries (ASI)* data set, published by the Central Statistical Organisation (CSO), is expected to give some meaningful results. The other set of industries will be taken up because, together with the analysis of the whole manufacturing sector, these specific sectors with relatively higher export intensity, may give a tentative understanding of the possibility of generation of employment through successful export performance.

Section I: Does Structural Adjustment Necessarily Harm Employment?

In this section we try to contextualise the growing problem of generation of employment in a changing economic scenario of an increasingly more open and liberal regime of trade and industry. While liberalisation in India has started with the major economic reforms in 1991, the process has been already initiated by mid 1980s to a limited extent. We have already noted that the stabilisation part of the economic reform represents an orderly reduction of aggregate demand and thus most likely to reduce growth and employment. On the contrary, structural reforms are intended to be reforms in micro and macro economic policies and institutions to increase the efficiency of the resource use and enhance growth as a way of reducing imbalance. It is expected that increase in growth and income will lead to employment. Thus theoretically there is no necessary contradiction between structural adjustment policies and the objective of employment generation and reduction in poverty.

But, the experiences of Latin America (Berry et al, 1997) and Sub-Saharan Africa (Weeks, 1997) suggest that even after more than one decade of their structural reform programmes, they have too few examples of success in terms of adjustment of the macro-economic imbalance with positive growth and non-increasing poverty. The case studies on different country's experience in the period of structural reforms often exhibit negative rate of growth of output and drastic decline in the employment. These pieces of evidence may lead us to believe that a necessary relationship between structural reform programmes and the phenomenon of decreasing rates of growth of output and employment exists.

One can possibly argue that, there is a conflict between growth and efficiency on the one hand and employment and poverty on the other. Interestingly, the experiences of East and South East Asian countries can give a totally different picture of the economic performance

in the era of their structural reforms. These countries were successful in making the structural reform programmes, and the programmes were so carefully chosen that they did make a great contribution to growth, employment and poverty reduction as much as possible (Amsden, 1989; Mazumder *et al*, 1997). Thus, it is always possible to shape the domestic macro policies to get a position in between at which high rate of growth can take care of employment generation to a great extent.

It is evident from the experiences of both successful and unsuccessful countries that the primary focus must be on an acceleration of growth. And the essential pre-condition for this high rate of growth is high rate of investment. Again, the ultimate guarantee of a high rate of investment is high rate of domestic savings. Past experience of several Latin American countries demonstrates the risk of external imbalance and debt crisis inherent in the strategy of accelerating investment by increasing dependence on external savings (Berry, 1997). But only the high rate of investment is not sufficient, the investment should be highly productive at the same time.

To make the investment productive both in terms of growth and employment, the government has to take certain policy initiatives. First, a careful identification of worthwhile activities and the provision of adequate support for their development are of critical importance. It is argued from the experiences of several countries that this is far from the past import substituting industrial strategy which led to arbitrary protection, and could not act as a rational guide for resource allocation.

However, it may often happen that especially in a developing country, an investment which is profitable in terms of individual's perspective may not be desirable from the society's point of view. This kind of divergence between social and individual interests will lead to failure of the market. In this case, it should be recognised that the market cannot guide investment in channels of socially beneficial activities which would produce the desired outcome. Thus some amount of government intervention is called for. In fact, the East and South-East Asian experience clearly demonstrates that the guiding direction and support of a government, inspired by the goals of growth and equity, have a critical role to play in channeling resources into right activities (Mazumder *et al*, 1997). This argument stands despite the signs of crisis these countries have recently shown.

Secondly, overall incentive system should work efficiently in the economy, so as to ensure efficient allocation of the resources. While the market may not be sufficient in creating enough signals, a total rejection of the market will be depriving the economy of any rational system of economic calculations. What is needed is, a careful balance. Thirdly, the system of incentives and institutions must favour rapid absorption of labour in the process of productive growth. In a typical labour surplus developing country, this should not have any conflict with the objective of growth and efficiency. If the policy can include appropriate pricing of labour and other competing factors of production, it can reform the institutions so as to create a structure that encourages greater absorption of labour.

But the most important fact for achieving the export oriented growth together with the emergence of sufficient employment for the more open economies depends on how far the countries will be successful in generating and continuing international competitiveness in the world market.

Through the major changes in the trade policy reforms, almost all the developing countries are now opting for an export oriented growth replacing the earlier import substituting industrial strategy. And clearly in these increasingly open economies, it is crucial to achieve and maintain international competitiveness for making exports more competitive and profitable on the one hand, and to resist the risk of relatively cheap and better quality imports on the other.

To understand how this competitiveness can influence employment, we have to analyse the link between the labour market policies, the macro-economic policies and the policies for adjustment. It is argued that the success of the East and South-East Asian countries in achieving a remarkably rapid expansion of employment, was due to their sustained international competitiveness. International competitiveness is crucially dependent on the unit labour cost in foreign exchange, and this in turn needs to have the following conditions:

- (a). The rate of growth of real wages should be kept within the rate of growth of productivity of the workers.

- (b). The rate of domestic inflation should be limited so that the inflation of the wage goods, the major determinant of the cost of living, can be kept in line with the traded goods, the price of which is internationally determined.
- (c). A continuous adjustment in the exchange rate is needed to compensate for any excess of the above two. (Khan *et al*, 1997).

The first one of the above mentioned conditions for international competitiveness is clearly determined by labour market policies. These policies should focus, firstly, on the labour productivity by endowing the work force with human capital and complementary fiscal resources and directing them to highly productive activities. Secondly, the policies should ensure a form of labour market functioning that allows an orderly rise in the real wages at par with increase in productivity.

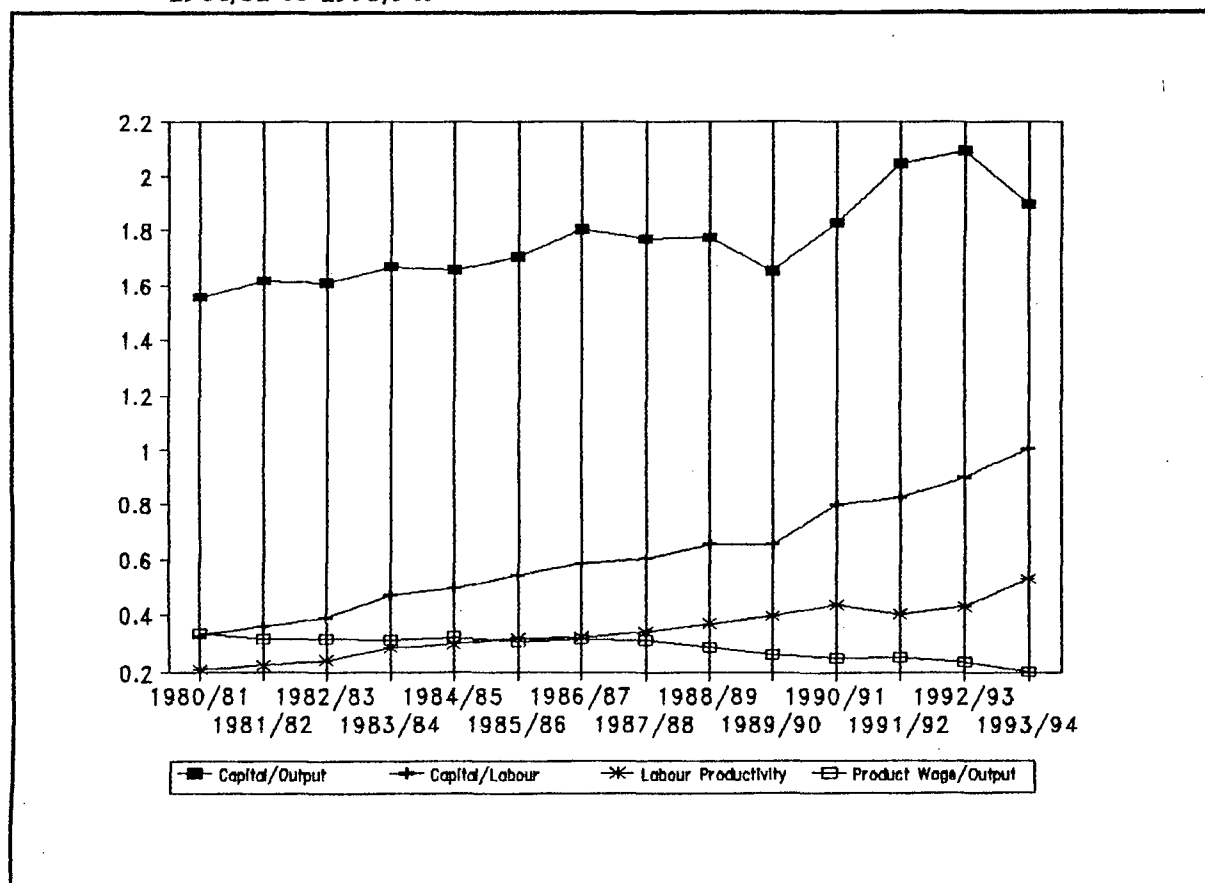
While the third condition is a policy of adjustment, the second condition is a matter of macro-economic policies which must ensure price stability. The policy should be such that any adjustment in the exchange rate (for the maintenance of the competitiveness) will not make the cost of living higher than the price of products made by the workers and consequently the rate of growth of real wage more than that of productivity.

Section II: Organised Manufacturing Sector: Growth and Employment

This section attempts to understand the nature of the production process with a special focus on the situation and possibility of employment in the factory sectors of Indian manufacturing. The analysis proceeds on the basis of certain important structural ratios involving the factors of production, capital and labour and the produced output, such as, capital/output, capital/labour, and output/labour. The change in the time trends in these ratios and the underlying relationship between them in determining the level and rate of growth of employment are to be considered.

We start our discussion with the factory sector of manufacturing in general in the reference period of 1980/81 to 1993/94, (Figure 4.1).

Fig. 4.1: Trends in different structural ratios of the registered manufacturing during 1980/81 to 1993/94.¹



The *Annual Survey Of Industries (ASI)* published by CSO provides data on various aspects of the factory sector of manufacturing separately from the other sectors. We have used the data on net value added, fixed capital, and number of workers for value of output, capital stock and employment respectively. All value figures in *ASI* are given in current prices. So, to get all these figures at constant prices appropriate deflators have been used. Net value added and wages are deflated by the wholesale price index for the sub-sectors of manufacturing. This measure of wages gives the concept of product wage. For calculating the rate of growth of real wages, the wage figure is deflated by the consumer price index for the industrial workers. Wholesale price index for machine and machine tools is used to deflate the capital stock. All indexes refer to the base year of 1981/82=100.

The time trends of the different structural ratios for the Indian organised manufacturing sector emerging from the figure cited above suggest a couple of facts very clearly. The

¹ Labour productivity and capital-labour ratio are in Rs. lakhs.

capital/labour ratio has an increasing trend over the reference period and in fact, it has not declined even for a single year. Consequently, labour productivity or the output/labour ratio has also increased. But the slope of the line depicting capital/labour ratio is generally steeper than that for productivity of labour. In fact, the year 1991/92 shows a decline in the productivity with an increase in the capital/labour ratio. The generally rising capital/output ratio together with the above mentioned trends suggest a lesser increment in the productivity compared to that of the increment in capital/labour ratio. While there is a continuous decline in the productivity of capital, in almost all the years, there is a continuous increase in capital deepening in the production process. Again, the share of wages (in terms of product wage) in the total net value added is continuously declining² in the context of a rising labour productivity. This fact strengthens the argument for a necessary critical approach towards the alleged strength of trade unionism in the organised manufacturing sector.

A close look at the analytical relationship between the three crucial structural ratios can give some valuable insights into the implications of capital deepening, that seems to have taken place over the period under study, from the perspective of employment. The capital/labour ratio can be defined as the product of the other two ratios capital/output and output /labour.

To put it algebraically, $C/L = C/O * O/L$ ³. Thus, any change in the capital/labour ratio would imply some changes in either or both the ratios. In fact, we can imagine three possible outcomes in terms of the other two ratios from an increase in the capital/labour ratio. First, with an increase in the capital labour ratio, both capital/ output and output/ labour ratio can increase. Alternatively, one ratio can increase and the other ratio may remain unchanged. And finally, one ratio may increase and the other may decrease, but the increase is more than the decrease.

Ideally, it is desirable to get a rise in labour productivity as a result of increase in capital labour ratio, so much so that the increase in the volume of output can outstrip the increase

² If we take the measure of real wages to net value added, the declining trend in the ratio persists as well.

³ Where, capital is denoted by C, output is denoted by O and labour is denoted by L.

in the volume of capital resulting in a decrease in the capital output ratio in the course of time. The decline in the capital output ratio means increase in the ratio output /capital, that is, increase in capital productivity. Evidently, in the above mentioned relationship the crucial component is productivity. Increase in capital per unit of labour can change labour productivity in two ways. First, the increase in capital can help to increase the skill content in the work force through human capital formation. This kind of technical change is usually labour augmenting. In this case, the output/labour ratio increases while both output and employment are increasing. Here the improvement in the quality of labour is crucial. Alternatively, capital investment can only be in the machinery which will displace labour and augment productivity. And in this process, a small group of workers may become more skilled to handle the new machinery. Clearly, in this case, increase in productivity will not lead to increase in employment. In fact, it is possible to get an absolute decrease in work force as a consequence of large scale automation. However, within the factory sector, different types of manufacturing suggest different types of behavior by the structural ratios, depending upon their very different nature of production. *ASI* gives data for both two digit and three digit levels of disaggregation of the manufacturing sector. It is felt that a detailed examination of the behaviour of the structural ratios of different sectors together with employment and capital investment scenario will give a fairly comprehensive picture at the disaggregated level. We have used the time series data for the period 1980/81 to 1993/94 for two digit levels of classifications involving 19 industrial categories. Table 4.1 shows the capital-labour ratio for the 19 industrial categories under manufacturing.

Table 4.1: The Capital/Labour Ratio For The Desegregated Organised Manufacturing Sector (In Rs. Lakhs)			
Industry Groups	Period I 1980/81- 1984/85	Period II 1985/86- 1990/91	Period III 1991/92- 1993/94
(20-21)Food Products	0.31	0.29	0.39
(22)Beverage/Tobacco	0.08	0.10	0.10
(23)Cotton Textiles	0.25	0.24	0.32
(24)wool/silk	0.62	0.59	0.98
(25)Jute	0.08	0.11	0.13
(26)Textile Product	0.20	0.20	0.24
(27)Wood Product	0.25	0.19	0.25
(28)Paper Product	1.71	0.76	0.84
(29)Leather Product	0.25	0.20	0.28
(30)Rubber Product	1.55	1.59	1.94
(31)Chemical Product	1.84	1.74	2.28
(32)Non met.min.Pro	0.61	0.80	0.99
(33)Basic met.Alloy	1.28	1.74	3.01
(34)Metal Product	0.23	0.34	0.54
(35)Non.Electri.Mach	0.37	0.55	0.75
(36)Elec.machinery	0.43	0.69	0.89
(37)Transport mach.	0.44	0.62	0.73
(38)other	0.28	0.44	0.61

Source: Calculated from various ASIs (Summary Results for factory sector)

Note: The numbers presented in the table for the three periods are the averages based on the individual capital/labour ratios of all the years in each period.

It will not take much time to conclude from Table 4.1, that the ratio of fixed capital to labour has increased in all the industrial sub groups from period I to Period III except in the paper and paper products.⁴ The ratio is relatively higher in the capital goods industries, basic metal and chemical products. In the capital goods industry the capital labour ratio has

⁴ After completion of this study I chanced upon a recent study by Shubhashis Gangopadhyay and Wilima Wadhwa (Gangopadhyay and Wadhwa 1998) which reports rising trends in capital/labour ratios in all the industrial categories in the time period 1973 to 1993 with different sub-periods of 1973-83 and 1984-93.

been doubled or even sometimes more than doubled in the third period compared with the first period⁵.

On the basis of the relationship between the three important structural ratios discussed above, this general increase in the capital labour ratio would have some implications in terms of the other two ratios of capital output and output labour. Interestingly, within these industrial categories we will observe almost all the possible outcomes of an increase in the capital labour ratio we have already discussed. Considering capital output ratio (see Table A-4.1) and labour productivity or output labour ratio (see Table A-4.2), it is possible to reclassify all the industries into three different groups represented in the Table 4.2. With this information, we consider the employment scenario in these industries in Table 4.2 as well.

⁵ It may be useful to look at the ratio on the basis of some other broad classification such as input-based. Metal-based industries show generally high capital labour ratio than the agro- and chemical based. For different classifications of the industrial categories, such as input-based and use-based, see Ahluwalia, 1985.

Table 4.2: Rate of growth of employment in industries classified according to changes in C/O and O/L ⁶			
Industry Groups	Rate of Growth of Employment		
	Period-I 1980/81 to 1984/85	Period-II 1985/86 to 1990/91	Period-III 1991/92 to 1993/94
Group I C/O decreases O/L increases (26)Textile Product ⁷ (29)Leather Product (30)Rubber Product (31)Chemical Product (37)Transport mach. (38)others	 3.20 4.95 3.29 0.89 1.56 -0.52	 9.25 7.75 5.72 0.44 -0.22 5.05	 26.13 3.34 6.27 4.68 1.30 9.93
Group II C/O increases O/L increases (20-21)Food Products (24)wool/silk (33)Basic met.Alloy (34)Metal Product (35)Non.Electri.Mach (36)Elec.machinery	 -5.89 5.84 3.38 0.51 1.55 2.77	 2.88 2.38 0.43 3.42 -0.39 2.19	 3.72 6.09 2.74 0.58 1.14 0.71
Group III C/O increases O/L decreases (22)Beverage/Tobacco (23)Cotton Textiles (25)Jute Textiles (27)Wood Products (32)Non met.min.Pro	 -2.37 -2.88 3.19 -0.99 4.04	 7.52 -1.28 -0.91 -2.38 -0.09	 -0.81 1.56 -6.47 5.32 -2.25

Source: Calculated from several AS/s.

Note: Growth rates are average annual growth rates, percentage per annum for the three periods.

⁶ Paper and paper products industry has been excluded from the table because it experiences a declining capital labour ratio.

⁷ For Textile Products there is a sudden increase in the number of workers in 1993/94. As the rate of growth in the third period consists only the two years 1992/93 and 1993/94, the average has been pulled up by the sharp increase in 1993/94.

From Table 4.2, it is evident that in the first group of industries, the increase in productivity growth as a result of increase in capital per unit of labour could increase output so much that it could manage to lower the effect of increase in capital per unit of output in the third period in relation to the first. Again these are the industries where the productivity growth has led to the increase in the rate of growth of employment in the third period compared to the first, with the exception of leather products and transport equipments. In these two industries decline in the rate of growth of employment on the one hand, and absolute decrease in employment figures in the period in between (in the case of transport equipments) on the other, in the context of sharp increase in productivity, leads to the fact that, productivity gains take place at the cost of labour displacement. We have already noticed that in all these industries the increase in the capital labour ratio was marginal over the reference period. One common fact about all these industries, except chemicals and transport equipments is that, they all are labour intensive.

The second group of industries are precisely those industries for which the increase in capital labour ratio was the sharpest other than the two industries of wool and silk textiles and food products where the increase is marginal. Considering the employment scenario for these industrial categories, except the food products and wool and silk textiles, Table 4.2 suggests not only a decline in the rate of growth of employment in all these industries from the first to the third period, but also a negative rate of growth of employment for some industries in some periods. Clearly, employment has decreased in these cases even in the absolute sense. Ironically, all these industrial sectors are supposed to be highly organised and retrenchment of labour force is an impossible proposition here. Thus, these are the industry groups where increase in productivity is made assured through displacement of labour by capital. In the case of third group of industries demonstrated in Table 4.2, the whole increase in capital labour ratio does not have any impact on the increase in productivity. On the contrary, it necessitates a decline in productivity resulting only in an increase in the capital output ratio. Employment scenario suggests divergent trends for these industrial categories. While the rate of growth of employment is increasing in the industrial group wood products, it is declining in the jute products and non-metallic minerals. In the case of beverage and tobacco both the first and third period suggest negative rate of growth of employment but the period in between shows a sudden increase. In the first two periods, cotton textile shows negative rates of growth of employment. The micro evidence about the

wide range of lay offs of the labour force in Ahmedabad and Bombay Textile mills discussed in the previous chapter can be verified by this macro trend. In the case of jute and cotton textiles, the continuous efforts to increase productivity might result in drastic fall both in the rate of growth of employment on the one hand and decrease in the level of employment on the other. Labour displacing effect is, thus, also quite significant here.

If we compare the rate of growth of employment and the rate of growth of fixed capital (see Table A-4.3) for these industrial classifications, we see that the rate of growth of fixed capital is generally much higher than the rate of growth of employment. This feature also characterises the industries where the rate of growth of employment is increasing. Thus, increase in the process of capital deepening is the general feature for all these industrial categories irrespective of both labour and capital productivity.

ASI data for the two digit classification of manufacturing cover both census and sample sectors, that is, both the big factories and the small enterprises, which are registered under the factory act. The data show that, of the total units in the factory sector, the small scale industries (SSI) comprised more than 80 per cent every year and contributed more than one-third employment and, in some years even more than half of the total employment. But its share in total fixed capital and value added is only about 5 per cent and 15 per cent respectively (Garg, 1996).

The trends in the different ratios, emerging from the above tables thus present a sort of aggregate view. It is evident that the capital labour ratio is much higher in the large factories than that in the smaller ones. Furthermore, there is reason to believe that the picture may be different with respect to the question of capital deepening in the case of small scale sectors. Unfortunately, the data regarding detailed division in terms of size are not available for the two digit industrial classification under manufacturing. However, it is possible to get a broad idea about the large and small factories in aggregate (Table 4.3).

Table: 4.3 Growth Rates: Employees, Fixed Capital, and Wages for Small and Large Factories (per cent per annum at 1981-82 Prices)						
Years	Employees		Fixed Capital		Wages/Worker	
	SSI	Large	SSI	Large	SSI	Large
1980/81to84/85	-2.1	2.1	16.2	10	1.6	3.8
1985/86to90/91	1.5	0.5	12.4	13.1	2.4	2.5
1980/81to90/91	0.1	1.1	13.9	15	2.1	3
1990/91to 91/92	-0.8	1	21.6	8.6	20.5	-17
Trend Rates						
1973/74 to 79/80	5.1	4.6				
1980/81 to 91/92	0.1	0.7	13.7	14.1	3	2.4

Source: Reproduced from Garg, 1996

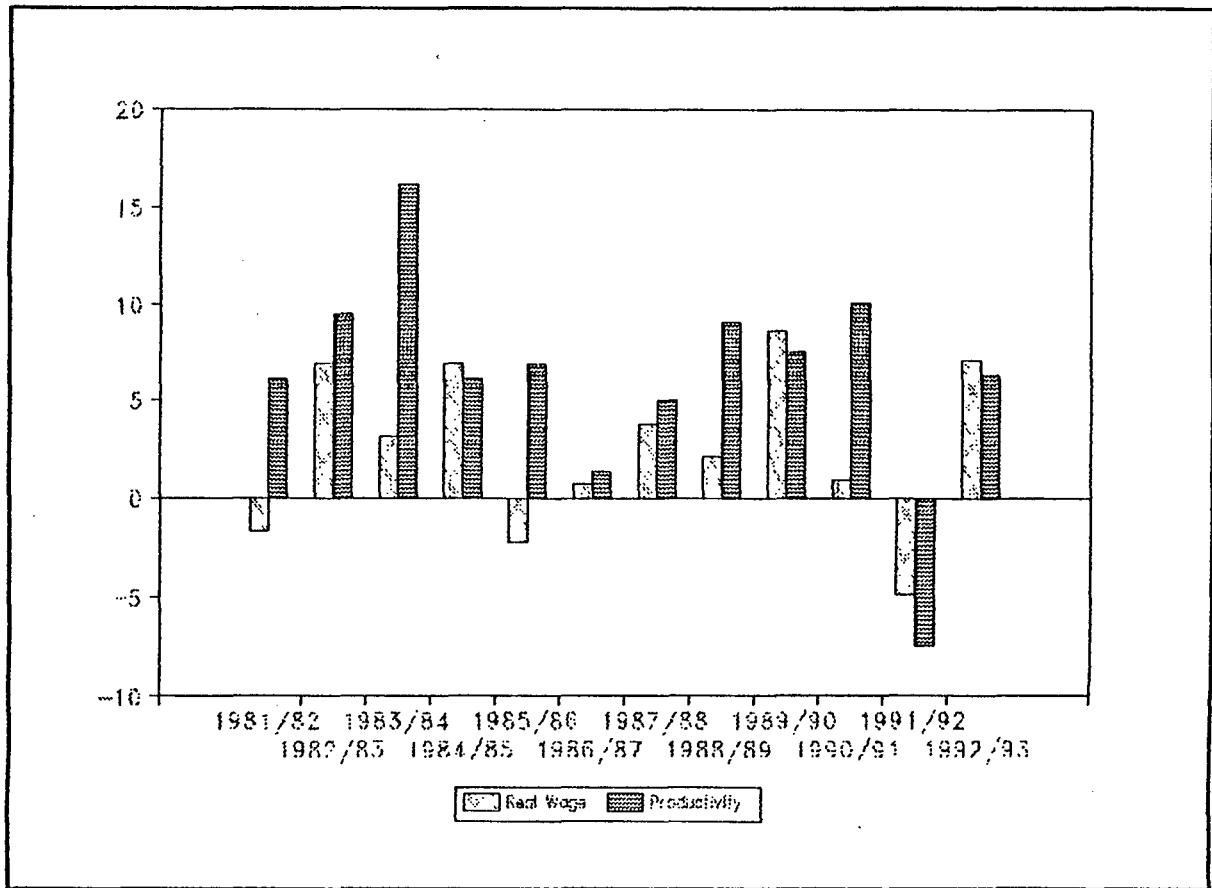
In spite of the general belief that there is much scope for employment in the small scale sector, the above table suggests quite a bleak picture. In fact, while the trend rate of employment has been experiencing a drastic fall in the rate of growth of employment in both the sectors (even sharper in small scale), the small scale sector shows even negative rates of growth of employment in two sub periods. If we look at the rate of growth of fixed capital, we see that in both the cases the trend rate is almost the same. In almost all the periods gross fixed capital has shown a positive rate of growth for both small and large sectors. While there is a sharp increase in the growth rate of fixed capital for the small scale in the latest period, the large group indicates a sharp decline. The trend rate of growth of capital labour ratio is in fact a little higher for the small scale. It has been shown that, in both large and small sectors while the labour productivity is increasing, capital productivity is decreasing significantly (Garg, 1996). The above analysis provides enough basis to conclude that the process of capital deepening has been taking place in all the different manufacturing industries irrespective of being big or small.

That there is increase in capital intensity in all these *ASI* sectors may be due to Government policies to encourage investment through low real interest rates. Depreciation allowance and deductions from profit tax have an effect of reducing effective tax rate on capital intensive projects (Ahluwalia 1991). At the same time, the rate of growth of employment in the organised manufacturing sector as a whole is in fact negative in the third period and in the

maximum number of industry groups, it has been declining over the three periods. This may have some connection with the investment incentives given by the Government in the 1980s. Many studies on production functions carried out in developed and developing countries have found that the elasticity of substitution in factor proportions is positive with respect to factor prices. This suggests that tax incentives to investment, to the extent that they are effective, work toward increasing the capital-intensity of the production process and work against the employment objective (Gandhi 1987).

The usual explanation for the increasing displacement of labour by capital in the factory sectors of manufacturing refers to the militant trade union activities. It is argued that there is a continuous increase in the rate of growth of real wages due to the collective bargaining pressure over time, and that extremely stringent labour laws have made it impossible to lay off the work force when it is needed. However, the macro evidence brought out in the third chapter as well as in the present chapter and the micro evidence discussed in the previous chapter, do not conclusively establish existence of a rigid labour market in the organised manufacturing sector. As we have already pointed out, while there is a continuous effort through several fiscal measures to make capital cheaper, ironically no measures are available from the government's side to increase the incentive for a labour intensive production process. There has been no initiative to improve labour productivity through investment in human capital which is the most important precondition for a labour intensive production process. As a result, the unskilled labourers have been easily and profitably replaced by machines and the few skilled labourers have been used both extensively and intensively, whenever more human hands were needed. In this process, these few skilled labourers have become more skilled and the organised manufacturing labour market has become more uncompetitive. It has been argued that, this increase in the use of a group of skilled workers leads to an increase in the overtime over and above the real wages. And that in turn leads to an increase in the rate of growth of real wages (Nagraj, 1994). Trade unions are not strong enough to protect the interests of the low skilled workers and they have also failed to react in a right manner as they are complacent with protecting the interests of the insiders only. In a way, the trade unions help the entrepreneurs to pursue the strategy of internal labour markets. Thus, labour unions as such are likely to play a minor role in determining growth in wages. More important is the strategy of the entrepreneurs in the production units, induced by several government policies.

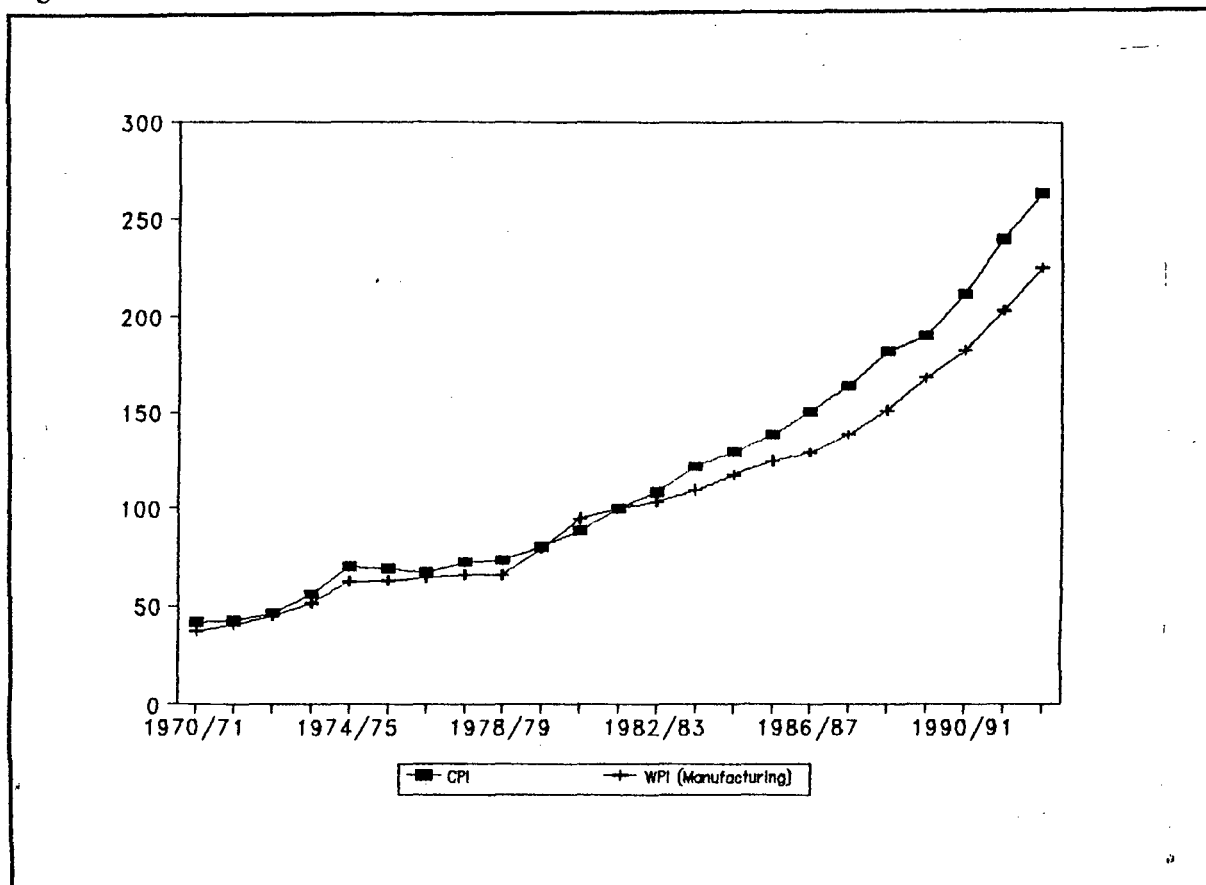
Figure 4.2: Rates of Growth of Real Wages and Productivity in Registered Manufacturing during 1980/81 to 1992/93.



However, increase in the real wages may not be a hindrance to new employment at all, if the rate of growth of real wages can be kept within the limit of the rate of growth of productivity as referred to in the first section of this chapter. Interestingly, if we consider the rate of growth of real wages and the rate of growth of productivity for the factory sector of manufacturing over the years of 1980/81 to 1992/93 (Figure 4.2), we see that the rate of growth of productivity is more than the rate of growth of real wage in eight out of twelve years. At the same time we have already pointed out that the rate of growth of employment in a number of sub-sectors under manufacturing not only decreases but also negative in some periods indicating a decline in the absolute number. For the factory sector as a whole, the rate of growth of employment increases marginally over the three periods. But this marginal increase may also come from the increase in the share of casual, temporary workers in the total work force (Nagraj, 1994), which is quite predominant in cotton textiles

and textile products (Dutta, 1996; Chatterjee, 1993). Let us consider this apparent contradiction in some more detail.

Figure 4.3: Trends in CPI and WPI (Manufacturing) during 1970/71 to 1992/93.



As we have argued in the first section, the easiest way to keep real wage growth within the limits of productivity growth is simply to ensure the prices of wage goods do not rise faster than that of the traded goods (manufactured goods). If we consider the Indian scenario in this respect (Figure 4.3), we will see a contradictory picture. In almost all the years, starting from 1970/71 on wards, consumer price index is higher than the whole sale price index, and in the later period, in fact, the difference between the two has increased. Naturally, there is an incentive for the entrepreneurs to reduce the labour content and increase in capital content for augmenting productivity.

We have already seen that labour productivity has been increased in a number of industrial categories through labour displacing technical changes. Even in those cases where, the rate of growth of employment has increased in the context of an increased productivity, the rate of growth of capital content is much higher than the rate of growth of employment. Thus, as a result of faulty government policies, even though it is possible to make the manufactured goods competitive in the world market, the increase in exports of these goods will not lead to increase in employment. Moreover, there is a limit to the possibility of substituting labour for capital as an instrument of productivity increase. Therefore, there is a good deal of ambiguity about the sustainability of this productivity increase in the long run. We take up these issues again later in the next section.

Section III: Opening up of the Domestic Market and Scope of Employment

Increase in capital deepening in the production process is almost a general characteristic for all industrial categories under manufacturing irrespective of being small or big. As a consequence of this typical behavior of the domestic manufacturing industries there should be an increase in the demand for capital goods. This increased demand for capital goods can be either catered by the domestic capital goods industries or through import of capital goods. If domestic capital goods industries play the major role in meeting the increased demand, the effect on the domestic economy in terms of output is most likely to be positive. And in terms of employment, though it will depend on the production process, at least the effect is expected not to be negative. On the contrary, if the domestic capital goods industries have to compete with the cheaper imported capital goods because of import liberalisation, domestic production is quite likely to be affected adversely. In this context it may be worthwhile to recall the results suggested by the framework developed in the second chapter.

Table 4.4 depicts the output and employment scenario of capital goods industries in the reference period. In each of the industrial categories, rate of growth of net value added has declined from first to the third period. While for the industrial category, non-electrical machinery, rate of growth of net value added has the lowest value in the period in between, for the transport equipment the period shows the highest value. The other two categories

show continuous decline over the periods. Moreover, Machine tools industry indicates absolute decline in its net value added in the last two periods. From these pieces of evidence, it may be concluded that the source of supply as a response to the increased demand is not the domestic capital goods sectors.

Table: 4.4: Growth Rates Of Net Value Added and Employment in the Capital Goods' Industries⁸			
Net value Added			
Industries	Period I 1980/81 to 1984/85	Period II 1985/86 to 1990/91	Period III 1991/92 to 1993/94
Non Elec.Machinery	8.93	3.20	6.31
Machine Tools ⁹	11.03	(-)4.08	(-)5.77
Electrical Machinery	15.75	12.11	1.23
Transport Equipment	9.20	10.40	8.24
Employment			
Non Elec.Machinery	1.55	(-)0.39	1.14
Machine Tools	(-)1.69	(-)6.20	(-)4.73
Electrical Machinery	2.77	2.19	0.71
Transport Equipment	1.56	(-)0.22	1.30

Source: Calculated from several *ASIs* (Summary Results for the Factory Sector)

Note: The growth rates are annual averages for the three periods, percentage per annum.

These are the industries which are considered to be the traditional import substitutes in the country. To understand how far the incapability of the domestic capital goods industries to respond in the changed scenario is due to the increased competition with the liberalised

⁸ We have considered only non-electrical machinery, electrical machinery and transport equipments as relevant sectors within the capital good's sector.

⁹ Machine tools are actually a sub-group under manufacturing of non-electrical machinery.

imports, we have to examine the extent of the capital goods liberalisation process in some detail.

From the mid 1980s onwards, the government of India has started taking up a series of policy measures concerning liberalisation of trade and industry. A general move towards liberalisation of imports, especially of capital goods and raw materials, and the emphasis on exports were the main policy changes involving the trade regime. The consequent expansion of the Open General License (OGL) list and the increase in the share of capital goods in the OGL list can give a comprehensive picture about liberalisation of capital goods imports from the policy perspective.

Table: 4.5: Expansion of OGL List: 1978/79 to 1988-91			
Year	No of Items Under OGL	No of Capital Goods Items Under OGL	Capital Goods as percentage of items under OGL
1978-79	534	252	47.1
1979-80	702	385	54.8
1980-81	776	428	55.1
1983-84	959	559	58.2
1984-85	1055	653	61.8
1985-88	1185	850	71.7
1988-91	1274	944	74.0

Source: Reproduced from Sen et al 1992

The OGL list for imports has been expanded both by inclusion of new items and by transfers from the licensed list. The Long Term Import Export (LTMX) policy measures suggested liberalisation on a priority basis, import of capital goods and raw materials, by shifting these to OGL list and via tariff reductions. Both the increase in the number under the OGL list and increase in the share of the capital goods to 74 percent^(Table 4.5) show the extent of liberalisation of imports of capital goods (Sen, 1992). Consequently, the imported capital goods have become relatively cheaper.

Now, to understand how far the imported capital goods actually entered into the domestic production, we have to consider the imported capital good's intensity in the production process. For the calculation of the import intensity of capital goods, we have taken the measure of total capital goods imported to total net value added for the specific industry groups.¹⁰ Unfortunately, *ASI* data source is totally silent about the import and export figures of the factory sector of manufacturing. The only source which gives data on imports and exports for selected industry/industry groups is the *Company Finance Studies* of RBI. They also give corresponding data for net value added and net sales. However, this data source has certain problems. First, this does not cover all the industrial classifications by even two digit level under manufacturing. Secondly, this is based on a sample companies of non governmental and non financial nature. Finally, the number of companies covered under each study varies, resulting in the problem of comparability. Therefore, we have not tried to calculate any aggregate figure. We have instead attempted to bring out some broad trends from the ratios. To make the series comparable, we have divided the value figures by the number of sample companies.

¹⁰ Import intensities have been calculated in several ways depending on the specific purposes. Naturally, the import intensity may vary from one measure to the other. For some notable attempts to measure import intensity, see Mani, 1991, Siddhartan, 1989 etc.

Table:4.6 : Import Intensity of Capital Goods			
Industries	Period I 1980/81 to 1984/85	Period II 1985/86 to 1990/91	Period III 1991/92 to 1993/94
Tea	0.32	0.15	1.09
Tobacco	2.50	1.48	3.42
Cot. Tex	5.54	11.54	11.39
Silk	4.43	7.52	12.90
Trans. Equip	5.18	5.37	6.67
Electric. Mech	3.01	3.69	3.66
Other Mech	5.59	3.98	6.18
Medi. & Pharma	1.03	2.23	2.62
Basic,ind Chem	6.94	7.42	8.72
Foundries	6.35	4.67	7.61
Ferr/nonfers metal	3.94	4.90	9.47
Cement	5.13	4.42	1.37
Rubber	2.38	2.85	12.83
Paper	4.88	4.91	4.29

Source: Calculated from RBI Bulletin various issues

Table 4.6 suggests a clear increase in the capital goods imports by almost all the industry groups from the first period to the third period. The industrial groups of beverage and tobacco, cotton textiles, silk, ferrous and non-ferrous metal, foundries and engineering industries and rubber and rubber products show quite a sharp increase in the import intensity of capital goods. Interestingly, the capital goods industries, especially non electrical and electrical machinery indicate marginal increase in the import intensity in the third period compared to the first. At the same time, these are the industries which are generally more capital intensive, and where the capital output ratios increase more sharply than in the others.

Two conclusions can be drawn from the above discussion. First, capital intensity in almost all the industrial categories of manufacturing (at two digit level) has been increased from the first to the third period in the context of a decrease in the rate of growth of domestic

capital goods production. Secondly, the portion of the domestic demand for capital goods catered through imported capital goods has increased from the first to the third period. However, due to lack of appropriate data, it is not possible to say anything definitely regarding the causal relationship between the two phenomena. But, the facts of rising demand for capital goods coming from the increasing use of capital goods in the domestic industries and several shifts in the trade policy regime towards increasingly liberalised imports of especially capital goods, lead to a probable conclusion that even cheaper imported capital goods are slowly capturing the domestic market replacing capital goods produced in the country¹¹.

These capital goods industries are the most capital intensive industries among all the classes. Thus, it may be argued that labour force in these sectors are already "rationalised" and there will not be much impact on employment, first, because of the decrease in the rate of growth of the net value added. and secondly due to absolute decline in the case of machine tool industry. an absolute decline in the net value added But, interestingly, Table 4.4 suggests a different fact. Not only that the rate of growth of employment decreases in all the categories, but also, in some cases (non electrical, machine tools, transport equipment), the rate is even negative implying an absolute decrease in the work force. This again might be an indication of retrenchment.

These industries face severe competition from the liberalised imported capital goods leading to production crunch in these sectors. Consequently, to compete in this changed scenario, they go in for a capital augmenting technical change. Thus, labour is displaced in these industries due to the change in both volume and process of production, and naturally the process becomes quite sharp.

¹¹ In 1994/95, however, the capital goods sector performed remarkably well and the trend persists in 1995/96 as well (Parikh eds, 1997). There is an argument that after the initial three years of recession, domestic capital goods industries are becoming competitive in the process of liberalisation. As my reference period ends with 1993/94, I am not entering into this debate.

We will now turn to the question of export and employment. In the second section we have tried to demonstrate how the manufacturing units opt for labour displacing technical changes largely due to inappropriate domestic macro policies. It has in turn been expected that there will not be much connection between increase in productivity and consequently better performance in the international market, and increase in employment. Here we narrow down the focus to the performance of certain specific sectors for which the export intensity is relatively higher.

The activities related to exports in India are still substantially an unorganised sector phenomena. Thus the *ASI* data, which give information only about the organised factory sector, are not appropriate to analyse the related features of export performance in the economy. But at the same time some amount of manufacturing exports have been taking place from small as well as large manufacturing units in the factory sector. The Table 4.7 gives us an idea about the rate of growth of total exports during 1980/81 to 1992/93 and percentage share of the factory sector (referred as large sector) to the total exports for the year 1992/93.

Table: 4.7 Growth Rates of Exports of Some Major Product Groups Of Large and Small Scale Industries¹²			
Industry Groups	Growth Rates	%share of LS	%share of SSI
Basic Chemicals	41.4	45	55
Chemical Products	20.8	97.2	2.8
Leather Product	23.5	20	80
Processed Food	17.7	35	65
Readymade Garment	27.3	10	90
Processed Tobacco	28.5	52.7	47.3

Source: Compiled and calculated from Garg 1996.

Note: The trend rate of growth of exports is calculated for the years 1980/81 - 1992/93.

¹² Data for SSIs are taken from SIDO statistics prepared by the Small Industry Development Organisation. The SSI, Factory Sector mostly presents large SSI units; SSI (SIDO), on the other hand represent mostly small units but comprise factory sector units also. Thus, in the above table, the large sector will definitely represent the majority of the factory sector, but at the same time some portion of the factory sector will be represented through the SSIs. Therefore the figures for the factory sector may be a little higher than the large units.

Table 4.7 suggests that the maximum rate of growth of exports has taken place in the sector of basic chemicals, followed by processed tobacco and garments. While the organised factory sector has considerable share of exports in almost all the sectors, the percentage shares for the ready made garments and the leather products are quite low at the same time.

But selection of the different sectors in terms of percentage share of exports by the factory sector may give a misleading picture. It may so happen that even though the percentage share of exports of a specific commodity by the factory sector is quite low, it can constitute a considerable proportion of its total sales. And, in fact, it is more important to analyse the impact of exports on a sector's output and employment. Thus, selection on the basis of export intensity will be more meaningful. We have defined export intensity as the ratio between total exports and total net sales of a specific sector. Just like the import intensity figures, we have calculated the export intensities which gives only an approximate picture. Table 4.8 gives the export intensity figures for some industries for which it is relatively high.

Table: 4.8 Export Intensity Of Some Selected Industry Groups			
Year	Chemical Products	Processed Tobacco	Cotton/blended Textiles
1987/88	3.83	16.84	7.07
1988/89	4.48	14.19	6.56
1989/90	5.61	17.76	8.6
1990/91	6.07	14.6	9.32
1991/92	6.11	20.4	12.19
1992/93	6.27	20.87	12.82

Source: Calculated from various issues of RBI Bulletin

Export intensity has increased over the years for all the industrial categories depicted in Table 4.8. While both the rate of growth of exports and percentage share by the factory sector for the chemical product is maximum, its export intensity is not as high as in the other two industries. In terms of export intensity, processed tobacco comes to the top. The performance of the cotton and blended textiles is also fairly good. The main component of the cotton/ blended textiles, in terms of exports, is readymade garments. If we exclude the export of gems and jewellery, where import content is very high and net value added is very

low, ready made garments are India's number one export today. They alone make 17 percent of total manufactured exports of India (Chatterjee, 1993). Though it is mainly a decentralised activity, the export intensity for the organised factories of this sector has not only been increasing over the years, but it also reached to around 13 percent of the total sales figure in the last year.

This should have considerable impact on the economy in general and on the specific sectors in particular. The figures for the rate of growth of net value added in these sectors and the rate of growth of employment may give us some idea about the impact of export performances of these sectors (Table 4.9).

Table: 4.9 Rates Of Growth Of Net Value Added And Employment in Some Selected Manufacturing Sectors			
Net Value Added	Period I	Period II	Period III
Beverages/Tobacco	20.9	8	6.1
Ready Made Garments	15.5	31.5	55.3
Chemicals	10.5	11	25.8
Employment	Period I	Period II	Period III
Beverages/Tobacco	(-)2.5	7.5	(-)0.8
Ready Made Garments	5.4	12.7	29.8
Chemicals	0.9	0.4	4.7

Note: The growth rates are annual average for the three periods, percentage per annum.
Source: Calculated from several ASIs.

Technically, increase in the demand for exports leads to an increase in the rate of growth of output, if the domestic conditions remain the same. The rate of growth of net value added has drastically gone down for processed tobacco in the second period in the context of a more or less high export intensity and 28 per cent of trend rate of growth of exports in general. Even in the third period, the declining trend in the rate of growth persists, when export intensity has reached around 18 percent on an average. The behaviour of the employment figures is also erratic. There is apparently no explanation for the sharp increase in the rate of growth of employment in the second period when there is a sharp decline in the net value added. Thus, much of the explanation may be lying in the domestic demand situation and the production process generally. In this context, it may be worth recalling

here that we could not make out any connection between productivity and employment for this sector.

The rate of growth of net value added is phenomenal in the readymade garment manufacturing sector. The increased share of exports most probably played an important role here (Chatterjee et al, 1993; Ramaswami et al, 1998). The export intensity could have been much higher if the data separately for readymade garment industry were available. Though the rate of growth of employment has gone up from the first to the third period with a sharp increase in the second period, it is by no way comparable with the rate of growth of net value added. The readymade garment sector is supposed to be a labour intensive sector due to its typical nature of production. But even in this case, the capital labour ratio has gone up individually in all the sub-periods. This might have happened partly because of the under-reporting of number of workers. Due to their labour intensive nature, the large units find it more profitable to go for subcontracting which necessarily lessens the labour cost. It happens to be so because quite a number of these subcontracting units are outside the purview of the factory sector as these subcontracting units often work in the households (Chatterjee et al 1993). Less labour cost in these subcontracting units implies that wages and other benefits in these sectors are much smaller than in the factory sector. This leads to the conclusion that, in this case, the growth in exports has led to an increase in production which in turn, has created employment. But the kind of employment this has generated may not be considered "gainful".

For chemical products, a clear relationship can be discerned between rate of growth of net value added and rate of growth of employment. But for this sector generally low export intensity suggests that the cause behind the increase in the rate of growth of net value added may not be the export growth performance in this period.

All these results suggest that there is nothing automatic about the exports to increase the rate of growth of net value added and employment. Due to the absence of appropriate government policies, employment will not be generated in the organised manufacturing sector, even if the rate of growth of exports is increasing and exports are becoming competitive in the world market.

Conclusion

In this chapter we have tried to capture both the static and the dynamic aspects of the policy changes in the trade regime. The process of reallocation we have discussed in the previous chapter, has been sought to be linked up with the changes in the trade policy regime. A probable relationship between import liberalisation of capital goods and the slowdown of production and employment in the domestic capital goods industries (traditional import substitutes) has been shown. We can say that, at least a part of the unemployment generated in the organised sector may be directly related to the changes in the trade policy thrust.

Discussion of the dynamic issue of distribution points out that while there is a necessary connection between stabilisation policies and decrease in growth, employment and increase in poverty, theoretically, there is no such connection with structural adjustment and the above variables. Even though import liberalisation may create unemployment, if the domestic policies are well shaped export promotion strategy can create enough employment in the organised sector manufacturing.

But, considering the facts regarding Indian organised manufacturing sector, we have seen that the technological changes, in the course of time, are mainly labour displacing, primarily due to inappropriate macro policies of the country. Thus even though the adjustment policies take favourable shape for an export promoting growth process, and in the short run international competitiveness is achieved, it may not lead to employment. Evidence from some relatively higher export intensive sectors has generally supported this idea.

Appendix to Chapter IV

Table A-4.1: Capital Output Ratio for the Registered Manufacturing During 1980/81 to 1993/94			
Industry Group	1980/81to 1984/85	1985/86to 1990/91	1991/92to 1993/94
(20-21)	1.393	1.266	1.505
(22)	0.540	0.829	0.756
(23)	1.197	1.321	1.601
(24)	1.583	1.606	1.838
(25)	0.704	1.162	1.194
(26)	0.674	0.804	0.572
(27)	1.130	1.311	1.749
(28)	2.604	2.905	2.502
(29)	1.063	1.081	0.935
(30)	1.940	1.521	1.457
(31)	2.180	2.104	1.802
(32)	1.685	3.269	2.860
(33)	3.591	4.095	5.719
(34)	0.898	1.159	1.681
(35)	0.948	1.079	1.236
(36)	0.842	0.977	0.980
(37)	1.403	1.496	1.378
(38)	0.881	0.801	0.686

Source: Annual Survey of Industries

Table A-4.2: Labour Productivity in the Registered Manufacturing During 1980/81 to 1993/94

Industry Group	Period I 1980/81to 1984/85	Period II 1985/86to 1990/91	Period III 1991/92to 1993/94
(20-21)	0.252	0.228	0.260
(22)	0.161	0.116	0.132
(23)	0.205	0.186	0.202
(24)	0.367	0.373	0.554
(25)	0.118	0.095	0.105
(26)	0.287	0.258	0.420
(27)	0.191	0.150	0.161
(28)	0.751	0.266	0.337
(29)	0.236	0.188	0.309
(30)	0.695	1.049	1.346
(31)	0.879	0.827	1.278
(32)	0.557	0.250	0.353
(33)	0.361	0.431	0.538
(34)	0.251	0.297	0.320
(35)	0.391	0.509	0.604
(36)	0.508	0.708	0.905
(37)	0.316	0.426	0.530
(38)	0.324	0.568	0.922

Source: Annual Survey of Industries

Table: A-4.3: Rate of Growth of Fixed Capital in the Registered Manufacturing			
Industry Group	Period I 1980/81to 1984/85	Period II 1985/86to 1990/91	Period III 1991/92to 1993/94
(20-21)	8.494	11.670	15.177
(22)	9.423	9.769	24.200
(23)	10.568	0.627	22.653
(24)	20.884	13.184	23.113
(25)	12.382	16.271	-9.130
(26)	11.157	19.716	40.179
(27)	13.630	7.241	47.986
(28)	18.231	8.389	14.563
(29)	8.155	14.415	17.489
(30)	26.195	10.374	24.653
(31)	3.660	11.436	17.025
(32)	21.351	7.638	12.542
(33)	11.392	13.676	12.241
(34)	7.727	16.352	28.870
(35)	11.113	2.994	14.143
(36)	11.589	12.813	10.337
(37)	7.805	2.639	12.724
(38)	11.680	12.987	30.322

Source: Annual Survey of Industries, Summary Results for the Factory Sector.

Chapter V: Conclusion

The relationship between trade orientation and economic performance has long been an issue of professional disagreement. The experience of trade liberalisation during the last two decades has served to intensify this debate. While Bhagavati, a representative spokes person of trade liberalisation, claims that, "*the question of the wisdom of an outward oriented (export promoting) strategy may be considered to be settled*" (Bhagavati, 1987: 257), Helleiner maintains that "*the World Bank, in particular, has recently directed major research attention to trade and industrialisation policy issues . . . But this research which failed to address many of the most interesting questions, was suspect in many circles from its outset because of the known predilections of its organisers; and has ultimately proven unconvincing*" (Helleiner, 1990: 879).

Studies of the recent changes in the trade policy regime have stressed the impact of the programme on macro performance in particular output growth, balance of payments and on inflation. The result of the empirical analyses contained in these studies have failed to produce a consensus.

A significant lacuna in the existing literature is to be noticed in the case of the relationship between trade liberalisation and employment. No doubt, the structural changes in the pattern of production induced by trade liberalisation have implications for labour utilisation and wages (Kirkpatrick and Evers, 1992). However, a few studies on labour adjustment and trade, focus on industrial countries where changes in trade policy (such as tariff reductions) have typically been small. The most radical trade reforms in recent years have occurred in the developing countries. Therefore, the omission of employment issues induced by trade liberalisation in the developing country context is all the more surprising since the possible unemployment effects of trade liberalisation have been a major problem for the policy makers. In point of fact, this has weakened the government commitment to reform programme. The present study is only a feeble attempt at filling this gap.

Any policy reform can be viewed as producing two kinds of outcomes as far as the labour market is concerned: first, improvement in resource allocation in a static sense, and secondly, the distributional outcome. While any reallocation that improves allocative efficiency is likely to have a positive impact on the possibilities of long term growth; it does not guarantee a favourable interpersonal distribution of welfare.

The study has suggested a simple theoretical framework to illustrate the possible short run employment consequences of a tariff reform. This frame work has been developed by adding some specific assumptions to the standard Ricardo-Viner model of trade and employment with real wage rigidity to contextualise the problem.

The new framework suggests as a result of tariff reduction reform, a reallocation of the work force from the organised to the unorganised sector, especially of male labourers. Because of the strong presence of trade unions, only those workers who are yet to be confirmed, are retrenched. In the unorganised sector women labourers face competition arising out of the organised sector and are forced back to farm employment because of various socio-economic rigidities. They may expect employment in the newly emerging export sector with a lower wage rate. In this way, it becomes quite clear that the labour market "specificities" are extremely important in the analysis of the probable impact of trade liberalisation on the labour market. However, a thorough analysis of the labour market specificities or the so called rigidities, suggests that much of the imperfection originates outside the periphery of the labour market.

While looking at the problem empirically, we have been constrained by lack of sufficient data to adequately substantiate the causal relationship between the trade policy changes and the process of reallocation in the labour market. This has led us to deal with the process of reallocation at the initial stage. It is argued that labour market specificities are extremely important to determine the extent of reallocation process, which in turn refers to the question of flexibility and have direct relationship with the success of trade liberalisation.

Thus our analysis and documentation of labour market reallocation have major bearings of these rigidities.

The argument that as the labour legislation are excessively protective, the organised private sector strongly prefers maximum use of capital in the place of labour is very common. Interestingly both macro and micro evidences which have been made use of, give us enough scope to contradict this alleged rigidity of the organised sector labour market. Data suggest not only that the organised sector is failing to generate new employment but also that a considerable amount of laying off of the labourers is taking place.

These jobless workers almost naturally find their way to the unorganised sector. Usual principal status employment elasticity is generally much higher in the unorganised sector than the organised sector. So, the hypothesis of growing labour absorption by the unorganised sector is generally true. But even in this case, elasticity is significantly lower than one in the first and third period and, only in the period in between, it is higher than one. This is the period when profligate social sector government expenditure reached its peak which led ultimately to the crisis of 1991. Government expenditure actually influenced the non-farm part of the unorganised sector employment. It is naturally to be expected that, with the stabilisation policies (where, the main objective is to curb demand especially emanating from the government expenditure), social sector government expenditure will fall and consequently, the number of employment in the non-farm sector will be affected. In this circumstance only alternative left for the jobless would be to fall back on agriculture. This may lead to an increase in disguised unemployment in the farm sector.

As India's trade sector is still insignificant compared to the size of the national economy, establishment of a direct relationship between trade policy reform and the labour force reallocation in terms of a economy wide analysis has not been possible. However, a probable relationship with import liberalisation of capital goods and the performance of their domestic substitutes may be discerned. We can say that, at least a part of unemployment

generated in the organised sector may be due to the changes in the trade policy thrust from the mid 1980s.

Since our concern is the labour market, dynamic implications of a change in the policy thrust of the trade regime have also been considered. While stabilisation has a necessary relationship with the decrease in growth and employment, structural reforms in general and changes in the trade regime in particular, theoretically do not have such relationship with the above macro-variables. Even though import liberalisation may create unemployment, if the domestic policies are formulated appropriately, export promotion strategy can create sufficient employment in the organised sector of manufacturing.

One important issue that has not been addressed in the present study mainly because of the dearth of data, is the issue relating to the unorganised sector in detail. As the unorganised manufacturing has still the major share in India's export basket, such as ready-made garments, leather products etc., an analysis of the macro performance of the economy due to trade liberalisation without the analysis of the unorganised manufacturing is bound to pose a major constraint. Future research can be pursued on the basis of primary data on these sectors specially focussed on employment issues.

Theoretically, the framework within which we worked suggested that the adverse impact of trade liberalisation would not be uniform on all the segments of the labour market. The empirical facts suggested by the study have failed to analyse these aspects, primarily because of insufficient information given by the macro data set, available in India. An interesting research agenda which will consider the employment impact of trade liberalisation in the context of segmented labour market by skill and gender can also be offered.

A major theme that unites the present study with some of the very recent studies of some other developing countries on the same issue, is that in spite of the presence of stringent labour legislation, all these markets are fluid enough to adjust to trade shocks. Firms shift the burden imposed by payroll taxes (Gruber, 1997) to employees by the real wages;

employees circumvent restrictions on firing by replacing permanent with temporary workers. Based on this kind of evidences, some policy makers have concluded that targeting the labour market for regulatory reform is unnecessary (Harrison and Leamer, 1997). In this context, it may be worthwhile to inquire into the actual role played by the labour market institutions, such as the trade unions, in determining the impact of recent policies on employment and wages. Again, how labour market regulations directed at the formal sector affect the informal sector may also be an issue to be probed. A study on Colombian experience (Bell, 1997) suggests that high minimum wages reduce employment in manufacturing. It is also likely that the high minimum depressed the informal sector wages, as workers were driven to the informal sector. This issue has important implications for the debate on labour standards in developing countries.

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