Labour Market Regulations and Economic Outcomes: An Analysis of Select Indian States since Early 1980s

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MASTER OF PHILOSOPHY

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DECLARATION

This is to certify that the dissertation entitled "Labour Market Regulations and Economic Outcomes: An Analysis of Select Indian States since Early 1980s" submitted by me is in partial fulfillment of the requirements for the award of the degree of Master of Philosophy of Jawaharlal Nehru University. This dissertation has not been submitted for the award of any other degree in this University or any other University and is my own work.

Swayamsiddha Pande Swayamsiddha Panda

CERTIFICATE

We recommend that this dissertation be placed before the examiners for evaluation.

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List of Abbreviations

ADB Asian Development Bank

ASI Annual Survey of Industries

CAGR Compound Annual Growth Rate

CPI-IW Consumer Price Index for Industrial Workers

CSO Central Statistical Organisation

EPI Employment Protection Index

EU European Union

GCI Global Competitiveness Index

GVA Gross Value Added

IDA Industrial Disputes Act

ILO International Labour Organisation

IMD Institute for Management Development

IMF International Monetary Fund

ITUC International Trade Union Confederation

KILM Key Indicators of Labour Market

NSDP Net State Domestic Product

NVA Net Value Added

OECD Organization for Economic Cooperation and Development

PIM Perpetual Inventory Method

RBI Reserve Bank of India

ULC Unit Labour Cost

UN United Nations

WEF World Economic Forum

WPI-MP Wholesale Price Index for Manufactured Products

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Introduction

In mainstream or neoclassical economics, as is well known, labour has been treated as any other factor of production. The remuneration accruing to labour is simply its price, which, according to the same paradigm, should be determined by supply and demand, as in any other factor market. For a while, that brand of economics took a back seat during the hey-days of Keynesianism. But now neoliberal economics has overshadowed all other considerations, be they social, political or ethical, and has extended the hegemony of the market over all aspects of economic life, including the world of work. The ascent of finance capital, bringing in its wake vociferous calls for labour market flexibility, and increasing casualisation, has increased the vulnerabilities of labour, while cementing the growing power of capital.

Even if global capitalism is a single genus, it becomes a distinct species in each specific country, depending on its specific history of development. Therefore, different countries have distinct social structures of accumulation (Banerjee, 2005, p.16). This study aims to elaborate on that theme in order to understand the specificities of the conditions of workers over the last three decades in the Indian organised manufacturing sector.

With globalisation being the buzzword in today's world, the advocates of globalisation who believe it to be the mantra for development argue that economic globalisation has changed the nature of competitiveness. Therefore, in order to stand up to the cut throat competition, there is a renewed need for reduced wage costs and greater flexibility in production. The nation's primary agenda should be to assemble the workers around the employers to produce more and more profit. If employers demand concessions from the workers, this ought to be endorsed. The supporters of globalisation believe that trade and investment can act as the best bolsters of raising labour standards in the developing countries, provided labour market flexibility and capital market restructuring accompany them. At the outset, labour market flexibility and capital market restructuring appear to be symmetric policies. But at a deeper level, both of them serve to establish the supremacy of capital at the expense of workers. However, as development is more than just the accumulation of capital and the enhanced efficiency of resource allocation, the role of the government in the

labour market assumes even greater importance in the face of the multi-faceted challenges posed by the ascendant neo-liberal regime.

In case of India, the employers' associations, the various chambers of commerce, are all preoccupied with projecting existing labour laws as the culprit for poor economic outcomes. The argument that is put forth is that the regulatory framework needs to be more flexible, so as to allow the entrepreneurs freer operations in the era of competitiveness. The supply-side theories attribute the indifferent growth performance of Indian industry to pressure on profits by workers. Only reduction in wages can make Indian products competitive in the world market, it is argued, but in organised manufacturing, because of the trade unions and complementary labour laws, the wages are difficult to reduce. So, the labour laws need to be amended in favour of capital in order to make flexibilisation easier. What is often ignored in such policy prescriptions, is that the erosion of wages would, of course, lower costs and prices to some extent, but so would it reduce the purchasing power of consumers, in other words, the effective demand. Thus, 'reduce wage' cannot be a nation's slogan. On the contrary, it is the obligation of the nation to look after the citizen's well-being. This is where the rights of workers as citizens come into prominence.

However, it is indeed tragic that the State has displayed an apathetic attitude, even in the face of the growing assault on labour rights by capital in this era of globalisation. This gets reflected in the stance adopted by the Second National Labour Commission that has considered the 'competitiveness of nation' argument as an axiom. The chapter on recommendations states: 'The context makes a special mention of the need to attain and retain the degree of "international competitiveness" that our country needs in the era of globalisation' (GoI 2002: Vol.2, Section 1.19, p.2). The recognition of such market based sentiment has been duly expressed in the observations of the Chairman of the Task Force on Employment Opportunities constituted by the Planning Commission in 2001: 'India's labour laws have evolved in a manner which had greatly reduced the flexibility available to employers to adjust the labour force in the light of changing economic circumstances' (GoI 2001, Sec. 8.52, p.171). He further goes on to recommend that 'changes in the laws are therefore necessary if we want to see rapid growth'. More recent government initiatives and proposals have continued along the same lines, echoing the views that the need of the

hour is greater labour market 'flexibility' and attaining that, would rid the economy in general, and the industrial sector in particular, of all economic evils.

This is the background against which this study examines the performance of the organised manufacturing sector in case of select Indian states. The purpose of this paper is to critically investigate the claims made in favour of introducing greater flexibility in the labour market. This is done through an empirical enquiry of the various propositions, popular in neoliberal policy circles. The focus of the study is on the organised manufacturing sector in India.

Scope and Objectives

The study offers a careful summary of the trends in conditions of work in the Indian factory sector and a critical analysis of the wage, profit and productivity behaviour in the Indian manufacturing sector in the last few decades. It has the following objectives:

- To critically appraise the past research and documentation on the impact of labour regulation measures on growth and employment in industry;
- To review labour legislations and policy in terms of their objectives, coverage, contents and practices;
- To undertake comparative analysis on labour regulation and industrial performance (in terms of growth of output and employment) in few selected states;
- To subject the examination of the growth and employment performance in terms of industry-groups at the 2-digit level to find if there are any discernible patterns.

Data Sources and Methodology:

The study uses secondary data collected from Annual Survey of Industries (ASI). The ASI frame work is classified into two sectors, the census sector and sample sector. The census sector covers all factories employing 50 or more workers and using power and 100 or more workers not using power. The sample sector covers remaining factories. The census sector and sample sector together are called factory sector. The present study is based on factory sector data and covers the period from 1980-81 to 2007-08.

For the two-digit level time series data, the ASI data provided by the Economic and Political Weekly Research Foundation (EPWRF) has been used. They have prepared these time series data, by using ASI data of the Central Statistical Organisation (CSO) and the concordance table between NIC 1998, NIC 1987 and NIC 1970.

For data on aspects related to industrial relations, like industrial disputes, trade unions, etc, the main data source is the Labour Bureau, with its various publications like the Indian Labour Statistics, Indian Labour Year Book, etc.

All the monetary values given were adjusted for 1993-94 prices by using appropriate deflators, the Wholesale Price Index (WPI) numbers and the Consumer Price Index for Industrial Workers wherever appropriate. The index series for different base years was spliced and appropriate adjustments were made to set 1993-94 as the base year. The source for the price indices series was the Handbook of Statistics on Indian Economy, published by the Reserve Bank of India. The choice of 1993-94 prices was also a matter of convenience as it is one of the middle years of the time period considered in the study.

Selection of States

The states included for analysis were selected on the basis of their per capita net state domestic product and their share in net value added in the aggregate manufacturing sector's net value addition¹. The major comparable Indian states were ranked

¹ Refer to table I and II provided in the annexure for details on ranking and selection of states.

according to their performance in terms of per capita net state domestic product and net value added (as a percentage of all India net value added in the manufacturing sector) over a period of four years each, and finally, the ranks assigned to the states were averaged to get the final rankings. The North Eastern states were not considered as they have their own set of internal problems, and states like Bihar, Madhya Pradesh and Uttar Pradesh have not been included as they split up into two, at a later stage.

Gujarat and Tamil Nadu were picked among the states performing well, while Rajasthan and Orissa were chosen among the states ranked towards the bottom end of the scale.

Period of Study

The time period considered in the study for looking at the performance of the organised manufacturing sector, is from 1980-81 to 2007-08. The period of 27 years from 1980-81 to 2007-08 has been divided into two periods, the first period up to 1997-98, and the second period from 1998-99 onwards, for the purpose of the analysis. This division is guided on the basis of significant changes in the coverage of ASI in the case of industries not classified as manufacturing, which has occurred over the years. The ASI has excluded certain industries like electricity undertakings from 1998-99 and various departmental undertakings since 1999-2000 from the purview of the manufacturing sector. So instead of a continuous time series, the data series has been broken into two periods for the purpose of analysis, the first period being from 1980-81 to 1997-98 (including electricity and other departmental undertakings) and the second period ranging from 1998-99 to 2007-08, accommodating the change in coverage scheme of the ASI.

Variables Used

Output

This study has used Net Value Added at constant prices (and Gross Value Added at constant prices wherever appropriate), as a measure of output. There are two distinct approaches to get the figures of real value added, namely, the single deflation method and the double deflation method. In the single deflation (SD) method, nominal value added is deflated by the output price index (Goldar 1986; Ahluwalia 1991). The single

deflation method is based on the assumption that the price of intermediate inputs and raw materials relative to the price of output is more or less constant for the period. On the other hand, the double deflation (DD) method deflates output and material inputs separately and then computes the real value added (Balakrishnan and Pushpangadan 1994). The main drawback of DD is the estimation of an appropriate price index for material inputs.

The present study uses the single deflation method to get the real figures for the value added measures.

Capital

Several methods have been employed in the literature to measure capital. In many studies, the capital unit is treated as a stock measured by the book value of fixed assets (Ray 2002; Kumar 2006) while in others it is considered as a flow, measured by the sum of rent, repairs, and depreciation expenses. In other cases, the perpetual inventory method (PIM) has been adopted for constructing capital stock series from annual investment data. In PIM, it is assumed that the flow of capital services is proportional to the stock of capital (Ahluwalia 1991; Balakrishnan and Pushpangadan 1994; Trivedi et al 2000; Trivedi 2004). Each of these measures has its own shortcomings.

In the present study, 'total fixed assets' as given in the ASI reports has been used to represent capital in the organised manufacturing sector. The series for WPI for machinery and machine tools has been used to deflate fixed capital assets and compute value of capital at 1993-94 prices.

Labour

The total number of persons engaged has been used as the measure of labour input and the total emoluments has been used as the measure of labour compensation, while considering the labour costs. While considering the employment figures, the number of persons engaged was preferred than to the total number of workers alone. It has been mentioned in the study, wherever the number of workers has been considered as a measure of labour input, for instance, while calculating net value added (in real terms) per worker, or share of wages in net value added and so on.

Wage per worker refers is derived by dividing the wages to workers by the number of workers. It excludes the imputed value of other benefits, employers' contribution to old age benefits and other social security charges which are reported separately.

Organisation of the Study

The first chapter provides an overview of the theoretical positions of the contending perspectives and brings out some conceptual issues associated with them. The second chapter provides a survey of the empirical evidence on the relationship between labour market institutions and economic performance. It undertakes a survey of major cross-country empirical analyses that examine linkages between labour regulation and different aspects of economic performance such as employment, economic growth, etc. The chapter also examines the relevant evidence on India and discusses the various methodological and statistical flaws that many of these empirical exercises have. The third chapter provides a mapping of the major labour regulations in India, and provides a list of the various labour laws in the four select states, namely Gujarat, Orissa, Rajasthan and Tamil Nadu. It also discusses the various changes in regulatory practices that have taken place in the recent years, some of them being explicit, and some in a tacit fashion. The fourth chapter brings out some critical issues relating to output and employment in the organised manufacturing sector in India, while the concluding section tries to link the findings with the whole labour market rigidity/flexibility argument and tries to draw an assessment as to how well(ill)founded such concerns are, with respect to the organised manufacturing sector in India as a whole, and particularly, with respect to the four select Indian states.

Chapter 1

A Brief Historical Excursion and a Conceptual Prelude

1.1 Historical Backdrop and Contemporary Relevance

The issue of labour market flexibility has assumed a special significance both in developing and developed countries in the new context of international competition in the rapidly globalising world, where industries strive to attain competitive edge. The case of Europe has been advanced as being characterised by relatively rigid labour markets where legislative and institutional regulations are seen to act as impediments in making adjustments in the quantum and mode of employing labour and has often been contrasted with America where it is presumed that such adjustments are possible with relative ease. Need for greater flexibility has, therefore, been strongly advocated in Europe and elsewhere as well, in the wake of globalisation. Several changes of varying degrees have taken place across different countries, and also within countries, and many others are being debated. This is of relevance to India as well, as the issues under debate are pretty similar.

'Labour market flexibility' has been a key rallying point in mainstream policy discourses of the last quarter of the twentieth century. According to the mainstream orthodoxy, the era of statutory regulation till the mid-1970s has distorted development in many ways: regulations, legislations, institutions and conventions that were designed to protect workers are often counter- productive, primarily because they raise unemployment. This is because such interventions cause the actual wage to deviate from the market clearing wage that is warranted by the supply of and demand for labour. If market forces were allowed free play, supply will exceed demand whenever wage is set above equilibrium and the responses of the profit-maximising firm and the utility maximising worker will eventually drive the price down towards equilibrium. The lower wage will increase the quantity demanded and reduce the quantity supplied, with the result that excess supply is reduced or eliminated (Banerjee, 2005,p.92).

In the not so long ago past, economists believed that macro-economic policy was the key to enhancing economic performance. The monetarists espoused that appropriate monetary policies offered the remedy for ensuring price stability and curbing the business cycle. On the other hand, the Keynesians gravitated towards fiscal policy: running deficits to speed economic recovery and surpluses to curtail inflationary pressures. Today, there is a new orthodoxy that advocates the dissolution of labour market institutions and increased employment and wage flexibility in the labour market as the recipe for economic success. International agencies, such as the OECD and IMF, and many economists, mainly subscribing to the mainstream orthodoxy, blame unemployment and sluggish economic growth on various labour institutions that supposedly reduce market flexibility. They recommend that governments weaken labour market institutions in favour of market driven solutions(Freeman, 2005). Following on the lines of the so called Washington Consensus, or what Stiglitz(2002) called 'market fundamentalism', labour market flexibility is being prescribed as the panacea for all economic problems. The key mantra to improving overall economic performance by enhancing productivity, attaining competitiveness ,accelerating employment generation and shoring up the momentum of economic growth, is to deregulate the labour market and remove or curb protective provisions for labour (Blanchard and Wolfers, 2000; Besley and Burgess, 2004; Burki and Perry, 1997; Forteza and Rama, 2002; Heckman et al 2004; among others)¹.

At the same time, criticisms directed against such a line of thinking have been mounting and there are growing objections to the base on which the mainstream orthodoxy rests. Analysts critical of the claim that across the board deregulation of labour markets and weakening of trade unions will cure unemployment thereby boosting economic growth argue that the models justifying these policies are "ill-specified and non-robust, more sawdust than hard wood" (Freeman,2005,p.1).

The current debate on labour market flexibility needs to be assessed in historical retrospect. Back in the 1960s, the notion of institutionalising workers' rights along with the establishment of an extended welfare state was considered complementary to the notion of efficiency and economic growth. Between 1945-75 or so, i.e., during the so-called 'Golden Age' of capitalism, a reduction in inequality of income and wealth was the focus of political discourse of the era. It was expected to materialise primarily

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¹ Discussed in Jha and Goldar (2008).

through attainment of a high and stable level of male full-time employment, whereby men were paid a 'family wage', enough to support a standard two-adult, two-child household (Standing 2002: Ch. 1). The laws and decrees comprising the statutory regulation were essentially protective of workers and pro-collective, in that they facilitated and presumed collective bargaining (Ibid.)².

Since the 1970s, however, due to the slowdown of growth and the emergence of mass unemployment a new kind of orthodoxy has arisen within the mainstream economics, giving vehement calls for deregulation of the institutional framework to provide a freer rein to market forces. In this context, analysts supporting this orthodox mainstream view have convinced many governments that most, if not all, labour-market institutions need to be reformed because they lead to all sorts of rigidities detrimental to job creation and innovation. During this second epoch, a trade-off between economic efficiency and social justice has been perceived by most economists (Boyer, 2006).

For example, the influential McCracken Report on the slowdown of growth in the 1970s argues that unemployment insurance provisions and other social welfare benefits, which serve to sustain effective demand during business downturns, actually undermined the effect of much of state economic policy. The report said that, by making the loss of a job more tolerable, these programmes reduced workers' willingness to accept wage cuts during a recession, which in turn reduced the government's capacity to control inflation (McCracken et al. 1977)³. If government spending on social programmes (such as health and unemployment insurance, pensions, family allowances and aid to the poor) slowed down economic growth, one would expect the existence of an inverse relationship between the level of welfare spending as a percentage of gross national product and the rate of economic growth. However, the basic statistical support behind the assumption seems to be lacking. In the mid-1970s, social welfare expenditure as a percentage of national income was around one-and-a-half times higher in countries such as Austria and West Germany

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² Discussed in Banerjee, 2005, pp.92-93.

³ Cited from Banerjee, 2005, p.93.

than in the United States; yet of these economies, the US economy exhibited the slowest growth (Piore and Sable, 1984: Table 1.1).⁴

Nevertheless, International Monetary Fund (IMF) and the World Bank, popularly known as the 'Washington Consensus', came up with policies aimed at enhancing economic performance in the medium term. Briefly, the main elements of the approach are: trade liberalisation, financial market liberalisation, privatisation of production, deregulation, elimination of barriers to foreign investment, secure property rights, unified and competitive exchange rates, diminished public spending or 'fiscal discipline', cutting marginal tax rates, less progressive tax and flexible labour markets. The 'flexible labour market' has been highlighted in numerous Fund-Bank and OECD (Organisation for Economic Cooperation and Development) reports, and has generally meant policies aimed at decentralising labour relations and those aiming to cut protective and pro-collective regulations (Standing 2002: Ch. 2). Thus, the notion of the post-war Keynesian welfare state got beleaguered towards the end of the 1970s, being replaced by the growing power of capital vis-à-vis labour.

'Thatcherism' in Europe, particularly in Great Britain and 'Reaganomics' in the United States ushered in a new era of supply-side economics, the tenets of which rested on monetarism coupled with Robert Lucas' rational expectations theory. Thatcherism and Reaganomics brought about a reversal of the directions set by Keynesianism. This school of thought believed that macroeconomic policy, that is, essentially monetary policy, was to be targeted at controlling inflation, while microeconomic policy was to be aimed at influencing employment by reforming institutions and regulations in order to lower the 'non-accelerating inflation rate of unemployment' (NAIRU). The new orthodoxy has compelled governments to give up the pursuit of full employment by economic means. As opposed to Keynesianism, which maintained that a deficiency of aggregate demand led to unemployment, the new orthodoxy argued that much of the unemployment is voluntary in nature and so the conditions of entitlement need to be tightened. Workers and employers should

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⁴ Ibid.

work it out for themselves, through free market transactions. The dissolution of employment stability and growth of non-standard work arrangements, the so called 'flexible labour market', thus ruled the day (Banerjee, 2005, pp.94-97).

The developing countries became susceptible to global finance capital and subsequently found themselves mired in unprecedented liquidity crises during the 1980s and 1990s, thereby falling prey to the Washington Consensus. To many employers and their organisations in these countries which were latecomers to industrialisation, the Consensus provided the most sought after instrument of debasing existing labour regulations. Flexibility has become the 'theme song' in many regions, a potent prescription, shaping policy and public perceptions currently. For any economic ill, the cause is immediately attributed to prevalence of 'rigidity' or lack of flexibility. The ascendancy of globalisation has reinforced the pressure to reform labour institutions in developed countries: significant segments of the value chain have been delocalised by multinational corporations towards emerging countries, especially in Asia. These countries were supposed to enjoy a definite competitive edge, associated with low wages, high labour-market flexibility and, for some of them, fast growth of their domestic markets. Consequently, the relative decline of old industrialised countries was attributed to the rigidity of their labour market institutions, whereas it was presumed that the emerging countries benefited immensely from highly flexible labour markets. Thus, during the 1990s, it increasingly became the norm to perceive labour regulations as being detrimental to job creation, growth and innovations (Boyer, 2006).

1.2 An Assessment of the Labour Flexibility/Rigidity Debate

1.2.1 The Orthodox View:

The 'distortionists' as broadly characterised by Freeman (1993), view institutions as distorting otherwise ideal competitive market equilibrium. The 'flexibility school'⁵, vouching for flexibility in the labour market, operates on the assumption of a perfectly competitive market model. They assume that in the absence of labour regulations

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⁵ Shyam Sundar,2008, p.132.

there prevails employment of resources at market clearing prices, with every factor getting rewarded according to its marginal contribution to the society. Regulations bring with them distortions and rigidities thereby inhibiting the smooth working of the market forces. Thus, if the regulations are completely eliminated, full employment of all resources along with optimal social welfare will be ensured⁶. Regulations increasing the transaction costs and affecting the efficiency of transactions are seen as bad (Menard and du Marais, 2006). In the classic free labour market, there exists "employment at will", meaning that in the absence of a written contract, an employer is free to quit the job and the employer is free to fire an employee for "a good reason, a bad reason, or no reason at all" (Schanzenbach 2003, pp.470-1)⁷.

1.2.2 What is Labour Market Flexibility?

Now the question arises that what is meant by labour flexibility, a concept that has been one of the most passionately debated terms in modern times?

Labour flexibility in simple terms means the ease with which employers are able to respond to the developments in the product market and changing macroeconomic conditions. The 'flexibility school' or the distortionists, advocating flexibility in the labour market, believe that the employer should have the ability to reduce workers' strength and the price of labour, implement functional changes such as workload or work assignment (via technological changes or retrain workers), close down unviable units, reallocate resources to more productive uses, and so on (Shyam Sundar, 2008).

Several different dimensions of flexibility have been discussed in the literature. Citing form Rodgers (2007), the following forms of flexibility can be identified⁸:

Employment protection: Freedom of employers to hire and fire is at the heart of debates on flexibility. Employment protection measures, of course, have a dual effect, reducing both inflows to and outflows from employment, so the net impact on

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⁶ Discussed in Jha and Goldar, 2008; Shyam Sundar, 2008; among others.

⁷ Cited in Shyam Sundar ,2008,p.132.

⁸ Rodgers, 2007, p.2.

employment and unemployment is ambiguous *a priori*. However, it is argued that reducing these flows overall is likely to limit firms' ability to adjust and adapt to changing circumstances. In most countries alongside the protection of regular, standard jobs a variety of temporary or otherwise less protected employment statuses are also a widely used means of flexibility.

Wage flexibility: A variety of institutions and regulations may limit wage variation, including minimum wage regulation, trade union activity and the extent to which there is coordinated wage bargaining.

Internal or functional flexibility. This largely concerns the ability of firms to organise and reorganise internal processes of production and labour use in the interests of productive or dynamic efficiency, e.g. through the flexibility of working time, job content, skill needs or technical change.

Supply side flexibility: While attention tends to focus on flexibility in labour demand, there are important issues relating to the supply side as well. Workers may demand flexibility in working time to meet work and family needs, or the flexibility of rights and entitlements which would permit mobility between jobs.

Regulations in the form of labour laws or trade unions or collective bargaining practices hinder the ability of the employers to bring about desired changes in the labour market, giving rise to rigidities or distortions thereby hurting the competitiveness of firms. This results in sub-optimal allocation of resources (including labour) leading to all round inefficiencies, which ultimately has an adverse effect on the interests of workers as well. Such a scenario has been described by Pages and Roy(2006). To quote them: the labour regulatory system (in India) "By inhibiting job creation, capital accumulation and technology upgrades....deprives workers from employment opportunities while sustaining low productivity, low wages and poor work conditions". On the other hand, labour flexibility leads to increases in efficiency and enhancement in the competitiveness of firms. Absence of protective

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⁹ Pages and Roy (2006), p.383

regulations would result in creative destruction, which takes place in two ways, inefficient firms exiting the labour market and reallocation of resources including workers (Shyam Sundar, 2008).

It would be of interest to discuss the concept of Beveridge curve, while deliberating about the notion of flexibility in the labour market. The Beveridge curve (Beveridge,1945) may be referred to as a simple point of reference which determines a perfectly flexible labour market ¹⁰. The Beveridge curve essentially is the negatively sloped relation between the vacancy rate (the number of unfilled jobs expressed as a proportion of the labour force) and the unemployment rate (the number of unemployed job seekers expressed as a proportion of the labour force). What is anticipated is a downward sloping relation: any increase in the demand for labour should bring about an increase in the number of vacancies and a reduction in the number of unemployed. An inward shift of the curve implies better matching efficiency; for instance, a better labour exchange, would match some of the unemployed workers with unfilled jobs in a better manner, leading to a reduction in both the unemployment and the vacancy rates. ¹¹ At any particular time, where a particular economy will end up on its Beveridge curve will depend on all the macroeconomic forces at work.

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¹⁰ The discourse on Beveridge curve in this section draws substantially on the discussion on the same as done in Banerjee, 2005, pp.100-101.

¹¹ Beveridge (1945) defined full employment as a situation in which the number of unemployed workers equals the number of unfilled jobs, with the result that any remaining unemployment arises from a geographic mismatch, a skill mismatch, or some other mismatch between the unemployed workers and the available jobs, not from any overall shortage of jobs (Banerjee, 2005,p.136).

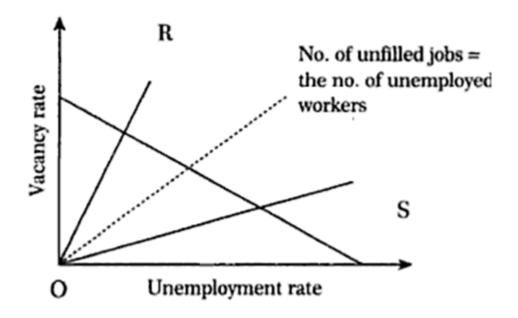


Figure 1.1: The Beveridge Curve: Labour Market Flexibility

Source: Banerjee (2005), p.100.

A perfectly flexible labour market would be one that introduces no friction in the smooth matching of an unfilled job with an unemployed worker with the requisite skills. The closer the curve to the origin, the more efficiently workers and jobs are being matched. Hence, labour market rigidities allow vacancies and unemployment to co-exist.

And the greater the rigidity, the further is the divergence of the Beveridge curve from the limiting case, and the further from the zero-zero point it is located.¹² Since vacancies in one segment cannot be matched with unemployed workers in another, anything, be it statute, union rule, regulation or custom, that limits the geographical, industrial or occupational mobility of workers, anything that leads to a segmentation of the labour market, will bring about an adverse shift in the Beveridge curve. Wage inflexibilities, including a high reservation wage will prevent hiring that could have

12 There is a critical ratio of vacancy rate to unemployment rate: with a higher ratio of vacancies to

unemployment, wage inflation will accelerate. OR and OS are two such critical ratios. OR corresponds to a lower NAIRU (or inflation-safe unemployment rate or natural rate) in the sense that it stabilizes inflation with a higher ratio of vacancies to unemployment (Krueger and Solow, 2002).

been done if the wages were more flexible, which may lead to the Beveridge curve being pushed away from the origin. While the theory of the Beveridge curve is in pretty good shape, the real problem is empirical (Solow,1997).

The Beveridge curve provides a somewhat heterodox perspective on the role of labour market rigidities. Solow has pointed out, based on an empirical study (done by James Medoff of Harvard University, quoted in Solow (1997)), that the Beveridge curve carries a message that goes squarely against the view that 'labour market rigidities' led to high and persistent European unemployment in the 1980s and 1990s (Solow,1997,p.8). To the extent that the location of the Beveridge curve is a reasonable summarisation of the degree of labour market rigidity, the large continental economies do not seem to have suffered from noticeably more rigid labour markets during the high unemployment 1980s than they did in the low unemployment 1970s. Therefore, it is not reasonable to blame large increase in unemployment on worsened labour market rigidity in, say, France and Germany.

The 1994 Jobs Study of the OECD (OECD,1994) brought to the centre of policy debate the claim that labour institutions were to blame for the prevalence of unemployment in advanced countries. The Jobs Study listed ten recommendations directed towards reducing unemployment and improving economic performance in the OECD nations. Five of the factors were as follows: good macro-economic policy; enhanced technological knowledge; elimination of hindrances to creation of enterprises; improved education and training; enhanced product market competition. Four recommendations called for labour market deregulation, viz. increased flexibility of working time; ensuring flexibility in wages and labour costs; reforming employment security provisions; and reforming unemployment and related benefit systems. The last recommendation advocated active labour market policies – training programs, job-finding assistance to workers, subsidies to employers to hire long-term unemployed or disabled workers, and special programs for youths leaving school (Freeman,2005).

Nearly a decade after the Jobs Study, an article was published by the IMF in its World Economic Outlook predicting a massive fall in unemployment in Europe, way below US levels, provided the European countries deregulated their labour and product markets¹³.

The dogmatic belief that labour institutions act as a deterrent to economic efficiency is not novel to the IMF and other international financial institutions (IFIs). An analysis on similar lines was published by the Fund in 1999 with respect to the European unemployment problems, albeit without such stark predictions that "reforms" would generate massive reduction in unemployment. In their effort to help developing countries deal with balance of payments and fiscal deficit problems, both the Fund and the World Bank have viewed labour institutions with deep suspicion, on the grounds that labour regulations will serve to undermine the macro-economic stabilisation policies and structural adjustment programmes that these twin institutions recommend.

In a balance of payments crisis, the country concerned needs to shift resources from non-traded goods to traded goods necessitating currency devaluation, leading to a reduction in the real wage. Moreover, the reallocation of resources is also likely to increase returns to capital relative to the returns to labour since traded goods sectors tend to be capital intensive. Similarly, in a fiscal crisis, governments must raise taxes and/or reduce public spending, which again leads to lowering of real wages and a redistribution of income from the poor to the wealthy. Since the recommended policies put labour at a disadvantage, at least in the short run, the IFIs naturally worry

¹³ "labour reforms could produce output gains of about 5 percent and a fall in the unemployment rate of about 3 percentage points. ... those benefits could be doubled by simultaneous efforts to increase competition in the product market." (IMF, 2003, Chapter 4, p 129).

[&]quot;high unemployment is largely structural in nature—and thereby potentially affected by institutions—rather than cyclical (and therefore determined by the business cycle and macroeconomic policies). (Enact the reforms and) ... unemployment could fall by about 6 ½ percentage points" (IMF, 2003, Chapter 4, p.131).

[&]quot;when labour markets are more competitive, the economy reacts more quickly and smoothly to changes in interest rates. This facilitates the task of the monetary authorities; in particular, smaller changes in interest rates—and therefore output—are necessary to stabilize inflation in the face of shocks." (IMF, 2003, Chapter 4, p.129).

that unions and other labour institutions, which look to protect the economic well-being of workers, will oppose such policies. The IFIs view labour institutions as potential "flies in the ointment" of the adjustments needed to restore economic health to sick economies (Freeman, 2005, p.4).

This perspective has led economists and analysts associated with the IMF to bemoan the lack of adequate flexibility in the labour market as a causal factor in economic crises even when those crises arise due to problems that have nothing to do with the labour market. This has been the case in Argentina, where the blame of the economic meltdown faced by the economy was squarely placed on the presence of 'rigidities' in its labour markets.¹⁴

Proponents of the flexibility school of thought believe that employment protection laws are largely responsible for rigidities in the labour market. It is argued that even during an upswing, the existence of stringent employment protection laws dissuade firms from hiring workers as they would not be able to retrench labour during downturns. It raises the costs of dismissing workers, making worker separation process an expensive affair. Since workers, once hired, cannot be easily removed, thus, labour becomes a quasi-fixed factor. It is believed that this massively compromises the firms' ability to adjust quickly to external shocks. Anticipating these artificially induced costs, firms operating in a highly regulated environment, restrict themselves from recruiting labour in the first place. Hence, the demand for labour goes down (Shyam Sundar, 2008, p.133).

¹⁴ Commenting on the 2002 economic collapse of Argentina, the Fund's once poster economy, Michael Mussa, former chief economist at the IMF wrote:

[&]quot;If Argentina had a more flexible economic system, especially in its labour markets, its economy would have been more able to adapt to the rigors of the convertibility plan, unemployment would have been lower, growth would have been stronger, fiscal deficits would have been smaller, and interest rates would have been lower" (Mussa, 2002, p.9). Cited in Freeman, 2005, pp.4-5.

At an NBER conference, Anne Krueger, then first deputy managing director, communicated a similar view, blaming the problems faced by Argentina on "... two factors ... weak fiscal policy and mounting overvaluation, the latter reflecting relatively high inflation, a stronger dollar, and insufficient domestic flexibility (for example, in the labour market). The last point is especially important — under a firmly fixed exchange, you need other sources of adjustment to maintain competitiveness." (Krueger, A., 2002). Cited in Freeman, 2005, p.5.

Any income support to the families of workers is also opposed by the advocates of the 'distortionist' persuasion as it is alleged to reduce the incentive for family members to take available jobs. Employment security makes workers complacent and they thus perform below par as dismissal is difficult (SNCL, 2002). Thus, as a recent ADB document puts it, for economists opposed to labour market regulations, "welfare-state interventions raise both the wage floor (the lowest wages that can be paid) and the reservation wage (the lowest wage at which workers will be willing to work), and these automatically reduce the demand for labour" (ADB, 2005 p. 27).

It is generally argued that high minimum wages, often an outcome of collective bargaining through trade unions, compresses the wage structure. This may cause the less skilled workers to be rationed out of the labour market, as is predicted by the usual supply-demand models. The basic crux of such models is that imposing a floor on downward wage adjustments will lead to employers responding with fewer jobs, which essentially harms workers. In the event of jobs not being created, job seekers have to spend more time as unemployed; at the same time permanent workers cannot be fired easily due to high firing costs. Unemployment spells become longer and the chances of entering the labour market for workers at the 'margin' or 'outsiders' also diminish. Longer unemployment span is likely to lead to loss of skills, weakening of morale, less capability to learn new skills and thus, the unemployed could become 'unemployable'. Absence of job creation causes workers to get 'locked into' undesirable jobs thereby creating a mismatch. This result of this is the creation of segmented labour markets, where most workers are trapped in low-paid, insecure jobs with scarce opportunities to progress into better jobs while few workers enjoy strong employment security. The 'insiders' in an attempt to protect their jobs and high wages pass on the costs of unemployment and low wages to the 'outsiders' (Young, 2003). 15

Therefore, the essence of the criticism of the advocates of labour market reforms rests on the following: "labour market interventions misallocate labour; they waste

¹⁵ Discussed in Jha and Goldar(2008); Shyam Sundar (2008), among others.

resources through rent seeking; they impair adjustments to economic shocks; and they deter investment, thereby reducing rates of growth" (ADB, 2005, p. 27). ¹⁶

1.2.3 The Institutionalists' Perspective:

On the other side of the coin are economists and international agencies that view labour market institutions as a way of enhancing economic adjustments and avoiding macro- crises(Freeman, 2005). As opposed to the 'flexibility school' or the 'distortionists', the 'institutionalists' believe that labour institutions are an integral part of the labour market and the industrial relations system and they perform several positive social functions (Baker et al, 2003.2004, 2006; Freeman, 1993; Howell, 2006; Standing and Tokman, 1991; Wilkinson,1992; etc.).

The institutionalists regard labour institutions as not only promoting social justice but also aiding efficiency. The institutionalists have laid sufficient emphasis on the market principles like efficiency and productivity and they do not seek to sacrifice them while promoting 'decent work' (Shyam Sundar, 2008, p.12). Bonnet et al (2003, p.231) define a decent workplace as "one in which worker security is relatively good while remaining compatible with the dynamic efficiency of the firm or organization". The institutionalists recognise that decent workplace concept should be compatible with dynamic efficiency and profitability because "... without efficiency it will not be economically viable" (Standing 1997, p.333). Thus, they reject the fundamental allegation of the distortionists that the labour institutions introduce 'rigidities' in the system and retard efficiency as they affect the working of the market forces. Their thinking is also influenced by the principles and policies advocated by the ILO, the international agency responsible for labour issues.

The ILO strongly advocates that 'labour should not be seen as a commodity and also not as a 'mere factor of production' as is perceived by the flexible school. The very essence of the vast amount of work done by the ILO, for instance, in terms of designing labour standards, is precisely to challenge the 'market view of labour' promoted by the "flexible school". The ILO argues to the contrary – that economic

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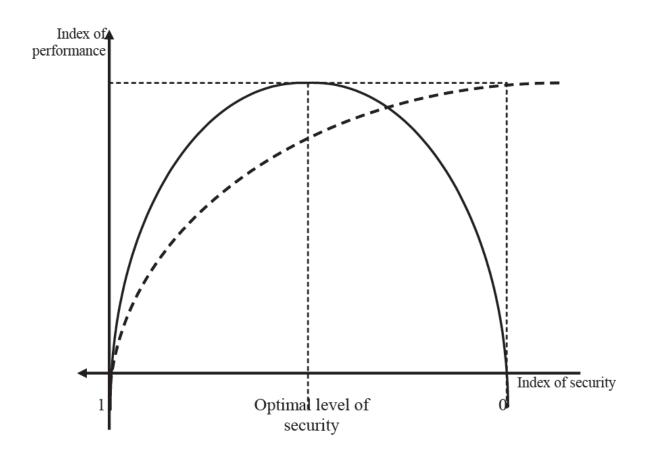
¹⁶ Cited in Jha and Goldar ,2008,p.3.

systems based on labour-management discussions can improve aggregate efficiency: "Successful social dialogue structures and processes have the potential to resolve important economic and social issues, encourage good governance, advance social and industrial peace and stability and boost economic progress" (quoted in Freeman, 2005, p.6). The notion that negotiations can lead to efficient outcomes is consistent with Ronald Coase's analysis of transactions costs. The Coase theorem holds that regardless of the distribution of property rights, bargaining should produce an optimal allocation of resources as long as transactions costs are low. Labour institutions could redistribute income toward workers without harming economic efficiency.

The global consensus on international labour standards was further strengthened by the policy innovation from the ILO side in having the ILO Declaration on Fundamental Principles and Rights at Work (FPRW) and its follow-up adopted by the International Labour Conference at its eighty sixth Session, on 18 June, 1998. The ILO model got a shot in the arm in the recent past, when its Director General, Juan Somavia introduced the concept of 'decent work'. The ILO Conventions in general and the core labour standards in particular and the components of decent work such as labour rights, social dialogue clearly recognise the need for and the positive role of collective institutions like trade unions, collective bargaining, strikes, etc. (Shyam Sundar, 2008,p.13).

The institutionalists also recognise the inadequacy of a pure, competitive model in assessing the impact of labour market institutions. The distortionists' perspective is largely derived from the perfectly competitive market theory. In a perfectly competitive market, the market forces perform the allocative and distributive functions. This model is based on certain strong assumptions like economic rationality on the part of the players, perfect information regarding the market, perfect mobility, etc. The competitive model of the labour market can be criticised on the grounds that the labour markets in the real world do not conform to the text book type competitive model. There exists a variety of market failures like information asymmetry,

immobility of labour, monopsonistic behaviour by the employer, etc.¹⁷ The labour market differs from the goods market in several ways (Bosworth et al,1996).



The market view: security introduces a distance with respect to the general equilibrium that is a Pareto optimum.

The institutionalist view:

- Full security may contradict the requirements of a capitalist economy.
- No security at all may create instability in labour contracts and industrial relations.
- In between, some security may be optimum for economic performance as well as for welfare.

Figure 1.2 Assessment of Optimal Level of Security

Source: Boyer, 2006, p.5

 $^{^{17}}$ Arguments on similar lines have been explored in Boyer (2006), Chandra(2006), Jha and Goldar (2008), Shyam Sundar (2008), etc

What has often been observed is that, a sizeable chunk of the literature eulogising the beneficial effects of labour regulations, is linked with some notion of 'market-failure'. Initially, in terms of microeconomic theory, the phenomenon of market failure was linked mainly to the presence of various externalities and in the face of this, achieving efficiency in allocation of resources and subsequently, much of it has been linked with the incomplete or imperfect flow of information or information asymmetry. "This has spanned a huge literature in mainstream economic theory itself, a good deal around the notion of 'efficiency wage', which is often at sharp variance with the conclusions emerging from the distortionist perspective, and supportive of claims advanced by the institutionalist perspective" (Jha and Goldar, 2008, p.5). The inadequacy of the competitive model becomes further evident from its failure in explaining differences in wages for similar jobs, existence of unemployment (reflected in the inability of workers to price themselves back into employment), stickiness of wages, presence of inequality of opportunity, discrimination in the labour market and poverty (Bosworth et al 1996; Deshpande et al, 2007). The alternative models like the segmented labour market theory sought to explain some of these aspects (Ibid.)¹⁸.

Yet another strand of this school of thought, broadly labelled as 'institutionalists', emphasise on the huge asymmetries in economic power of the workers and employers, and suggests that the weak bargaining position of the workers vis-à-vis the employers often leads to unfair outcomes such as underpayment to the workers, hazardous working conditions, or discrimination against certain groups of workers (for instance, women, children). In general, private markets without proper regulations tend to do a poor job of protecting unemployed workers (ADB, 2005, p. 25). On these grounds, there are some theoretical reasons for justifying regulatory mechanisms like, employment protection laws.

The 'employment at will' doctrine as advocated by the 'flexible school' is bad as it may promote employer opportunism (Shyam Sundar, 2008, p.148). Workers are generally risk averse and need some kind of insurance cover to protect them from reduction or loss of income for no fault of theirs. Left to themselves, firms may

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¹⁸ See Shyam Sundar ,2008, p.148.

behave opportunistically by designating all dismissals on disciplinary grounds. Therefore, labour regulations come to the rescue of weak workers pitted against employers with a degree of monopsony power. Therefore, it is argued in the institutionalist perspective that labour institutions help to insure vulnerable and marginalised categories workers against adverse market outcomes (Standing and Tokman, 1991).

Employment security by assuring stable employment relationships could produce worker cooperation and promote increased effort (owing to greater motivation and trust); these could result in an increase in labour productivity which in turn could raise labour demand (OECD 2004,p.80). A rise in labour productivity could be brought about through other channels as well. Employers might exercise greater caution in choosing workers, owing to constraints on dismissal as costs involved in firing might be high. Longer tenure of employment allows both the parties to learn about each other. The firms could be then encouraged to make investments in human capital (say via training); as the longer duration of the contract enables the firms to reap the returns in the post training period. On the other hand, short tenure of jobs would lead to under-investment in the firm specific human capital as they could be fired any day (OECD 2004,p.80). There might be a fall in the attrition rates, as workers with firm-specific human capital would find it costly to leave the firm and hence, it becomes a symbiotic relationship with benefits accruing to both parties 19.

As Wilkinson,1992; Sengenberger and Campbell,1994; among others, suggest, there might be two alternative trajectories that firms could avail to compete with each other: either by reducing their unit costs by a reduction in wages and labour standards, that is, by opting for the 'low road to growth' or alternatively by increasing productivity with innovations in technology, product design, organisation etc., that is, by taking recourse to the 'high road to growth' (Jha and Goldar, 2008). The low road strategy of numerical flexibility (downsizing, forced resignations, etc), cannot create high performance workplaces. In fact, the superior performance of Japanese autocompanies over those in the US has been traced to the absence of equal levels of

¹⁹ Based on the discourse in Shyam Sundar, 2008,p.149

commitment and loyalty in the latter as compared with the former (Emerson 1988,p.777)²⁰.

In a well-known study, Gary Fields also refutes the conventional mainstream argument that presumes an inverse relationship between minimum wages and employment. Using a model with the two sector labour market (one covered by minimum wage and the other not), Fields argues that the redistributive results of minimum wages will lead to higher employment for the economy as a whole simply because the demand for goods of the lower paid is expected to be highly labour intensive. This may happen through both the direct route of their own purchases as well as via the indirect route like multiplier effects. (Chandra, 2006)²¹.

As is noted by Jha and Goldar (2008), Shyam Sundar (2008), among others, even though flexibility is a micro-level arrangement, however, it can have macro economic implications in that too much numerical flexibility could weaken effective demand. Writings of Keynes (and those of Michael Kalecki, Richard Khan, N. Kaldor, J. Robinson, among others, in the 1930s) brought to the centre-stage the problem of market-failure at the macroeconomic level.

As argued by Bhaduri (2005), an increase in productivity might not be able to sustain the higher total output, if the percentage of decrease in the level of employment is greater than the percentage increase in labour productivity. Therefore, the corporate strategy of 'downsizing' the labour force, which is based on the concept of efficiency in micro-economic terms, may prove to be macro-economically counterproductive, if the size of the domestic market shrinks due to a lower level of aggregate employment.²²

²¹ Also discussed in Jha and Goldar, 2008, p.4.

²⁰ Cited from Shyam Sundar, 2008, p.150.

Many other models suggest a similar result about the optimality of an intermediate level of adjustment and of flexibility. For instance, a very simple multi-sector model describing income distribution and effective demand formation shows that an inverse U-shaped curve is observed with respect to the speed of adjustment of employment to its neo-classical efficient level (Boyer, Mistral

The problem of effective demand might get aggarvated, and relatively more difficult to manage, in the case of a liberalised/ globalised open economy, as has been reasoned by Patnaik (2004), with particular reference to the contemporary Indian economy. He argues that there might be a deficiency in demand, in an open economy which might even lead to de- industrialisation (in the sense of workers employed in the industrial sector losing their jobs). Roy (2007) has discussed the unrealistic assumptions on which the standard pro-flexibility arguments are based, particularly with reference to wage flexibility. Following the Keynesian tradition, it can be argued that the 'flexibility school' or the 'distortionist' perspective ignores the notion of worker as a consumer as well. It fails to take into account that a reduction in nominal wages (as demanded by the flexibility theorists), would have some impact on aggregate demand via reduction in purchasing power of the workers (Roy, 2007, p.216).

In one of his other papers, Patnaik has subjected some mainstream perceptions to a careful scrutiny and has reasoned that the theoretical argument for introducing labour market flexibility is a flawed one. He puts forth the argument that existence of a reserve army of labour is of essence for the functioning of capitalism.²³ He goes on to propound that in the Indian context, where labour market deregulation is high on the neo-liberal agenda, such "flexibility" would result in an increase in the "degree of monopoly"²⁴, shift income distribution from wages to profits, reduce aggregate demand and raise unemployment. Such worsening of the unemployment situation would entail an attack on workers' rights, which as Patnaik puts it, is "anti-democratic *per se*, and which threatens an attenuation of democracy in society in general" (Patnaik,2006, p.11).

1982). The reason is simple: what is gained at the micro level in terms of productive efficiency can be lost at the aggregate level by a negative impact upon effective demand (Boyer, 2006).

²³ To the question relating to stickiness of wages even in the face of an excess supply of labour at those wages, Patnaik argues that "it is not the specificities of the labour market which are responsible for its apparently idiosyncratic behaviour from a Walrasian point of view, such idiosyncratic behaviour is necessary for the functioning of capitalism, and the labour market institutions are only the mechanisms for achieving it. The forced introduction of labour market flexibility, and the overcoming of the labour market's "social institution" character, will far from overcoming unemployment, worsen the problem, even while imparting greater instability into the functioning of the system" (Patnaik, 2006, p.11).

²⁴ The terminology is Kaleckian in nature.

1.3 Some Conceptual Issues

The first critical issue is with regard to the concept of labour market rigidity or flexibility. 'Labour market rigidity' is never defined very precisely or directly, but only by the enumeration of tell-tale symptoms (Solow,1997). To the neoliberals a labour market is inflexible if there are too many restrictions on the freedom of employers 'to hire and to fire', or if the permissible hours of work are too tightly regulated, or if the trade unions have too much power to protect incumbent workers against competition and to control the flow of work at the site of production or if generous compensation of overtime work is mandated, or perhaps if statutory health and safety regulations are too stringent. Thus, labour flexibility is an umbrella term which is used by people (researchers, government agencies, trade unions, employers and so on) to mean any of the aspects relating to employment, pay, working time, organisational hierarchy, unions, strikes etc. It differs according to persons, contexts, time, space, etc.(Shyam Sundar, 2008, p.146).

Secondly, the question to be asked is that, who is asking for flexibility? It is the employers, the international financial institutions such as the World Bank, the IMF and not the workers. The State is often under pressure from capital (both domestic and international) and the international financial institutions. It is caught up in the complexities thrown up by the supporters and opponents of flexibility. The flexibility issue no longer dwells in the economic sphere, it spills into other areas like politics, social sphere etc. (Ibid.) Advocates of flexibility argue that due to labour market rigidity, it becomes difficult to fire workers during a downturn and in that sense, labour becomes a quasi fixed factor, involving a fixed cost. But doesn't capital involve a fixed cost as well if it is used as a substituting factor in place of labour?

As discussed in an earlier section, the mainstream explanation of high unemployment usually runs in terms of inflexible labour market, in particular, its downward rigidity and consequent high wages. In contemporary discussions, the frequently used models to support such a claim hinge on the idea of the non-accelerating inflation rate of unemployment, or NAIRU. Many economists believe that at any given time there is a certain level of unemployment that is consistent with stable inflation. If the

government tries to drive unemployment below that rate, it will pay the price of accelerating inflation. If the government wants to reduce the inflation rate, it must reduce demand so as to drive unemployment above this rate. Milton Friedman, the noted monetarist dubbed the critical rate of unemployment the 'natural rate'. However, other economists have proposed the alternative NAIRU (Krugman 1990: Ch.3). It is argued that to avoid ever-accelerating inflation, the government must accept an unemployment rate that is sufficiently high for workers on average not to demand real wage increases that exceed their productivity growth, and ensure that firms do not try to raise their prices faster than their costs²⁵.

The Organisation for Economic Co-operation and Development (OECD) (1994) and International Monetary Fund (IMF) (1999, 2003) for example, fundamentally using the NAIRU-argument have insisted for several years that, in order to accelerate growth, Europe has to reform its labour markets so as to make them more flexible, in line with the US approach. Similar analysis underpins the advocacy for reformers' arguments for labour markets in the case of developing countries, (Heckman and Pagés, 2004).

However, the 'natural unemployment' rate, as distinct from Friedman's perception, is a rate specific to each country and persisting for a fairly long period, and is not found to have a stable relation with the inflation rate of the country. The unemployment rate in the US, for instance, declined steadily after 1992; but there was surprisingly no resurgence of inflation as had occurred in other periods of sustained growth. The unemployment rate was at a 30-year low in 1999. Despite this growing tightness in the labour market, the inflation rate too declined from 6.1 percent in 1990 to 1.6 percent in 1998. The Consumer Price Index (CPI) increased by 3.4 percent in 2000, the highest since 1990, but still lower given the unemployment rate (US Department of Labour 2001: Ch.2).²⁶

²⁵ Discussed in Banerjee, 2005; Jha and Goldar, 2008; among others.

²⁶ Provided from Banerjee (2005), p.96.

Most importantly, the question that arises is whether flexibility can be the magic bullet for all problems ailing the economy? The supporters of flexibility say 'yes' in unanimity but the flexible policies would result in pain for workers (unemployment), for some employers (as inefficient firms close) and to the local community (as capital migrates to other regions). But the advocates of flexibility assure us that these are short term costs of adjustment. In the medium to long run, things will look bright as efficiency reigns in the system. But this gives rise to certain disturbing questions. Do they recommend social policies for managing the so-called short term adjustment pains? How short is the short term? What are the ways to 'retool' the workers? Are the workers young enough to shift work streams? The flexibility school regards the 'market' as the ideal. Is the market ultimately not a social institution and embedded in a social context? (Shyam Sundar, 2008, pp.146-147).

Another thing that comes to one's notice is that the entire flexibility debate militates against the "philosophy and strategy of the ILO, which can be characterised as the evolution of protective measures to safeguard the employment, security and basic needs of workers while promoting productivity and wealth accumulation" (Standing 1986, p. 1). Thus, the orthodoxy school completely ignores the interests and entitlements of workers such as labour rights as embodied in the ILO Core Conventions, which enjoy international legitimacy.

1.4 Alternative Labour Paradigms: Comparing the U.S. and the European Model

Over the last few decades, a great debate has emerged as to whether the traditional European social economy model is viable any longer. Europe, which has had a decade of high unemployment, is contrasted with the U.S which is characterised by low levels of unemployment. The claim is that this superior U.S. performance is attributable to the U.S. having flexible labour markets, whereas Europe has labour markets that are inflexible and sclerotic. The policy assertion is that Europe must abandon its long-standing social economy model which has given extensive social and economic protections to working people. This characterisation raises important questions regarding how successful the U.S. economy has been compared to Europe,

and whether it is labour market flexibility or some other factor that is responsible for the differential employment performance.

1.4.1 Four Social Europe(s)

A common taxonomy of Social Europe(s)- proposed, inter alia, by Ferrera (1998) and Bertola (2001)- refer to four distinct social policy models: Nordic, Anglo-Saxon, Continental and Mediterranean countries. The countries in the first group (Denmark, Sweden, Finland plus Netherlands) feature the highest levels of social protection, and provide universal welfare as a "citizen right", funded by general taxation. High unemployment benefits, high replacement rate for medium and low wage earners, unions' involvement in the administration of benefits often go hand in hand with compressed wage structures

Countries with an extensive insurance base, non-employment benefits and old age pension belong to the second group. Continental countries (Germany, Austria, France, Belgium and Luxembourg) display declining union membership rates in the last 25 years (Boeri, 2001), whereas unions' influence is preserved by laws extending the coverage of collective bargaining to non-members. Unemployment benefits are not generous as in the Northern model, but they are provided for long durations. Most of the people are covered by social insurance since they start to work as in the Bismarckian tradition.

The third family of social policy systems, the Anglo-Saxon (UK and Ireland), draws on the Beveridgean tradition. Coverage is inclusive but it can be considered universal only in public health care. Social assistance is provided conditional to rather tight means testing. As unions are weak, and redistribution is concentrated o the very poor, wage structures are more dispersed than elsewhere with a relatively high incidence of low-pay employment, somewhere half-a-way between Europe and the US.

The Southern group includes Italy, Greece, Spain and Portugal. These countries feature traditionally relatively strict employment protection legislation and early retirement provisions protecting the breadwinner, while excluding from the labour market important segments of the population in working age, such as the youngster

and women. Spending is concentrated on old age pensions. The strong influence of trade unions involves rather compressed wage structures (Garibaldi et al., 2008, pp.2-3).

1.4.2 The Uniqueness of the European Social Model

The industrial economies of Europe are marked by the presence of legal and administrative institutions that protect a variety of substantive rights- terms, conditions and rewards of work- based on a set of well defined procedural rights (Hepple, 2006). ²⁷ Industrial societies have tacitly recognised that equitable outcomes by way of substantive rights automatically follow the establishment of institutions that guarantee procedural rights.

The combination of the two sets of rights- substantive and procedural- is a profoundly important achievement of all industrial economies. It is epitomised by the European social model. The essential features of this model may be listed as follows: i) universal provision of public service that include education, health, infrastructure and a clean environment; ii) assured employment opportunities based on open-ended contracts; iii) improved terms and conditions of employment along with minimal disparities in wage earnings; and iv) social protection including occupational safety and secure incomes for all during and beyond their working lives.²⁸

1.4.3 The U.S. and Europe compared

In an early contribution to the debate over the U.S. model, Bernstein and Mishel (1995)²⁹ identified the key stylized facts distinguishing the U.S. from Europe. Over the last decade, the U.S. has enjoyed unambiguously faster job creation and a lower rate of unemployment than Europe. Average real hourly wages have stagnated in the

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²⁷ Hepple (2006) also draws the distinction between substantive and procedural rights. Substantive rights are those which determine the actual conditions of labour, such as minimum wages, maximum working time and the right to equal treatment. Procedural rights are those which shape the procedures by which substantive rights are determined, such as the right to collective bargaining, the rights of workers' representatives and the right to equal opportunities.

²⁸ Cited from A.V. Jose in Garibaldi et al, 2008, pp.24-25.

²⁹Discussed in Palley (1999).

U.S., and there has also been a significant increase in income inequality and poverty. In Europe, job creation has been negligible and unemployment rates have been much higher. For the most part (the U.K. is an exception corresponding more closely to the U.S.), European income inequality has remained relatively unchanged and average real hourly wages have risen. Europe has also enjoyed relatively faster rates of productivity growth, as well as having much lower rates of poverty and a more equitable income distribution.

These stylized facts reveal that the U.S. economy has performed well with regard to Job creation and unemployment, but it has failed to deliver with regard to wages, income distribution, poverty, and productivity growth. As opposed to this, European economies have performed well with regard to wages, income distribution, poverty, and productivity growth, but have failed with regard to unemployment and job growth.

1.4.4 The Hype Surrounding Labour Market Flexibility: A Damp Squib?

The leading explanation of the U.S.'s better employment performance that is often offered is that U.S. labour markets are flexible, whereas European labour markets are inflexible. This flexibility applies to both real wages and relative wages, as well as with respect to the costs of firing workers.

In an illuminating paper, Krueger and Pischke (1997)³⁰ have examined the consistency of this explanation, and they find it comes up short. Echoing the views of Bernstein and Mishel (1995), Krueger and Pischke find that the superior job creation of the U.S. is largely attributable to significantly faster population growth. With regard to Europe's higher unemployment rate, they reject the argument that it is attributable to a higher wage floor. If this were so, there should have been a relative increase in unemployment amongst those at the bottom rungs of the skill distribution ladder, yet this has not happened. The argument that relative wage rigidity has

Policy: U.S. and European Unemployment Explained".

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³⁰ Cited in Palley,T. (1999), "The Myth of Labor Market Flexibility and the Costs of Bad Macroeconomic

prevented Europe from adjusting to a shift in demand away from unskilled to skilled workers is also rejected. If this were true, there should have been an increase in unemployment amongst unskilled workers, and a decrease in unemployment amongst skilled workers. However, unemployment amongst skilled workers has actually risen, while the proportion of skilled to unskilled unemployed workers has changed a little. Finally, higher firing costs cannot explain European unemployment either theoretically or empirically. Instead of lowering employment, they serve to reduce the cyclical volatility of employment (Bentolila and Bertola, 1990).

There are other arguments that further put the labour market flexibility hypothesis in jeopardy. While the U.S. has enjoyed a lower rate of unemployment than Europe, it is also the case that the unemployment rate has been higher than it was in the 1950s and 1960s. However, the minimum wage in real terms has decreased, as has unemployment insurance coverage, and union density (Palley, 1998). Each of these developments should have reduced labour market inflexibility and reduced the unemployment rate, yet it has still risen with regard to the past.

There has also been an increase in labour market flexibility in Europe. Thus, Blank (1997) notes that Germany, France, and Belgium weakened their dismissal laws, Spain and the Netherlands decentralized wage bargaining, while Italy eliminated automatic wage indexation. This should have reduced European unemployment yet unemployment did not fall. Taken together, these arguments suggest that labour market flexibility is not the cause of the U.S.'s lower unemployment rate.

An alternative to the labour market flexibility hypothesis is that high European unemployment is attributable to bad macroeconomic policy (Solow, 1994). When this is linked with differences in labour market flexibility, there emerges a coherent and comprehensive account of both unemployment performance and wage developments (Palley, 1998)³¹.

³¹Palley, T. (1998) "Restoring Prosperity: Why the U.S. Model is not the Answer for the U.S. or Europe," Journal of Post Keynesian Economics, 20, 337-54.

1.4.5 Highlighting the Weakness of the US Model

With regard to the debate on labour market flexibility, the labour market in the US was considered to be 'flexible and dynamic' while that in Europe as 'sclerotic'. The 'employment at will' doctrine is said to prevail in the labour market in the US (Schanzenbach,2003). However, there are a few facts that provide a contrasting picture³².

It is true that labour laws in the US do not generally restrain the freedom of employers in the hiring and firing of workers and the workers could get protection only from collective agreements, should they contain provisions to that effect. However, the scenario is not as free as it seems. The Federal Law prohibits dismissals on grounds of national origin, colour, sex, physical state, pregnancy, etc. as in most Western countries (Dasgupta, 2001, p.16). The Worker Adjustment and Restructuring Notification (WARN) Act (1988) requires firms employing more than 100 workers to provide sixty days advance notice of plant closures or mass lay-offs to local government officials, apart from providing notice to workers and their representatives (Bertola et al,1999; Schanzenbach,2003). A large number of cases relating to unjust dismissals are filed in the US (Nickell and Layard 1999,p.3065). It has been estimated that the number of wrongful dismissal lawsuits has risen from "only a handful in the 1970s to 600,000 cases in 1982, and then to about 100,000 annually from the late 1980s onwards" (Beck, 1999, p.94). Also, the success rates in such cases have been an impressive 60-65 percent for the country as a whole. The courts in the United States have recognised "exceptions to employment at will if a termination could violate public policy, an implicit contract, or good faith" (Schanzenbach, 2003,p.471). The European versus the 'dynamic' US labour markets are at best a "gross simplification of a far interesting situation" (Navarro, 1998) and the contrast between the two "is more complex than is commonly realised" (Nickell, 1997).

³² This sub-section summarises the arguments as provided in Shyam Sundar, 2008, pp.150-151.

1.4.6 Is Europe as "Rigid" as it is Portrayed? A Reality Check

It is common place to compute a 'European unemployment rate' and compare it with the unemployment rate in the US. But it is important to note that there is a heterogeneity in the unemployment rates across countries in Europe and it is misleading to call a particular rate as the 'European unemployment rate' (Shyam Sundar, 2008). The average standardised unemployment rate in the European Union in 1994 was just about 11 percent and the comparable figures for the reference country, the US, was 6.1 percent (Ibid.)³³. It is quite obvious, that the US experienced less unemployment than the European Union. But there were atleast three countries, namely, Austria, Switzerland and Norway, which had unemployment rates lower than that in the US and two countries, the Netherlands and Portugal had just around the US unemployment rate. It is interesting to note that Canada, UK, Ireland and New Zealand, the English speaking countries had higher unemployment (Shyam Sundar, 2008,pp.151-152).

The blame of higher unemployment has usually been placed on strict unemployment laws. Against this backdrop, it would be analytically significant to look at the unemployment experience in 1995 (which was a year of high unemployment, as mentioned earlier). The OECD countries have been classified on the basis of overall EPL scores (Version 2) constructed by the OECD for late 1990s, into liberal (low), medium strict and high categories and study the unemployment experience accordingly (Shyam Sundar in Garibaldi et al, 2008, p.59).

It is evident from the table (Refer table 1.2 in the annexure) that some European countries believed to be having stricter employment protection laws than liberal countries (and certainly more stringent than the reference country, the US) had unemployment rates lower in general than the liberal countries. Their performance registers a marked improvement when the figures for Finland (an 'outlier' case in that group) are excluded, even after excluding, the figures for Ireland from the liberal group on similar grounds. Among the countries belonging to the medium category, Austria had lower unemployment rates even when compared with the US, with youth

³³ This and the subsequent year witnessed higher rates of unemployment, hence the choice of this year (Shyam Sundar, 2008, p.151).

and female unemployment rates being palpably lower in Austria than in the US. Thus, the allegations by the 'flexibility school' that institutional rigidities and strict employment laws are responsible for higher unemployment rates do not seem to hold ground on a one-to-one comparison of the two contrasting systems.

It may be argued that it is not the aggregate employment rates that matter, but those at the disaggregated levels. The unemployment rates by gender and age for the OECD countries are reproduced in table 1.3 (Refer annexure).

Following Howell et al (2006), the European countries are divided into two groups: high unemployment countries include Belgium, Finland, France, Germany, Italy and Spain and low unemployment countries include Austria, Denmark, the Netherlands, Norway, Sweden and Switzerland. There is little to distinguish between the unemployment experience of the liberal OECD countries and the low unemployment European countries even when we study the unemployment rates by gender and age groups. But the unemployment rates for young workers in general and young female workers in particular are higher and a source of concern. The rates for young female workers are much higher in the case of Italy and Spain and quite low for Germany.

The argument that European labour markets are not flexible is not valid either. The recent review of labour market conditions in the European countries by the European Trade Union Confederation (ETUC) reveals that precarious, dead-end jobs are pervasive (ETUC,2008)³⁴. The main findings are summarised as follows:

It was observed that the number of fixed term contract workers rose from 22 million in 1997 to 32 million in 2007 in the EU-27 as a whole; in other words, their share in total employment rose from 11.5 percent to 14.5 percent. The number of part-time workers rose from 32 million in 1997 to 40 million after ten years. Much of the rise in employment rate was apparently due to expansion of part-time jobs. The number of 'involuntary part-timers', i.e. those working part time because they could not get full time jobs, also rose, that is, from 15 percent their share rose to 20 percent of part-timers. It was found that a sizeable chunk of part time workers work in unconducive working conditions such as long and/or inflexible working hours, lack of care

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³⁴ This has also been discussed in Shyam Sundar, 2008, pp.153-154.

facilities and absence of mobility for skilled workers. About 15 percent of the workforce (31 million workers) were earning a poverty wage and some 17 million of them constituted 'working poor' (ETUC, 2008).

The fact finding exercise of the ETUC shows that the argument that labour markets in Europe are rigid and inflexible stands refuted. In fact, Europe is currently suffering not from inflexibility but "excessive flexibility", which does not bode well for "Social Europe" (ETUC, 2008, p.2).

1.5 Summing Up

In recent years, the role of labour institutions in explaining economic outcomes has received considerable attention from analysts, researchers, policy makers, etc. This chapter provided a brief overview of the theoretical positions of the contending perspectives. It also extends the line of argument to discuss alternative labour paradigms, where the supposedly "flexible" US model is compared and contrasted with the so called "rigid" and "sclerotic" European model. It has been argued by economists belonging to the mainstream orthodoxy and international organisations like the IMF that rigid labour market institutions like tough employment protection laws and generous unemployment benefit schemes could be at work to cause high and persistent unemployment in many European countries. The European countries experiencing high unemployment have been urged to emulate the 'model' U.S. labour market and "undertake comprehensive structural reforms to reduce 'labour market rigidities'."(IMF, 2003).

However, as it has clearly emerged from the review of various strands of literature, the theoretical basis for the advocacy of labour market flexibility as the key to growth and employment expansion skates on thin ice. To quote Jha (2010), "viewing labour flexibility as the cornerstone of economic policy may simply be akin to barking up the wrong tree. Economic performance of a system, in terms of growth and employment, hinges critically on other variables such as aggregate demand, appropriate investments in labour, among others" (Jha, 2010,p.94). As postulated in a paper by Jutting (2003), analysing the impact of institutions on development outcomes need to take into account the differences between exogenous and endogenous institutions, the

idea that institutions do not stand alone but are embedded in a local setting influenced by historical trajectories and culture and different levels of institutions are associated with different time horizons of change. The last point is of special relevance for policy makers aiming to reform the institutional set-ups of their countries.

Chapter 2

Measuring Regulations: A Slippery Terrain?

There are primarily two kinds of exercises when it comes to the issue of measurement of labour regulations. The first is based on survey responses from the players in the labour market such as managers, executives, etc. For instance, the World Economic Forum (WEF) and Institute for Management Development (IMD) partake in such a kind of survey based exercise. The second kind of measurement exercises use the labour laws (formal aspects) of the countries and try to construct indices of rigidity/flexibility to characterise the nature of their labour markets, e.g. OECD and Botero et al (2003).

Many exercises have been undertaken, both at the global level, across countries, and at the regional level, within countries, to bring out comparative reports discussing the competitiveness of firms/countries/regions and the 'idealness' of business environment in countries. The World Bank, the IMD, the WEF are well known exponents of such type of measurement studies. The aims of the reports of these bodies are basically to (a) define an 'ideal' economic (including the business) environment, (b) indicate the extent of 'deviation' from the benchmarked environment, (c) influence economic and social policy making of the governments, and (d) present a comparative picture of economic and business environment of various countries to enable business firms to decide on their investment decisions (Shyam Sundar, 2008, p.136).

It is often advocated by the proponents of such exercises, that the "ideal" economic environment is one where economic freedoms of various kinds are allowed to prevail in an unfettered manner. Such freedoms are supposed to include personal choice, free human interaction reflected in voluntary exchange aided by markets, freedom of entry and exit in industry, existence of property rights, freedom of occupation among others. The champions of such 'freedoms' as they are referred to, view any government intervention as being 'coercive', but accommodate 'minimal coercion' to

provide a framework for economic activity, say, to ensure protection of private property (Beach and Kane, 2007)¹.

These studies and measurement exercises are principally from the point of view of the business firms. They are based on the ideology that the rational expectation guiding investment decisions suggests that capital should flow to regions where an 'ideal' business environment is presumed to exist. An ideal business environment is characterised by minimal regulations and free operation of market forces. The business environment comparative exercises adopt the 'free market' approach as their benchmark and rank the countries accordingly. According to the economic freedom perspective, freedom in the labour market is reflected in the ability of the firms and the individuals to act without restraint in issues relating to buying or selling labour services and freedom in the associated aspects of the exchange such as price of labour, conditions of work, quits and dismissals, etc., without any restrictions by external agencies such as the law, trade unions etc. A free labour market is one where the workers and the employers are allowed to act as free agents and are unconstrained by regulations of any sort, be it laws, codes or traditions. The role of the State is reduced to playing merely an enabling role in the labour market, and keeping interventions to a minimum.

2.1 Survey-based Studies

Among the various kinds of survey based studies that are prevalent, details of some of the important ones are provided in this section. An attempt is made to briefly discuss the methodology and main findings of some of these studies, drawing substantially on the reports or manuals brought out by the exponents of such exercises.

¹ Beach, William W and Kane, Tim (2007), Chapter 3, Methodology: Measuring the 10 Economic Freedom, http://www.heritage.org/research/Features/index/chapters/pdfs/Index2007 Chap3.pdf

2.1.1 World Economic Forum's Study²

The World Economic Forum's 'Centre for Global Competitiveness and Performance', through its Global Competitiveness Report and report series, aims to highlight the business operating environment and competitiveness of economies worldwide. Every year, the WEF brings out the Global Competitiveness Report. The Report for 2002-03 covered 80 countries and the Report for 2006-07 increased its coverage to 125 countries and regions within the countries. The 2010-11 Report featured 139 countries while the 2011-12 Report further expanded its ambit to include 142 economies. The study supplements 'hard' data, that is, published information on various economic and social variables with 'soft' data, i.e. information collected through the survey. The 'soft' data is collected from the Executive Opinion Survey conducted every year with the local partner institutions in the countries covered. The respondent firms are chosen randomly from the roster of firms and the respondent in the firms is usually a highly ranked official, such as the CEO or a member of its senior management.

The typical Executive Opinion Survey question asks the respondent to assess an issue by choosing a score between 1 and 7 that best reflects their perceptions, where values 1 and 7 indicate two ends of the spectrum. Suppose there are two options to a query. Circling 1 means that the respondent wholeheartedly agrees with the first option and circling 7 implies that the respondent subscribes to the second option. Lower numbers show agreement (on declining intensity) with the first option and higher numbers show endorsement increasingly for the latter option.

Since 2005, the World Economic Forum has based its competitiveness analysis on the Global Competitiveness Index (GCI), proclaimed by it as a highly comprehensive index for measuring national competitiveness, which captures the microeconomic and macroeconomic foundations of national competitiveness. The GCI is based on a combination of soft and hard data on variables generated on the following nine factors, called 'pillars' of competitiveness, namely, institutions (public and private),

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² Based on the World Economic Forum, 'The Global Competitiveness Report', various years.

infrastructure, macro economy, health and primary education, higher education and training, market efficiency (goods, labour and financial markets), technological readiness, business sophistication and innovation. The 'pillar' that is of relevance in this discussion is 'market efficiency'. The 'market efficiency' pillar seeks to study the efficiency of allocation in goods, labour and financial markets. In the labour market, flexibility and efficiency are considered essential to allocate labour to the best possible use. This is sought to be captured by flexibility in hiring and firing and wage determination, and the extent of co-operation in labour-employer relations, the relationship between pay and productivity and equality of treatment between men and women in business.³

2.1.2 IMD's World Competitive Exercise

Ever since 1989, the IMD has been publishing the World Competitiveness Yearbook. The exercise analyses and ranks "the ability of nations to create and maintain an environment that sustains the competitiveness of enterprises" (IMD, 2005). It combines 'hard' data taken from international, national and regional organisations and private institutes and 'soft' data drawn from the annual Executive Opinion Survey of over 4000 respondents. The survey consists of queries on over 100 points and the respondents are usually the top and middle management personnel. The sample size in each country is proportionately distributed according to the share of the three sectors (primary, secondary and services) in national income. It uses over 300 criteria grouped into four competitiveness factors. The four competitiveness factors are economic performance (77 criteria), government efficiency (73 criteria), business efficiency (69 criteria), and infrastructure (95 criteria). In turn, each of these four factors is divided into five sub-factors and thus, there are 20 sub-factors. Each subfactor has the same weight in the overall scheme, that is 5 per cent. Criteria can be based on either hard data or soft data (survey data). Business legislation is one of the sub-factors of the criteria 'government efficiency'. Labour regulation is one of the factors listed under this sub-factor. Information is based on survey data (See Shyam Sundar, 2008, pp.137-138).

³ Refer Shyam Sundar (2008).

For instance the queries under this aspect can be of the following sort: "Labour regulations (hiring/firing practices, minimum ages, etc.): hinder business activities/do not hinder business activities". The respondents are required to assess the variable on a scale of 1 to 6, the lower values indicating negative perception and the higher values indicating positive perception. The average value is calculated from these scores and the data is converted from a 1-6 scale to a 0-10 scale. Finally, the survey responses are converted into their standard deviation values and accordingly rankings are calculated. (Ibid.p.139).

The variables covered under labour regulation by the IMD study include unemployment legislation, wages and labour cost, working hours, labour/work force, including total, part-time, female workers, labour relations, worker motivation and employee training, etc. On variables like unemployment legislation, labour relations, worker motivation and employee training, survey based responses are resorted to, while in case of variables like wages and labour cost, working hours, work force, the exercise draws upon hard data. On the aspect of labour relations, both soft and hard data are combined to generate a ranking.

According to the findings of the IMD's annual World Competitiveness Yearbook (WCY), the most competitive of the 59 ranked economies in 2012 are Hong Kong, the US and Switzerland. Emerging economies like China (23), India (35) and Brazil (46) have all slipped in the rankings, in the wake of global turmoil.⁴

2.1.3 Heritage's Economic Freedom Study⁵

The Heritage Foundation has provided the Index of Economic Freedom, co-published annually with the Wall Street Journal, since 1995. The Index tracks the march of economic freedom around the world, across various countries. The analysts and experts involved in the construction of the index identify 10 types of economic freedoms, such as business freedom, trade freedom, government size, monetary

⁴ IMD (2012), The World Competitiveness Yearbook.

⁵ *Index of Economic Freedom* (Washington, DC: The Heritage Foundation and Dow Jones & Company, Inc., 2012), Various years, http://www.heritage.org/index.

freedom, investment freedom, financial freedom, property rights, freedom from corruption, and labour freedom. The basic tenet on which the study rests is that all economic agents should be left free to pursue their economic activities with limited intervention by the government.

The labour freedom component is a quantitative measure that looks into various aspects of the legal and regulatory framework of a country's labour market. It provides cross-country data on regulations concerning minimum wages; laws inhibiting layoffs; severance requirements; and measurable regulatory burdens on hiring, hours, and so on. Labour freedom "reflects the ability of workers and business enterprises to interact without restrictions by the state" (Beach and Kane 2007, p.41).

However, as noted by the authors of the freedom index, coverage of labour market flexibility in the previous methodology was limited by the lack of data on labour regulation that were available across countries in a consistent manner. In light of the growing importance of labour market flexibility in today's economy and the increased availability of consistent labour policy data across countries, the 2007 *Index* adopted an independent labour freedom factor that is designed to measure countries' labour market regulations more adequately(Beach and Kane, 2008, p.53).

In the construction of the labour freedom index, six quantitative factors are equally weighted, with each counted as one-sixth of the labour freedom component⁶.

- Ratio of minimum wage to the average value added per worker,
- Hindrance to hiring additional workers,
- Rigidity of hours,
- Difficulty of firing redundant employees,
- Legally mandated notice period, and
- Mandatory severance pay.

Based on data from the World Bank's *Doing Business* report, these factors specifically examine labour regulations that affect "the hiring and redundancy of workers and the rigidity of working hours." In constructing the labour freedom score,

⁶ Terry Miller, Kim R. Holmes, and Edwin J. Feulner, *2012 Index of Economic Freedom* (Washington, D.C.: The Heritage Foundation and Dow Jones & Company, Inc., 2012) .

each of the six factors is converted to a scale of 0 to 100 based on the following equation:

Factor Score_i= $50 \times factor_{average}/factor_{i}$

where country *i* data are calculated relative to the world average and then multiplied by 50. The six factor scores are then averaged for each country, yielding a labour freedom score. The simple average of the converted values for the six factors is computed for the country's overall labour freedom score. For example, even if a country had the worst rigidity of hours in the world with a zero score for that factor, it could still get a score as high as 83.3 based on the other five factors.

For the eight countries that are not covered by the World Bank's *Doing Business* report, the labour freedom component is scored by looking into labour market flexibility based on qualitative information from other reliable and internationally recognised sources.⁷

The 2008 Index covered 162 countries across ten facets of economic freedom, as discussed above. Hong Kong was depicted as having the highest level of economic freedom, followed by Singapore. Europe, Asia and the Americas were considered the three freest regions of the globe. The 2012 Index analyses economic policy developments captured through scores across the ten specific factors of freedom, in case of 184 countries, since the second half of 2010. Hong Kong maintained its numero uno position, and was closely followed by Singapore as the second freest economy in the world. Australia, New Zealand and Switzerland came next in the rankings.

2.1.4 The OECD's Measures

The employment protection law (EPL) index constructed by the OECD is one of the most popular and widely used measures. The EPL index is the aggregate of the strictness of regulations of employment protection, for regular employment, temporary employment and collective dismissals. It was initially constructed for two

⁷ Ibid.

time periods, the late 1980s and the late 1990s and the OECD's 2004 report provided data for 2003 (Shyam Sundar, 2008, p.140). The details of the index can be seen from table 2.1, provided in the annexure.

2.1.5 Botero et al Measures⁸

Botero et al (2003) empirically investigate the labour protection conferred on workers through employment laws, collective bargaining laws and social security laws, in 85 countries. They have relied on several cross-country secondary sources, including the International Encyclopaedia for Labour Law and Industrial Relations, the ILO's Conditions of Work Digest (1994, 1995), and the U.S. Social Security Administration's Social Security Programs throughout the world. They make certain assumptions about the worker and the business in order to ensure comparability and consistency across countries, which are reported in the discussion related to World Bank's exercise. For each type of law, they identify various aspects of it and assign scores on the extent of regulation; higher scores are assigned to indicate higher regulation and vice versa.

They construct three sub-indices, namely, alternative employment contracts, conditions of employment, and job security and arrive at the employment law index by aggregating the sum of three above mentioned sub-indices. Each sub index is a product of various components. The alternative employment contract index considers the regulations on part-time employment, fixed-term contracts, and employment of family members. The scores for each variable are either binary(one in case of regulation and zero for its absence) or normalized from zero to one, where higher values mean more regulation or higher protection. The scores of the variables are averaged to arrive at the sub-index that is, 'alternative employment contracts'. Similarly, the sub-index for conditions of employment is the average of scores assigned for variables such as hours of work, maximum hours of work, premium for overtime work, restrictions on night work, days of annual leave with pay, paid time-off for national or local holidays, statutory duration of maternity leave with full pay

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⁸ Botero, Juan C., Simon Djankov, Rafael la Porta, Florencio Lopez-De-Silanes and Andrei Shleifer (2003), "The Regulation of Labour", NBER Working Paper 9756, pp.9-12.

protection, mandatory minimum wage, and conditions of employment in the constitution of the country. The third sub-index relates to job security which is the average of scores assigned to variables like protection of grounds for dismissal, notification to or permission from a third party for dismissal (individual or collective), mandatory retraining or replacement before dismissal, priority rules applicable for lay-offs, legally mandated notice period and severance payment, and the existence of the right to job security in the constitution of the country. They sum up the scores for each sub-index (alternative employment, conditions of employment and job security) to arrive at the employment law index⁹.

2.1.6 World Bank's 'Doing Business' Survey¹⁰

The World Bank has been publishing 'Doing Business' (DB) since 2004. It seeks to provide objective measures of business regulations and their enforcement. Labour and employment regulation (under the heading 'employing workers') figured among the original five themes covered in the initial years and continues to be so even after the expansion of themes over the years, In its recent editions, it measures regulations affecting ten areas of business such as starting a business, dealing with licenses, employing workers, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts, and closing a business. The 'Doing Business' ranks countries on the criteria of 'ease of doing business'. The information on the criteria of 'employing workers' is based on a detailed survey of labour regulations, which are completed by local lawyers and public officials. Secondary sources are reported to be used to check the accuracy of the responses.

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Shyam Sundar also provides a lucid exposition on this, Shyam Sundar, 2008,pp.143-145.

⁹ Discussed in Shyam Sundar, 2008,pp.142-143.

¹⁰ Based on World Bank, 'Doing Business' Reports, various years. Can be accessed at http://www.doingbusiness.org/Reports.

The World Bank has used the methodology adopted by Botero et al (2004) to measure labour regulations across countries. To make data comparable across economies, the Survey makes certain assumptions about the worker and business which are noted as follows. The worker is a full time, male, and non-executive employee, with twenty years of service. He earns a salary plus benefits equal to the economy's average wage during the entire period of his employment. The assumptions about the business include; it is a limited liability company, domestically owned and operates in the manufacturing sector. The firm is situated in the largest business city and has 60 employees. More importantly, employment regulations are assumed to be governed by collective agreements only in those countries where bargaining covers more than half of the manufacturing sector (World Bank, *Doing Business*, 2012,p.67).

It constructs the 'rigidity of employment index' which is the average of three sub-indices, viz. the difficulty of hiring index, the rigidity of hours index, and the difficulty of firing index. The scores for each component of the sub-index are averaged and they are scaled to 100. The index values thus take the values between 0 and 100, with higher values indicating more rigid regulation. The 2008 Survey has made some minor modifications in the methodology "to align the DB methodology with International Labour Organization (ILO) conventions" (World Bank 2007,p.68). Since 2009 the World Bank Group has been working with a consultative group—including labour lawyers, employer and employee representatives, and experts from the ILO, the OECD, civil society and the private sector—to review the employing workers methodology (World Bank, 2012,p.58).

2.1.7 Fraser Institute's Exercise¹¹

The Fraser Institute in Vancouver, Canada publishes 'Economic Freedom of the World' every year. It seeks to measure the extent of support rendered by the policies and the institutions of a country to promote economic freedom. The Economic Freedom exercise for 2004 covered 130 countries. The Economic Freedom exercise for 2011 expanded the data set to cover 141 countries and territories. It uses

Based on the *Economic Freedom of the World, Annual Report*, Fraser Institute, Canada, various years.

information and data from third-party international sources like the IMF, the World Bank, the World Economic Forum and so on. Forty-two data points are used to construct a summary index and to measure the degree of economic freedom in five areas, i.e. the size of the government, the legal structure and security of property rights, access to sound money, the freedom to trade internationally, and the regulation of credit, labour and business markets¹².

Confining our discussion to matters related to labour markets only, the relevant indicators covered are minimum wages, dismissal regulations, setting of wages by a centralized agency, extension of union contracts to non-participating parties, and military conscription. The labour-market component is designed to measure the extent to which these restraints upon economic freedom are present. In order to earn high marks in the component rating regulation of the labour market, a country must allow market forces to determine wages and establish the conditions of hiring and firing, and refrain from the use of conscription.

2.2 A Critique of Selected Survey Based Studies

2.2.1 Problems in Ranking Methodology

Most of these studies provide rankings of countries on the basis of their scores in different parameters. The ordinal measure in terms of ranks indicates whether some country is "more or less" regulated than the other. But it cannot reveal the extent of over or under regulation, i.e. by how much. The second important limitation is that the exercise of assigning 'numerical values' corresponding to the extent of toughness of a protective provision could be arbitrary (Heckman and Pages, 2000). The next issue is with respect to the problem of assigning weights. Some researchers argue that weighting exercises require detailed relevant information and involve subjectivity. On the other hand, there are others who argue that weighting should be used in the crosscountry comparative exercises as the institutional conditions vary across the countries.

Fourthly, some so-called rigid countries appear to be flexible on one count and rigid on another. Now, it is not clear as to which component should be taken for judging the countries. Fifthly, the analytical logic inherent in the exercises is mechanical. For

Institute.

¹² Gwartney, J., R. Lawson and J. Hall, Economic Freedom of the World 2011 Annual Report, Fraser

instance, the higher the protection or the greater the regulation, the lesser is the economic freedom of the business environment, and this is viewed as bad. But as argued in the earlier chapter, this is not necessarily the case, as greater protection might pave the way for increased efficiency.

Sixthly, these studies take into account the explicit costs; they fail to include the indirect and real costs of rigidities owing to measurement problems and complicated nature of such an exercise. For example, worker separation exercises could give out 'signals' to stayers and their productivity may decrease (owing to feelings of insecurity) or increase (owing to threat effects). The money cost of reinstatement could be equivalent to the amount of wages paid to months of service lost plus some penalty amount. But the real costs of reinstatement are larger than this. Employers do not prefer to reinstate the dismissed worker for several reasons (it may be difficult to manage the reinstated worker and it might incite indiscipline amongst other workers). The actual costs of rigidities should therefore, include the total costs (both money and real and direct and indirect) involved in scenarios that deviate from the so-called ideal situation of 'dismissal at will'. The regulation system imposes 'real' costs in terms of procedures and uncertainties and 'indirect' costs in terms of wider effects. The efforts to capture these have been incomplete, problematic and arbitrary (See Shyam Sundar, 2008, pp.156-157).

2.2.2 A Critical Review of Some Select Studies

Several exercises like the Fraser Institute's measures of economic freedom, the World Bank's 'Doing Business', the WEF's exercises, variables like conscription considered by the Fraser Institute betray the influence of free market idealism. All these studies emphasise flexibility from the employer's perspective. These exercises completely ignore the institutions that protect and extend various types of securities and freedom of association and collective bargaining. Thus, by refusing to take cognizance of these core rights (the ILO convention could serve as a basis for judging them), the surveys show the 'one-sided' nature of these exercises (Berg and Cazes 2007).

There are two approaches to study the impact of labour regulation: one, to construct an objective scoring system by looking at formal law and institutions. But this is not fool-proof as the implementation of labour regulations is lax for various reasons. The alternative is to gauge the employers' perceptions by means of a survey method.

The exercises of WEF and IMD use survey-based answers on labour regulations. The survey based data is supposed to be better than that which is based on a construction of indices based on legal aspects, as the responses would also reflect the effectiveness of enforcement of law. On the other hand, there are certain problems with survey responses. Firstly, it is subjective. The firm's responses could be influenced by its experience (good or bad) which need not conform to the perceptions of others. For example, firms which have had bad labour relations owing perhaps a bad human resources policy could be prejudiced to rank union power among the major obstacles to conduct business.

Secondly, there could be a difference between perceptions and actual conditions. Respondents could adopt different yardsticks to assess the importance of particular variables. Labour regulations might receive a better ranking in one region and a worse ranking in the other. It does not necessarily mean that things are better in the former than in the latter. Thirdly, the perceptions of firms on the listed deterrents would vary among firms and what is usually reported is the average. It might hide more than it reveals. Fourthly, it usually covers only big players. The DB exercise by the World Bank makes a number of assumptions, one of which relates to the size of the firms covered. The World Bank has made some efforts to cover the informal sector also. ¹³ Fifthly, employers know these surveys could be used by the press, the media and others in future and they could be effective tools in pushing labour reforms; then their responses could be shaped accordingly to project an overly rigid picture of the labour market ¹⁴.

2.2.3 The 'Doing Business' Indicators: A Brief Critical Appraisal

In recent years, the World Bank's DB exercise has come in for a lot of flak from several quarters. In fact, its self evaluation exercise by an external team of auditors has shown that it has sought to use weak evidence to push its agenda (see Callan, 2006)¹⁵. Trade unions like the ITUC (formerly ICFTU), the ILO, and a group of Senators in the United States have levelled criticisms on the exercise on several

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¹³ See World Bank 2005 for further information on exercises relating to informal firms.

¹⁴ These arguments are explored in detail in Shyam Sundar, 2008(p.158-162).

¹⁵ Cited in Shyam Sundar, 2008,p.162.

grounds (Berg and Cazes 2007; Bakvis 2006; Engler 2006; ILO/GB 2006; ITUC/Global Unions 2007). The basic argument of the critics is that the DB surveys are an attempt by the IMF and the World Bank to promote labour market deregulation in the developing countries, by using the index as a guide for determining loans by the international financial institutions

The "Employing Workers Index" suffers from several methodological problems, some of which are admitted by the authors of DB themselves (Djankov, 2007). Some of the important problems as pointed out by the critics are highlighted here. The Employing Workers Index scores countries based on strong assumptions about the workers and the enterprises which are not relevant, particularly in developing countries, but also in developed countries. According to the authors of Doing Business reports, the hypothetical cases should make international comparison more simple and universal. But this is "an erroneous and narrow view that assumes that in all countries the same legal instruments are used to resolve identical problems", (Berg and Cazes, 2007, p.9). To start with, the survey covers only the most populous cities and may not be representative of regulations in other parts of the country. The seriousness of this limitation becomes evident when researchers find significant differences in labour regulations across the regions in a country- for instance, the recent studies on labour regulation in some states in India and regional studies on industrial relations have found significant differences in regulation (Venkata Ratnam 1996; Shyam Sundar 2008; Reddy 2008; Banerjee 2008; Sharma and Kalpana 2008).

Secondly, the measures involve an element of arbitrary choices with regard to the weighting scheme. For example, equal weights are assigned to the three components of the difficulty of the difficulty of hiring indicator, whereas unequal weights are assigned to the difficulty of firing indicator and the reasons for doing so are not explained. The dynamic ranking method (yearly exercises) means that a country's ranking prompts the countries to initiate more labour market reforms to surge ahead of others and thus improve their rankings. This could result in race to deregulation in the labour market. Berg and Cazes (2007) demonstrate the validity of their criticisms by taking the cases of Bulgaria and Argentina. Both are rated as having rigid labour markets by the DB exercise. Ironically, the OECD's EPL score for individual contracts and the score based on employers' perceptions for Bulgaria shows it to be

one of the most flexible countries in that region. The differences in the ratings are due to the methodological peculiarities if the DB exercise outlined above. The EWI gives equal weights to regulations relating to regular and temporary contracts though the latter are insignificant in Bulgaria (Berg and Cazes, 2007). Further, the researchers have argued that using 'composite indicators' to rank the countries could be problematic: one can use the same set of indicators but reweight them and could thus arrive at different rankings (See Shyam Sundar, 2008). The Doing Business reports are based on answers to questionnaires on the different types of labour regulations that prevail in each country. Questionnaires allow room for interpretation and value judgements as they are based on the perception of the respondent, resulting in a certain level of subjectivity (Berg and Cazes, 2007, p.12).

Apart from various methodological problems with the index, Berg and Cazes (2007) note that a significant conceptual shortcoming of the 'Employing Workers' (and Botero et al., 2004) indicators is that they do not consider the positive externalities of labour market regulations. The many benefits, both economic and social, emanating from labour law, such as their role in reducing inequality, insecurity and social conflict, but also in providing incentives to businesses to pursue high-road management strategies, are not considered (Berg and Cazes, 2007, p.5).

There are some flaws in the policy prescriptions of the World Bank and the IMF. They advocate deregulation and flexibility measures to all countries irrespective of the peculiarities of the labour market and Industrial Relations System prevalent in them. Also, they fail to realise that the labour market outcomes are a product of complex interactions between various institutions and there could be important tradeoffs or complementarities between these institutions (Shyam Sundar, 2008).

Berg and Cazes (2007) observe that the index disregards the provisions set forth in numerous International Labour Conventions and even tends to discourage countries from abiding by many of the International Labour Conventions of the ILO. The Bank claims that the DB exercise made changes in its survey for 2008 which rewards countries complying with the ILO standards (World Bank, 2007). It is of interest to note that the DB exercise figured in the Agenda for Debate and Guidance of the Governing Body of the ILO in its 300th session held in November 2007 (ILO/GB

2007). The ILO regards the changes to be minor and argues that conflicts still persist between the EWI and the ILO standards on questions concerning dismissal notification, working hours and weekly rest. It further observes that the EWI doesn't reward compliance with international labour standards and can give high rankings where laws do not conform to ratified standards.

It is to be noted that while the "flexible school" continues to accuse high labour regulation as an impediment to business or capital in-flows, there are other labour related variables (apart from general aspects such as absence of corruption, low transaction costs, ease of entry etc), such as availability of skills that often influence the investors (ILO/GB 2007). It is ironical that top economic and social performers such as Germany and Finland should be rated as having burdensome labour regulations ¹⁶.

2.2.4 Criticisms of the Heritage Freedom Index

Freedom in the labour market need not necessarily imply freedom in the political system. On comparing the labour freedom as identified by the Heritage, with the civil and economic freedoms compiled by the Freedom House, two sets of cases can be identified: countries which rank high in labour freedom but having low civil and political rights and those which rank low in labour freedom, but enjoy high civil and political rights. For instance, countries like Saudi Arabia, Uganda, Singapore which are supposed to enjoy greater labour freedom on the basis of ranks assigned by the Heritage exercise, fare poorly when it comes to the civil and political rights category as reflected by the exercise by the Freedom House. On the other hand, countries like India, Germany, Finland, Norway, etc which are categorised as having low labour freedom are the ones enjoying the highest level of civil and political rights. As is argued by many, economic freedom is not the only freedom that exists—political and civil rights, too, have spillover effects on economic freedom (Shyam Sundar, 2008).

The exercise by the Heritage House relies on World Bank's Doing Business for data, which in itself is rife with problems as discussed in the section above. Further, the exercise by the Heritage House does not tell us the methods of data collection. The

¹⁶ An illuminating narrative has been provided in Shyam Sundar (2008), deliberating on all the key arguments. (pp.162-166).

indices are perhaps constructed by in-house experts. The exercise seems to be subjective and there is little transparency in it. Ahlering and Deakin (2005) observe that the indices constructed by the Heritage Foundation could "simply represent the political opinion of it". There have been numerous criticisms from various countries questioning their ranks assigned by the Heritage Foundation.

2.3 Institutions and Economic Outcomes: The Cross-Country Empirical Literature

Since the late 1980s a considerable literature has developed on the extent to which differences in economic performances between nations and over time can be explained by labour market institutions. But after decades of empirical research, academics have failed to reach consensus on the effect of labour regulations on economic and labour market outcomes. The researchers are divided in terms of their findings as regards both the direction and the magnitude of the presumed causal connection. This section provides a survey of some of the most influential of these empirical studies that have attempted to examine linkages between labour regulations and various aspects of economic performance, say in terms of economic growth, employment, etc.

In a well known study, Botero et al (2003)¹⁷investigate the regulation of labour markets through employment laws, collective bargaining laws, and social security laws in 85 countries. They found that richer countries regulate labour less than poorer countries do, although they have more generous social security systems. The political power of the left is associated with more stringent labour regulations and more generous social security systems. Heavier regulation of labour is associated with a larger informal economy, lower labour force participation, and higher unemployment, especially of the young.

Another well-known study, by Calderon Cesar and Alberto Chong (2003), attempts to examine the argument that "labour market regulations create distortions from an ideal competitive setting, thus slowing down wage adjustment and labour reallocation and

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¹⁷ Subsequently published as Juan Botero & Simeon Djankov & Rafael Porta & Florencio C. Lopez-De-Silanes, 2004. "<u>The Regulation of Labor</u>," <u>The Quarterly Journal of Economics</u>, MIT Press, vol. 119(4), pages 1339-1382, November.

hence, becoming an obstacle for economic growth" (p.1). They use panel data for 76 countries, over the 1970-2000 period, to test their hypothesis. Using econometric analysis, the study highlights the following as major claims.

Growth in industrial as well as developing countries are adversely affected by thicker labour codes. Growth among developing countries could be promoted by fewer regulations stipulated in the national labour codes. Among developing countries, minimum wages and trade unions are the major routes of transmission through which higher labour regulations impact adversely on growth (p. 3).

Building on his earlier work with Layard and Jackman (1991), Nickell (1997) lays out a clear and simple framework for examining the link between institutions and unemployment with a sample of 20 OECD countries for two six year periods, 1983-88 and 1989-1994¹⁸. The study calculates the average rate of unemployment, long-term unemployment, and short-term unemployment for each country in each period, which then appear (in log form) as the dependent variables in a set of regressions. The independent variables intended to capture the impact of key labour market institutions and regulations are employment protection, the replacement rate (percent of working wage), unemployment benefit duration (years), active labour market policy (spending per unemployed worker as a percentage of GDP per employed worker), union density (percent), union coverage, bargaining coordination, and the total tax rate (percent).

Despite the apparent strength of the results, Nickell's interpretation is cautious. His discussion points out that many of the institutional features that are thought of as labour market rigidities are no more prevalent among the group of high unemployment countries than among the low unemployment countries. He also points out that some of these features, such as bargaining coordination, appear to reduce unemployment. The paper closes with the warning that, "the broad-brush analysis that says that European unemployment is high because European labour markets are too 'rigid' is too vague and probably misleading." ¹⁹

¹⁸ Nickell, S., 1997, Unemployment and Labour Market Rigidities: Europe versus North America. The Journal of Economic Perspectives 11, 55-74.

¹⁹ Also cited in Baker et el (2003, p.26).

"Key Lessons for Labour Market Reforms" by Elmeskov, Martin and Scarpetta (EMS) (1998) is an assessment of the effectiveness of the recommendations from the OECD Jobs Study [OECD, 1994] by three OECD economists²⁰. EMS's results differ from those obtained by Nickell (1997) in several noteworthy ways, even though the period covered is almost identical. They find a large significant positive relationship between employment protection and unemployment, which contrasts with Nickell's finding that there was no relationship between employment protection legislation and the unemployment rate.

Unlike Nickell (1997), EMS do not find a statistically significant relationship between union density and unemployment. Using their regression results, EMS examine the extent to which changes in the unemployment rates in the OECD countries over this period can be explained by the changes in labour-market institutions. They find that for most countries, the vast majority of the change in the unemployment rate can be attributed to country-specific effects rather than any identified change in labour market institutions (EMS, 1998, Table 3). Yet, in spite of these rather weak findings, particularly in comparison with Nickell (1997), EMS are much less cautious and strongly argue for the importance of labour-market institutions in the explanation for high unemployment in the OECD. They conclude by urging nations to reform their labour markets along the lines recommended by the OECD²¹.

Belot and van Ours (2002) extend the approach of EMS (1998) by exploring a wider set of interactions between variables.²² They also extends the period of analysis, using 5-year periods from 1960 to 1996. The study reports the results of four regressions

²⁰ Elmeskov, J., J.P. Martin and S. Scarpetta (1998), "Key Lessons for Labour Market Reforms: Evidence from OECD Countries' Experiences", *Swedish Economic Policy Review*.

²¹ "Some of the medicine prescribed under the OECD recommendations is bitter and hard for many countries to swallow, especially insofar as it appears to raise concerns about equity and appears to threaten some of the rents and privileges of insiders. As a result, there is a natural tendency in many countries to delay needed reforms in certain areas and/or search for alternative, 'sweeter' remedies. It requires strong political will and leadership to convince electorates that it is necessary to swallow all of the medicine and that it will take time before this treatment leads to improved labour market performance and falling unemployment. But the success stories show that it can be done!" (Elmeskov, Martin and Scarpetta ,1998). Cited in Baker et al, 2003, p.29.

²² Belot, Michèle & Boone, Jan & van Ours, Jan C. (2002): "Welfare Effects of Employment Protection", CEPR Discussion Papers 3396.

that test the direct impact of institutions on unemployment over this period. In this regression, the coefficient for the tax rate, the replacement rate and union density variables are all positive and statistically significant, as the conventional labour market rigidity view predicts. On the other hand, the coefficients on the coordination and employment protection variables are negative and significant which goes against the conventional view since it implies that employment protection legislation lowers the unemployment rate. Like Nickell (1997), and in sharp contrast to EMS, Belot and Van Ours are cautious in their interpretation of these results. They conclude by noting that "institutions matter and institutions interact" (p 18), warning that policies that lead to lower unemployment in some countries may not have the same effect on countries with a different institutional structure²³.

In another study, Nickell et al. (2002) try to explain trends in unemployment rates in the OECD over the longer period, in this case from 1961 to 1995. This paper uses annual data and takes into account the interactions between institutions. The interacted institutions include coordination and employment protection, benefit duration and the replacement rate, coordination and union density, and coordination and the tax rate. This study also measures the effects of several macroeconomic shocks, including changes in labour demand, total factor productivity growth, real import prices, the money supply, and the real interest rate. Nickell et al also look at a broader set of labour market outcomes, including the inflow into unemployment (proxied by short-term unemployment), real compensation growth, and employment-to-population rates as dependent variables, in addition to the unemployment rate as the dependent variable.

Nevertheless, Nickell et al. conclude that their results show that "broad movements in unemployment across the OECD can be explained by shifts in labour market institutions." ²⁴ Indeed, they contend that "with better data, e.g. on union coverage or the administration of the benefit system, one could probably generate a more

²³ Cited in Baker et al,2003, p.32.

²⁴ Cited in Baker et al (2004, p.28).

complete explanation. To be more precise, changes in labour market institutions explain around 55 percent of the rise in European unemployment from the 1960s to the first half of the 1990s" (p 19). Much of the rest of the increase is attributed to the recession of the early nineties²⁵.

In a paper by Bassanini and Duval (2006), the authors explore the impact of policies and institutions on employment and unemployment of OECD countries in the past decades. Reduced-form unemployment equations, consistent with standard wage setting/price-setting models, are estimated using cross-country/time-series data from 21 OECD countries over the period 1982-2003. In the "average" OECD country, high and long-lasting unemployment benefits, high tax wedges and stringent anti-competitive product market regulation are found to increase aggregate unemployment. By contrast, highly centralised and/or coordinated wage bargaining systems are estimated to reduce unemployment.

The above mentioned study by Bassanini and Duval (2006) also finds significant evidence of interactions across policies and institutions, as well as between institutions and macroeconomic conditions. They conclude that, consistent with theory, structural reforms appear to have mutually reinforcing effects: the impact of a given policy reform is greater, the more employment-friendly the overall policy and institutional framework. Finally, it is shown that macroeconomic conditions also matter for unemployment patterns, with their impact being shaped by policies.

An innovative study by Blanchard and Wolfers (2000) emphasised on the interaction of institutions with macroeconomic shocks, represented by the slowdown in total factor productivity growth, trends in long-term real interest rates, and shifts in labour demand. The Blanchard-Wolfers study uses 8 five-year periods from 1960 to 1996 (the last two years are treated as a full period). In some regressions, some of the institutions vary over the period, but in most cases labour market institutions are held fixed. The results provide some evidence for the proposition that labour market institutions, in the presence of adverse shocks, lead to higher unemployment. Blanchard and Wolfers hold that their results provide support for the view that the

²⁵ Discussed in Baker et al, 2003, pp.35-36.

combination of macroeconomic shocks over the last three decades with the rigidity in the labour markets in some countries helps to explain both the general increase in the unemployment from the 1960s to the 1990s and the variation across countries. However, the study also notes that their findings are sensitive to changes in specification²⁶.

Like Blanchard and Wolfers (2000), Fitoussi et al. (2000) try to explain unemployment with a model that emphasizes the interaction of macroeconomic shocks and institutions. Fitoussi et al. accept that labour market institutions can at least explain the persistence of high unemployment in some nations, but conclude that "institutional reforms in the OECD" can only explain a small portion of the divergent trends in unemployment (p 257)²⁷. The study then points to the success of many countries, most notably Ireland, which have seen large reductions in their unemployment rates with little or no reform of their labour-market institutions.

Bertola, Blau, and Kahn also attempt to explain trends in unemployment rates by the interaction of macroeconomic shocks and labour- market institutions. One notable difference in the Bertola et al analysis is its inclusion of demographic variables, specifically variables intended to measure the percentage of young workers in the labour force, in regressions examining differences in unemployment rates across countries and through time. In most other ways, the core analysis follows closely the methodology used by Blanchard and Wolfers. In spite of the mixed nature of their regression results, Bertola et al are quite unambiguous in assessing their findings, commenting that, "we find the superior overall performance in the United States since the 1970s is largely due to the interaction between macro shocks and our laissez- faire labour market institutions" (p52). Summarizing its findings, the study asserts that, "high wage inequality and low wage levels are associated with low unemployment" and "that 'globalisation' and 'new technologies' make it increasingly difficult for OECD countries to deliver favourable employment and wage opportunities to some of their workers" (p 53)²⁸.

²⁶ Discussed in Baker et al (2003,pp.36-38). Also highlighted in Jha and Goldar (2008,p.10).

²⁷ Cited in Baker et al (2003, p.39).

²⁸ Cited in Baker et al (2003, pp.42-43).

A study by the IMF (2003) largely follows the framework laid out in Nickell et al. (2002), with some minor modifications. Like Nickell et al., it attempts to explain the differences across countries and changes over time in unemployment rates over the period 1960-98 by international differences and changes in institutions, rather than as the result of the interaction between shocks and institutions. Terms reflecting the impact of macro shocks are entered into the regressions separately, and are not interacted with the institutional variables. Like Nickell et al., the IMF also uses annual data. In addition, the IMF study also follows Nickell et al. by including country specific time trends in the regression. The study's authors describe their results as providing compelling evidence that weakening labour market institutions will lead to lower unemployment: "comprehensive and pro-competitive reforms can generate substantial gains" (p 129)²⁹. But it is not obvious that their evidence unambiguously supports such a claim.

Heckman and Pages (2000) reviewing the studies for Latin American and Caribbean countries find that strict job security provisions in these countries lead to lower job turnover in the labour market and lower employment rates; they create a large proportion of self-employment and a decline in the ratio of wage employment to population of young workers. Their research suggests that job security regulations have a substantial impact on employment and turnover rates both in Latin America and in OECD countries. They also argue that job security provisions reduce the job prospects(and possibly wages) of younger and less experienced workers while they protect the jobs and incomes of other workers; this widens the inequality in the labour market. Thus job security provisions are both inefficient(because they reduce the demand for labour) and inequitable(because they benefit some and hurt others).

Despite the lack of robust evidence, many economists and policy-makers continue to strongly defend the orthodox view that institutions are the root cause of economic problems. In the January 2005 Economic Journal Nickell, Nunziata, and Ochel reiterated the claim that "the broad movements in unemployment in the OECD can be

²⁹ Cited in Baker et al (2004, p.9).

explained by shifts in labour market institutions" (p 1) ... without responding to the evidence given by critics of that view³⁰.

2.3.1 An Assessment of the Evidence

While this literature is widely viewed to provide strong evidence for the labour market rigidity view, a close reading of the leading papers suggests that the evidence is actually quite mixed, as several of the studies explicitly acknowledge.

Exhaustive reviews of the literature on the impact of labour market institutions on labour market outcomes by a team consisting of Baker, Glyn, Howell and Schmitt (2003; 2004; 2006) and replication exercises have clearly shown that there is little evidence to show that labour market institutions could be held responsible for causing high unemployment as was argued by a section of academics and international institutions like the IMF, and the OECD.

As argued by Baker et al, the wide range of coefficient estimates for the labour market institution variables does not provide compelling evidence linking these institutions to unemployment. In many cases, these coefficients are insignificant even in the preferred regression within a study. In the cases where the coefficients are generally significant (e.g. the replacement rate or tax wedge variables), the range of estimates is so large that it raises questions about the credibility of the results and particularly to undermine their usefulness for policy (See Baker, Glyn, Howell and Schmitt 2004; 2006).

Baker at al (2004) express their general skepticism regarding the quality of the data as well as conclude that their own efforts at analyzing them strongly suggests that these cross-country results are highly unreliable. They further express their views over the inconclusiveness of the econometric evidence. They believe that a large part of the empirical problem in this literature may be the difficulty of adequately measuring the relevant labour-market institutions. Labour markets and the institutions that shape and regulate them are highly complex. Quantitative measures that will be useful enough to

³⁰ Quoted in Freeman (2005, p.12).

shed light on the real-world workings of key labour-market institutions will have to be sufficiently standardized to be meaningful across countries, yet flexible enough to factor in important national differences. This might entail creation of multidimensional measures of labour-market institutions,

Freeman (2005) adds: "The estimated coefficients on labour institutions disappear or become statistically insignificant when the researchers make modest changes in the measures of institutions, countries covered and time periods of analysis". The April 2003 article in the IMF's World Economic Outlook predicted that "reforms" that would lead to a closer alignment of the so called rigid labour markets of Europe with the US model, would reduce EU unemployment from 8.0% to 5.0% and raise GDP by 5 percent, while a combination of labour and product market reforms would result in a drop in EU unemployment by 6.5 points to 1.5%. As Freeman observed, in 2003 many EU countries had unemployment rates below 6.5% viz. Austria, Denmark, Eire, Netherlands, Luxembourg, Portugal, Sweden, and the United Kingdom (as well as Norway outside the EU), so this effectively meant that a 6.5 point drop would put them into negative unemployment bracket. Since this is an absurdity, rates would have to fall by more than 6.5 points in other countries. He went on to say that analysts might have noticed that the country with nominally the most flexible institutions, the US, did not have anything close to the predicted 1.5% rate of unemployment. In 2003 the US unemployment rate was 6.0%. That "the EU would have one-fourth the unemployment rate that the US had if the EU only had flexible US institutions seems prima facie nonsense. If the US couldn't attain a 1.5% unemployment rate with these flexible institutions or even the 5.0% unemployment rate predicted for European countries if they adopted US style labour practices, why should European countries do so well?" (Freeman, 2005,pp.13-14).

A succinct summary of all the critical issues relating to the sample of studies of the 'distortionist' persuasion, has been provided by Jha and Goldar (2008), which questions the credibility of such claims. It would be worthwhile to highlight some of them in a nutshell. As discussed by the authors, in most of these cross-country analyses, results often depend upon the proxy used in the econometric exercises as well as the sample of countries; and playing around with them can generate vastly different results. Variables often used to measure various aspects of the labour market

are difficult to capture and the wide variability of these variables across countries makes it extremely difficult to generate comparable robust results. Several researchers like Freeman (2005), consider the cross-country aggregate data as 'weak' to draw tenable conclusions. Most of the influential studies that are supposed to be lending support to the distortionist perspective, actually provide mixed results and are far from unanimous in their estimates of the impact of institutional variables on unemployment (Jha and Goldar, 2008, pp.11-12).

It would be pertinent to have a brief overview of the empirical literature on the institutionalist perspective as well. Baker et al (2003) attempted to empirically examine the effects of labour market institutions on unemployment rates across selected OECD countries, for the period 1960-99. From their exercise, they could find no hint that labour market institutions and policies could explain even a small part of the post-1980 pattern of unemployment for the countries considered. They conclude that "it is even less evident that further weakening of social and collective protections for workers will have significant positive impacts on employment prospects. The effects of various kinds of deregulation on unemployment are very hard to determine and maybe quite negligible" (Baker et al, 2003, p.56).

A well-known study from the US economy, by Card and Kruger (1995), attempts to test empirically the neoclassical prediction that the minimum wage had an adverse impact on employment growth. Based on their case study of the two adjoining states, New Jersey and Pennsylvania, they in fact find a negative association between the two variables; thus employment growth was higher where minimum wage was higher.³¹

In another such notable study by Kucera and Sarna (2004), based on the information for 162 countries, it is shown that stronger trade union rights do not generally hinder trade competitiveness, including trade of labour intensive goods; further, the study offers a stronger conclusion that the countries with stronger trade union rights tend to do comparatively better in several respects such as aggregate trade flows, total manufacturing exports etc. (p.25)³². Further, the fact that deregulation of the labour

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³¹ Discussed in Jha and Goldar (2008,p.13).

³² Discussed in Jha and Goldar (2008, p.13).

market, even in most of the advanced capitalist countries, has not been able to contain high unemployment even after years of implementation, ought to increase scepticism about deregulation and its supposed benefits.

As noted by Jha and Goldar (2008), a series of studies by Buchele and Christiansen (1992, 1995, 1999a, 1999b), suggested that the rights of workers have a general positive effect on the growth of output per hour worked. They argue that workers hold the key to increases in labour productivity, on the basis of their cooperation and effective participation in the production process. So, for the long run success of the firm, it becomes imperative to guarantee workers' rights, reduce their vulnerabilities against job loss, etc.

2.4 The Effect of Labour Market Regulations: Empirical Evidence from India

A number of studies have attempted to estimate the effects of labour market regulations on economic outcomes in India. Most of these empirical studies are based on the amendments to the Industrial Disputes Act and the consequences to organised sector output, employment, investment and so on. And within the Industrial Disputes Act, it is the provisions of job security in Chapter V-B that has in fact received most of the attention.

Fallon and Lucas (1991) and (1993) studied the effect of job security laws by analyzing the effects of the 1976 introduction of chapter V-B in the Industrial Disputes Act (IDA), which mandated firms employing 300 or more workers to request permission from the government prior to retrenchment. They found a large impact on manufacturing jobs: formal employment for a given level of output declined by 17.5 percent. Similarly, Dutta Roy (2004) examined the effects of the 1982 central amendment to the IDA, which extended the prohibition to retrench workers without government authorization to firms that employed hundred or more workers. The author found evidence of substantial adjustment costs in employment but no evidence that such costs are driven or altered by the IDA legislative amendment. She concluded that by no means could job security regulations be

identified as the primary cause for the observed rigidities in employment adjustment in the Indian manufacturing sector.

Turning to one of the much publicised empirical studies relevant to the ongoing discussion, Besley and Burgess (2004) isolate the variations in the direction of amendments made to the IDA by different states over the period 1958-1992. Accordingly, they classify amendments as pro-worker, neutral or pro-employer, assigning scores of +1, 0 and -1 respectively to each state for the relevant year. The scores are then cumulated state-wise over time to obtain what they call a 'regulatory measure' for each state in each year, referred to as the BB index. Such a measure is then used to explain a whole range of economic performance indicators including per capita output, labour use intensity, employment, etc., with respect to the organised manufacturing sector using panel data for 1958 to 1992, at the state level. They find labour regulations to have important adverse effects on output and employment, particularly in the registered manufacturing sector.

Hasan, Mitra and Ramaswamy (2003) examine whether differences in labour laws explain differences in the way labour markets adjusted to trade reforms. They find that states with more stringent labour regulations (measured as in Besley and Burgess 2004) have lower demand elasticities and these elasticities are less affected by trade reforms.

Lall and Mengistae (2005) examine the influence of labour market regulations, as perceived by employers, on plant productivity differences across Indian cities. They find that differences in the degree of labour regulations, jointly with differences in the severity of power shortages, explain a large share of the productivity gaps between cities. As in Besley and Burgess (2004) by aggregating different labour laws into one unique measure, they cannot identify which labour laws are the ones responsible for adverse economic outcomes. From the policy perspective, understanding which laws regulation have more adverse effects is important and an question.

Ahsan and Pages (2006) study the economic effects of legal amendments on different types of labour laws. They examine the effects of amendments to labour dispute laws, and amendments to job security legislations. They also identify the effects of legal

amendments related to the most contentious regulation of all: Chapter V-B of the Industrial Disputes Act, which since the 1982 amendment, stipulates that firms with 100 or more employees cannot retrench workers without government authorization. They find that jobs that increase job security or increase the cost of labour disputes substantially reduce registered sector employment and output but do not increase the labour share. Labour-intensive industries, such as textiles are the hardest hit by laws that increase job security while capital intensive industries are most affected by high labour dispute resolution costs. They also find that the widespread and increasing use of contract labour may have brought some output and employment gains but did not make up for the adverse effects of job security and dispute resolution laws.

There are two distinct approaches that have been used in the empirical literature to examine the effects of the IDA for industrial performance. The first, following the paper by Fallon and Lucas(1993) employs a "before and after" methodology to examine the impact of the 1976 and 1982/1984 amendments on employment in manufacturing at the national or industry level. The second, following from Besley and Burgess (2004) exploits variations in IDA amendments made by different states to explain various state level economic outcomes.

Using data for the census sector of the ASI, Fallon and Lucas (1993), found that the 1976 amendment did cause an average decline of 17.5 percent in employment. However, these results have been questioned by Bhalotra (1998). In her own estimates of dynamic labour demand functions, Bhalotra used a series (1979-1987) that was too short to capture the full effects of the 1982/84 amendment (Bhattacharjea, 2006; Shyam Sundar in Papola et al, 2008). However, she refuted the claim that the phenomenon of "jobless growth" witnessed by the organised Indian manufacturing sector during most of the 1980s could be pinpointed on the amendment to the IDA. She concluded that the amendment that took effect in 1984 could not have led to an immediate fall in employment that continued till 1988, in the light of sluggish adjustment in employment. She also observed that employment increased in factories with between 100 and 1000 workers but fell for those with more than 1000 (even though the 1982/84 amendment had a threshold at 100) (Bhattacharjea, 2006, p.4-5).

Aggarwal (2002), covers the period 1960-98. He does not explicitly deal with the issue of job security legislation, but his measure of inertia increases in the sub-period

1976-85 but becomes insignificant for 1985-98, when employment responded swiftly to growth in value added. This indicates that the 1976 amendment may have reduced flexibility, but the 1982-84 amendment paradoxically increased it, or that the law had no effect on actual practice in the more recent period. Further, in another study, Dutta Roy (2004), allowing for inter-related factor demands and covering the period 1960-95, does explicitly test for the impact of IDA amendments. She finds that most industries exhibited considerable rigidity in their employment adjustment even before 1976, and only in the cement industry did it get worse after the amendments (for workers only, not for supervisors). Paradoxically, in four industries, the amendments actually appeared to increase flexibility, which Dutta Roy attributes to the growing use of contract and casual labour, and to greater flexibility in hours worked³³.

On the basis of the BB index, Besley and Burgess (2004) concluded that pro-worker legislations contributed to the lowering of investment and employment in the organised manufacturing sector, and also facilitated the existence and growth of a very large informal sector.

The above discussed literature has overlooked the fact that all the relevant sections of Chapter V-B – requiring official permission for lay-offs (Section 25 (M)), retrenchments (25(N)), and closures (25(O))- were contested in legal battles that raged for the next quarter century. 25(O) was struck down as unconstitutional by the Supreme Court as early as 1978. Four High Courts then invalidated 25(M) and (N) on similar grounds. The 1982 amendment apart from reducing the permission threshold to 100, incorporated several procedural changes in 25(O) so as to satisfy the Supreme Court. Further, all these amendments involving Chapter V-B were in the direction of reduced flexibility for employers, but the 1984 amendment also changed the definition of 'retrenchment' so as to exclude from its purview any termination of service resulting from the non-renewal of a contract or under a stipulation contained in the contract. This would be conducive to greater flexibility, because retrenchment requires notice and payment of compensation for establishments covered by Chapter V-A (those employing at least 50 workers), plus official permission for those covered by Chapter V-B (Bhattacharjea, 2006; Shyam Sundar in Papola et al, 2008).

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³³ Discussed in Bhattacharjea, 2006,p.6.

There are a large number of methodological as well as analytical problems in the construction of the index (Bhattacharjea 2006). For instance, first the scoring system is based only on two amendments and thus ignores many other labour laws. Second, Besley and Burgess also ignore the allocation of industrial licences by the central government, which was a significant determinant of industrial location for most of their sample period. As Bhattacharjea (2006) points out, classifying a state as proworker or pro-employer on the basis of a single amendment while all other central or state laws remain unchanged, can be quite misleading. Besley and Burgess (2004) only reported the value of their index up to 1992 (there were in fact no further state amendments after 1989). A problem thus arises for later studies that have tried to use their index to explain more recent developments.

Thus, the evidence regarding actual labour market conditions is very different from that suggested by the Besley-Burgess index. Interestingly, the India Labour Report (Team Lease Services 2006), using a different coding of state-level amendments to the IDA along with several direct indicators of enforcement and industrial disputes, ranks the 'labour law ecosystem' in Maharashtra, Karnataka, Punjab and Gujarat, in that order, as being the most conducive to employment generation. In the Besley-Burgess study, these states were respectively categorised as pro-worker, pro-employer, neutral and pro-worker. It might also be noted that as per the World Bank's Investment Climate Survey of the Indian States (World Bank, 2003), two states which were ranked 'Best' were Gujarat and Maharashtra, both of which had been classified as 'inflexible' as per the Besley-Burgess study³⁴.

Using the original Besley-Burgess classification, Topalova (2004) finds that firms' total factor productivity(TFP) responded favourably to trade liberalisation (as measured by lagged industry specific tariff rates, 1989-2001), but there was no difference as between firms located in the three categories of states. This result is contrary to that of Besley-Burgess who found a positive impact of pro-employer reforms on labour productivity, not total factor productivity, and for an earlier period.

In a study of the determinants of the location of large private investment projects across states, Sanyal and Menon (2005) use the BB tabulation to compute the share of

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³⁴ Discussed in Jha and Goldar (2008).

pro-worker amendments from 1949 to 1990 in each state, and also single out two specific types of amendments – the right to strike and provision of severance pay – as separate explanatory dummy variables. In addition, they use direct measures of labour conflict (the number of strikes and lockouts, and the union density) for each state. The share of pro-worker amendments (and in an alternative specification, the severance pay dummy) and the lockout variables emerge as significant deterrents to project location, as does urban inequality (perhaps an indicator of social tensions).

In their paper Aghion et al. (2006) analyse the impact of industrial delicensing, which was an omitted variable in the Besley-Burgess exercise. At the national level, for the period 1980-97 and at the three digit state-industry level, they capture the effects of delicensing on performance with a dummy variable whose value for each industry switches from zero to one from the year in which it was delicensed. Interesting results emerge when the delicensing dummy is interacted with the BB index. Output responds positively to delicensing in the pro-employer states, but negatively in proworker states, explaining the weak overall effect on an average. These results are robust to the inclusion of state and industry time trends and political controls. Further results show that employment, entry (measured by the number of factories) and fixed capital investment are higher in pro-employer states and also respond more favourably to delicensing than in pro-worker sates, with employment actually falling in the latter. On the other hand, a separate study by Purfield (2006) that further updated the BB index (through 2002) did not find significant detrimental effects of more pro-employer labour institutions on state-level growth.

As discussed in Bhattacharjea (2006, pp.28-29); Debroy (2005), Anant et al (2006), and Sharma (2006) describe several ways in which the apparently pro-labour clauses of the IDA are of little help to workers. Employers can dispute whether the worker was really a worker as defined in the Act, and whether she/he was in continuous service for the 240 days required to benefit from its protective clauses. There are long delays in adjudication, for which many workers do not have the staying power. The 'competent authority' can be manipulated to delay the grant of permission for retrenchments and closures, since after sixty days it is deemed to have been granted. And only nominal fines are levied on employers who do not abide by the law. Increase recourse to contract and casual labour, which are not covered by the IDA, is

further weakening its protection. Employers are often coerced into accepting 'voluntary' retirement schemes. Shyam Sundar (2006) summarises a monograph that studies over 200 collective bargaining agreements signed during 1991-2001, most of which contained clauses giving management considerable flexibility in setting work norms, wages and employment.

Anant et al. (2006) and Bhattacharjea (2006) point out that many of the formal state-level amendments to the IDA used in the index would appear to be of minimal significance since they are infrequent, sometimes pertain to obscure procedural matters, and are likely to be overshadowed by court decisions and informal changes in the application of the laws. An update of the BB index carried out as background to the OECD 2007 Economic Survey of India (through 2005), using the most recent edition of the original data source for the index (Malik, 2006), shows that there have been only eight amendments to the IDA in any Indian state since 1990, and they relate to only three states, of which only the 2004 amendments in Gujarat would appear to be of any consequence to labour market outcomes.³⁵ Several prominent observers of India's labour markets now argue that regulations other than the IDA are likely to be more important and that the IDA may be something of a distraction in the debate over labour reforms, given the four dozen central laws and hundreds of state laws that govern labour issues (Nagaraj, 2004; Debroy, 2005; TeamLease, 2006).

There have been far fewer studies that look more broadly at India's labour laws in systematic empirical analysis, perhaps due to their complexity and overlapping coverage. Moreover, some of the most important changes appear to have occurred in interpretation of the laws by the Supreme Court and through changes in the way the laws are enforced, particularly obvious in the case of the use of contract labour, which has become increasingly widespread in many states (Anant et al., 2006). Such state-level reforms have been the subject of speculation, but there has been little systematic regulatory information collected beyond the IDA amendments in the BB index.³⁶

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³⁵ These post-1992 IDA amendments are comprised of: an additional method for qualifying to serve on a labour court in Tamil Nadu (1998); a reduction in the prerequisites for serving on an Industrial Tribunal in Madhya Pradesh (1999, 2003); removal of state-level provisions inserted in 1982 that pertained to criminal cases in Madhya Pradesh (2003); and the introduction of a range of exemptions from the IDA's Chapter V-B for Special Economic Zones in Gujarat (2004).

³⁶ Some surveys to examine state-level changes in the application of labour laws through notifications and changes in the application of various regulations have been undertaken (CII, 2004a and 2004b).

In a paper by Goldar and Banga (2004), the authors have tried to investigate and analyse the factors influencing the wage-setting process, in organised manufacturing industry in India. Results of a detailed econometric analysis of determinants of wage rate presented in the paper indicated that labor market conditions matter a lot in wage setting. The stronger the trade unions, the higher are the wages earned by industrial workers. Greater labour market flexibility tends to push wages down. On the other hand, a good investment climate raises the industrial wages.

The distortionists' view that the disappointing growth of employment in India's organised manufacturing is primarily due to labour market rigidities, is endorsed in a recent report of the World Bank (2010), which claims that by imposing excess rigidity in the formal manufacturing labour market, labour regulation has created disincentives for employers to create jobs. The report presents an estimate according to which the Industrial Disputes Act has caused about three million less jobs to be created in formal sector manufacturing.

There is, however, a divergent view on whether the Indian industrial firms have actually been facing strong labour regulations. Nagaraj (2007) has questioned the hypothesis that labour market rigidities are holding up industrial growth. According to him, the fine print of exemptions and loopholes built into the labour laws provide sufficient flexibilities to the industrial firms. There is other literature on labour regulation in India which takes the position that several Indian states have relaxed the provision of enforcement of labour laws leading to flexible practices at the ground level (Sharma 2006; Papola 2008).

Continuing the debate on the effect of labour market regulations on economic outcomes, in a recent article, Goldar (2011) argues that the rapid growth in employment in organised manufacturing between 2003-04 and 2008-09 can be explained by changes in labour laws (and practices) at the state level. He reaches this conclusion on the basis of a positive correlation coefficient between employment

However, these previous efforts did not include all major states and questions were limited to a relatively small set of procedural changes.

elasticity of output and an index of labour reforms across 20 major states.³⁷ However, in response to the above cited article by Goldar, Nagaraj (2011) points out that Goldar's inference of a positive effect of labour reforms in explaining inter-state variations in employment elasticity of output is not statistically valid. He finds out that labour reforms index has practically no association with either output or employment growth.

In a micro level study concerning a survey of about 1,300 manufacturing firms across nine industry groups, Deshpande et al (2004) examine the determinants of the levels and changes in employment between 1991 and 1998. One of the main objectives was to find out the extent of flexibility enjoyed by employers in adjusting investment as well as other important decisions within an establishment to external changes. The study reports that both the unionised and non-unionised firms increased capital intensity over the relevant period; thus the presence of unions does not support the core conclusion of the distortionists as regards the adoption of capital- intensive technology. Further not only did the share of non-permanent workers increase but the share of casual workers in the non-poor permanent category increased even faster, and the bigger firms resorted to greater use of non-permanent workers.

In another recent study, Guha (2009) tries to assess the impact of the increase in labour market flexibility that has taken place on output and employment. He concludes that increasing labour market flexibility – defined as an increase in the proportion of non-permanent/casual workers in total workers – has no positive impact on output and employment growth. Thus, the neoliberal proposition that an increase in labour flexibility would lead to higher output growth and greater labour absorption does not seem to be valid as far as Indian manufacturing industries are concerned.

Pal (2011) looked at the impact of banking outreach, physical infrastructure and labour market flexibility on growth of manufacturing industries across 14 major state

³⁷ The labour reforms index used by Goldar(2011) in his study, has been taken from a paper by Sean Dougherty ("Labour Regulations and Employment Dynamics at the State Level in India", OECD Economics Department Working Paper No 624, 2008, published in *Review of Market Integration*, 29 June, Vol 1, No 3, 2010).

of India in the post-liberalisation period (1991–92/2002–03) and found that while the first two influenced industrial growth significantly the last had no significant impact.

This chapter set out to provide a survey of the empirical literature that tries to explore linkages between labour market institutions and economic outcomes, both across countries and also in case of India. Looking at both sides of the story, it clearly emerges that the empirical basis for the advocacy of across the board labour market flexibility is not well founded and calls for deregulation of the institutional framework to bring about an improvement in economic performance rests on shaky ground.

Chapter 3

Labour Regulations in India: A Mapping

In the present chapter, the first section discusses the rationale and historical evolution of labour regulations in India and how the chain of evolution is related to the development of political ideas of social justice and democracy. It briefly traces the history of major regulations in the sphere of conditions of work, minimum wages, social security, job security and industrial relations and discusses some of the major labour laws in a concise manner, with respect to their scope, coverage and applicability. Then there is a succinct section on the labour regulatory framework of the four selected states, namely, Gujarat, Tamil Nadu, Orissa and Rajasthan. In the later part of the chapter, findings of some studies on the rationale and effectiveness of present labour regulation are summarised, providing an overview of some recent policy changes that have taken place in the sphere of labour regulations, some of them explicit, some tacit. And finally, it attempts to suggest some policy recommendations.

3.1 Rationale and Historical Evolution

The origin of various measures to regulate labour, viz. laws, rules, decrees and conventions, in India, as also in any other country, can be traced to the recognition of unequal power balance between labour and capital. Labour has been considered to be a weaker party vis-à-vis the employer and therefore, susceptible to exploitation and in need of protection. Regulation of labour market has come up in order to give protection to workers/employees against primarily four kinds of unevenness in the 'free' market. First, via regulations, the government wanted to forbid discrimination in the labour market and endow workers with basic rights at work. Second, by restricting the range of feasible contracts and raising the costs of both laying off workers and increasing hours of work the government sought to regulate employment relationships. Third, the government empowered the labour unions to represent vulnerable individual workers collectively against the organised power of employees. Finally, the government tries to provide some iota of employment security (Banerjee, 2008).

The motivation to ensure some degree of protection to labour was further strengthened by the ideas of equity and social justice that the national movement for independence advocated and which were also finally enshrined in the Indian Constitution (Singh, 2003). Establishment of the International Labour Organisation (ILO) in 1919 was a watershed event in the chronicles of labour history, providing international mandate to various labour legislations designed to protect the interests of workers. The ILO has developed conventions and recommendations on labour standards for facilitating improvements in labour conditions which have been adopted by its member countries including India. India is one of the founding members of the ILO and has been a permanent member of the ILO Governing Body since 1922. Dr.Shankar Dayal Sharma, then President of India, speaking on the release of a commemorative stamp on the occasion of the 75th anniversary of the ILO said that "the Constitution of the ILO and the Declaration of Philadelphia have as their objectives social justice, equality of treatment between men and women workers, ensuring a living wage and the social security of workers. These are indeed laudable aims which we, in India, have tried to secure through various constitutional and legislative mechanisms."¹

Along with the birth of the ILO, the All India Trade Unions Congress also came into existence in India in 1920, which spearheaded the movement for legislation to ameliorate the conditions of workers in the nation. The trade unions which have long been accepted as important social institutions in the socio-economic reconstruction of the country have articulated and sharpened the scope and content of regulatory measures (Standing,1999).²

The need to legislate to protect the interests of workers and also to ensure a smooth process of production in enterprises had long been recognised by the Britishers in India. The colonial government passed the Factories Act in 1880 laying down the minimum conditions of work in terms of hygiene, safety, hours of work, etc. Several revisions were followed in the pre-independence period in 1891, 1911 and so on (Pages and Roy 2006). The Trade Union Act was passed in 1926 which set out procedures for registration of unions and protection of unions from harassment. The

¹ Cited in Papola et al (2008),p.10.

² Ibid.

pressure for protection of workers against occupational hazards mounted since the 1920s onwards. As a result, several legislations were passed regulating the working environment and providing social security before independence. The provision of compensation to workmen for any injury during the course of employment was made in the Workman's Compensation Act passed in 1923. Payment of Wages Act was passed in 1936, to regulate intervals between successive wage payments, over time payments and deductions from the wage paid to the worker. In the sphere of industrial relations, the Trade Disputes Act of 1929 aimed at creation of an institutional framework to settle disputes. The Great Depression and its effect on the Bombay industry with large scale wage cuts and resulting disputes led to some important regulations such as the Bombay Industrial Dispute Act of 1932. The Act provided that an industrial worker had the right to know the terms and conditions of his employment and the rules of discipline he was expected to adhere to.

Thus, the emergence of labour regulations in India can be traced back to the period of colonial rule in India. But a plethora of labour laws governing various aspects of work were passed in quick succession of each other after independence. And there was a complete metamorphosis in the approach to labour legislation after the attainment of independence in 1947. The basic philosophy itself underwent a change and the ideas of social justice and welfare state as enshrined in the Constitution of India became the guiding principles for the formulation of labour regulations (Thakur, 2007). The Constitution made specific mention of the duties that the state owes to labour for their social regeneration and economic upliftment. One of the important duties which have a direct bearing on social security legislation is the duty to make effective provision for securing public assistance in the case of unemployment, old age sickness, disablement and other cases of undeserved want (Papola et al., 2008).

In an independent democratic country, it was considered essential that the right of employers to hire, dismiss and alter conditions of employment to the disadvantage of the workers be subjected to judicial scrutiny. Accordingly, the Industrial Disputes act enacted in 1947 provided protection to the workmen against lay-offs, retrenchment and closure and for creation, maintenance and promotion of industrial peace in industrial enterprises. This Act was later amended in 1972, 1976 and in 1982 seemingly endowing workers with greater protection. Factories Act 1948, which

replaced the one passed in 1884, aimed at regulating the conditions of work in manufacturing establishments and to ensure adequate safety, sanitary, health, welfare measures, hours of work, leave with wages and weekly off for workers employed in 'factories', defined as establishments employing 10 or more workers using power and above 20 workers without using power. Similarly, the Minimum Wage Act 1948 can be viewed as the most important piece of legislation that was expected to provide some kind of aid to unorganised workers despite their lack of bargaining power (See Papola et al, 2008; Pais, 2008).

Besides the above major laws there are several others that have been enacted for improving the condition of employment and protecting the overall welfare of industrial workers after independence in India and some of these laws have been discussed in a subsequent section.

3.2 Nature of Labour Laws: Concurrent Subject and 'Appropriate' Government

Matters relating to labour and employment have been placed in the concurrent list under the Constitution of India. Both the union and state governments are empowered to enact appropriate laws for regulation of labour. However, while the states do make labour laws, most of the labour laws are enacted by the centre. But the task of implementation of most of these central laws lies with the state governments through the formulation of state-specific rules for each legislation.

There are three different ways in which the central labour laws are implemented. First, some central laws like the Mines act, 1952 and Employees' Provident Fund and Miscellaneous Provisions Act, 1952 have the central government as the sole authority in respect of implementation of these laws. Second, there are central laws like the Factories Act, 1948 and Plantations Labour Act, 1951, where the authority lies exclusively with the state government where the factory or plantation is located. The third is often an interesting situation. In central laws like the Industrial Disputes Act, 1947, Payment of Bonus Act, 1965, both the central and the state governments

exercise jurisdiction depending on the specification of 'appropriate government' for the purpose. (Refer table 3.1 in the annexure)³.

The appropriate government that is responsible for the implementation of the different Acts forms rules for the enforcement of the Acts. The appropriate government also has the flexibility in increasing or reducing the coverage of the provisions of the Act. The regulations entitle appropriate governments to make exemptions and additions to the coverage of the Act by exempting or including a class of establishments, industry or sector or even individual establishments as the case may be. Thus, when the state governments are responsible for the enforcement of certain Acts, they are in a position to suitably adapt the provisions of the Central Act to the needs of the state through framing of rules, exemptions and additions to coverage of the Acts. There are instances of contestation on the question regarding the 'appropriate government', and has often come for judicial determination. And, of course, there are state labour laws adopting certain central laws or modified state laws, and the authority for implementation of these laws is vested with the respective states (Reddy, 2008, p.29).

3.3 Overall Objective of Labour Laws

Each law has its own specific objectives. But, overall, the different labour legislations together aim at protecting the interest of workers in terms of employment security, social security, condition of employment and wages, by laying down various provisions (Papola et al, pp.5-6).

- i. To protect and safeguard the interest of workers against arbitrary and unilateral actions of employers.
- ii. To regulate and improve upon the working conditions of workers employed in different factories and establishments by stipulating measures to protect and promote their health, safety and welfare.
- iii. Fixation, payment and periodic revision of need based minimum wages of workers in the organised and the unorganised sector.

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³ All labour regulations listed in table 3.1 are enacted by the central government except the Shops and Commercial Establishments Act which is enacted by the state governments.

- iv. To ensure the timely payment of wages and authorised deduction from the wages of workers.
- v. To ensure the service conditions and the mutual rights and obligations of workmen and employers.
- vi. To provide freedom to the workers to form or join the trade unions and promote their welfare through collective bargaining and collective action.
- vii. To promote industrial peace by providing for an elaborate machinery for the prevention and settlement of industrial disputes.
- viii. To ensure social security and benefits to workers in the unwanted eventualities such as sickness, maternity, disablement and death.
 - ix. To provide appropriate welfare facilities and social amenities of life for workers and their families outside workplace by raising welfare funds.
 - x. To undertake the provision for the regular training of a certain number of apprentices in different trades.
 - xi. To make it obligatory from the part of employers to notify vacancies to the employment exchange so as to facilitate recruitment of different categories of labour force available in their enterprises.
- xii. To regulate the employment and service conditions of contract labour and provide for the abolition of contract labour.
- xiii. To provide for regular and periodic furnishing of statistics by industrial and commercial enterprises on specific labour matters.
- xiv. To make it obligatory for industrial enterprises to take effective measures and install and maintain appropriate equipment for the prevention and control of air and water pollutions so as to promote healthy environment.

3.4 Important Labour Regulations and Their Applicability

The various labour legislations in India that have been enacted for improving the conditions of employment and protecting the overall welfare of industrial workers in

India, can broadly be classified into six categories according to their objectives. Therefore, the major labour laws can broadly be classified as legislations relating to: Social Security, Industrial Relations, Wages, Working Conditions, Labour Welfare Funds, Employment and Training (Chandra, 2006; Pages and Roy, 2006; Jha and Goldar, 2008; Papola et al, 2008). A list of the various Acts under legislations governing these various aspects has been provided in the annexure (Refer Box 3.1 in the annexure)

It would be of importance to look specifically at the applicability and coverage of some of important labour regulations in Indian industry relating to various aspects like industrial relations, wages, social security, etc.

3.4.1 Laws Relating to Working Conditions

1. The Factories Act, 1948

It is enacted by the central government in India. Factories are regulated by the provisions of the Factories Act, 1948. All industrial establishments employing 10 or more workers and carrying manufacturing activities with the aid of power come within the definition of 'factory'. In case there is no use of power in the manufacturing process, the employment size for the applicability of the Factories Act is 20 or more workers. The said Act makes provisions for the health, safety, welfare, working hours and leave of workers in factories. it is enforced by the state governments through their 'factory inspectorates'. The said Act empowers the state governments to frame rules, so that the local conditions prevailing in the state are appropriately reflected in the enforcement of the Act. The said Act puts special emphasis on welfare, health and safety of workers. The said Act is instrumental in strengthening the provisions relating to safety and health at work, providing for statutory health surveys, requiring appointment of safety officers, establishment of canteen, crèches, and welfare committees etc. in large factories (Pais, 2008; Papola et al, 2008).

2. The Shops & Establishment Act (Year varies from state to state)

The conditions of work for employees in shops and commercial establishments are governed by the provisions of the above mentioned Act. This is a state level legislation, and all major states have incorporated this law. The Shops and Commercial establishments Act aims to regulate daily and weekly hours of work, payments of wages, holidays and leave, conditions of employment of children and women. It provides for a notice period of one month for termination of service of a worker. The said Act also has a chapter on health and safety in establishments performing various types of repair work and other such workshops; but unlike the Factories Act, the said Act does not provide for control measures required for ensuring safety in these establishments (Pais, 2008; Papola et al, 2008).

In 2004, the Shops and Commercial Establishments Act in comparable forms was in operation in Andhra Pradesh, Assam, Bihar, Delhi, Gujarat, Goa, Himachal Pradesh, Maharashtra, Jammu and Kashmir, Karnataka, Kerala, Madhya Pradesh, Tamil Nadu, Orissa, Pondicherry, Punjab, Rajasthan, Uttar Pradesh and West Bengal (Pais, 2008, p.10)

3. The Beedi & Cigar Workers (Conditions Of Employment) Act, 1966

This Act provides for the welfare of workers in beedi and cigar establishments and seeks to regulate the conditions of their work with respect to, working hours, wages for overtime work, interval for rest, annual leave with wages, welfare and health measures like cleanliness, ventilation, sanitation, washing facilities, first aid, creche, canteen, etc. It extends to the whole of India and applies to all establishments which are manufacturing beedi or cigar and for matters connected there with, except the state of Jammu & Kashmir.

4. The Contract Labour (Regulation and Abolition) Act, 1970

The employment of contract labour in India is regulated under this Act. The aim of the Act was to provide for the regulation of contract labour in certain economic activities and for abolition in other circumstances. The Act defines a contractor and a principal employer. Every establishment that intends to employ contract workers through a contractor is expected to register as a principal employer under the Act. And every contractor under the Act is expected to obtain a licence as a labour contractor.

Apart from the abolition of contract labour in certain industries and activities, the main provisions of the Act relate to the conditions of work, health and welfare of contract labour. For example, the Act provides for regulations of physical conditions of work, hours of work, overtime, payment of wages, leave with pay, sanitation and crèche facilities. According to the Act, the contractor is required to pay wages and is bound by duty to ensure proper disbursement of wages in the presence of the authorised representative of the principal employer. In case of failure on the part of the contractor to pay wages either in part or in full, the principal employer is liable to pay the same.

Geographically, the Act applies to the whole country without distinction between regions or areas. The Act applies to a) every establishment in which twenty or more contract workers are/were employed on any day in preceding twelve months and b) to every contractor who employs or who has employed twenty or more contract workers on any day of the preceding twelve months. There is a provision in the Act that the appropriate government (state government and central government) may extend the provisions of the Act to any establishment or contractor employing less than twenty workers after giving two months notice (Pais, 2008, pp.11-13).

5. The Inter-State Migrant Workers Act, 1979

This Act aims to safeguard the terms and conditions of work of workers recruited by contractors from one state for service in an establishment in another state. It is intended to guard against exploitation of migrant workers by employers and contractors. Similar to the Contract Labour Act, this Act provides for registration of establishments employing migrant labour and licensing of contractors. As in the

Contract Labour Act, the principal employer is held responsible in case of omissions by the contractor.

The Act applies to the whole country without distinction between regions or areas. It applies to every establishment and contractor employing five or more workers.

6. The Child Labour (Prohibition & Regulation) Act,1986

Employment of children below the age of 14 years in certain occupations and hazardous processes as listed in **part A** & **part B** of the schedule to the Act is prohibited under this Act (Refer Box 3.2 in Annexure). It regulates the conditions of work of children in certain other employments. Under Section 3 of this Act, no child should be employed or permitted to work in any of the occupations classified under part - A and/or in any of the workshop wherein any of the processes categorised under part-B.

However, under Section 32 of the Bombay Shops & Establishments Act, 1948, employing children below the age of 14 years is totally prohibited in all the shops and establishments in Gujarat. Complaints can be filed against employer, for violation of this act. Criminal case can be filed by any person, police officer or inspectors appointed under Section 17 of the Act in any of the competent judicial courts. Age certificate of every child labourer, obtained from Government Medical Officer shall be considered conclusive evidence as to the age of the child.⁴

3.4.2 Laws Relating to Wages and Remuneration

7. Minimum Wages Act, 1948

Among all the central and state level labour regulations, the most important regulation in terms of its coverage would be the Minimum Wages Act. The Minimum Wages

⁴ From the website of Labour and Employment Department, Government of Gujarat. http://labourandemployment.gov.in/

Act prescribes minimum wages for all employees in all establishments or working at home in certain employments specified in the schedule of the Act. Central and state governments revise minimum wages specified in the schedule. Under this Act, statutory minimum wages may vary across different employments and within a particular employment, across different skill levels. The Minimum Wages Act 1948 has classified workers as unskilled, semi-skilled, skilled; and highly skilled. The Act is also so designed such that the statutory minimum wages may vary from state to state and within a state, from region to region.

The minimum wages are fixed in Gujarat on the advice of the State level Minimum Wage Advisory Committee. This advisory committee consists of the members of both employers and employees and also other experts

8. Payment of Wages Act, 1936

Following the report of the Royal Commission of Labour which was appointed in 1929, the colonial government of India passed the Payment of Wages Act in 1936. The Act aims to ensure that workers receive regular and prompt payment of wages for work done. It prohibits arbitrary deduction from workers' wages in the form of fines and penalties (Pais, 2008, pp.18).

Under the Payment of Wages Act 1936 some important obligations of the employers can be identified. Every employer is primarily responsible for payment of wages to employees. The employer should fix the wage period (which may be per day, per week or per month) but in no case should it exceed one month. Every employer should make timely payment of wages. If the employment of any employee is being terminated, the necessary wages should be paid within two days of the date of termination; and the employer should pay the wages in cash, i.e. in coins in circulation or currency notes. However wages may also be paid either by cheque or by crediting in employee's bank account after obtaining written consent.

9. Payment of Bonus Act, 1965

The Payment of Bonus Act provides for the payment of bonus to persons employed in certain establishments on the basis of profits or on the basis of production or productivity.

The Act is applicable to establishments employing 20 or more persons. The minimum bonus, which an employer is required to pay even if he suffers losses during the accounting year is 8.33% of the salary or wage earned by a worker. The Payment of Bonus Act is applicable to the whole country except the state of Sikkim. The Act is not applicable to agricultural or the unorganised sector (Pais, 2008). As per an amendment by the Gujarat state government, this Act applies to every factory and every other establishments in which 10 or more persons are employed on any day during an accounting year⁵.

10. The Equal Remuneration Act, 1976

The main objective of the Equal Remuneration Act is to prevent discrimination with respect to wage payments on the grounds of gender. It provides for payment of equal remuneration to men and women workers for the "same work or work of similar nature". The Act also prohibits discrimination based on gender at the time of recruitment, for same or similar nature of work, except when employment of women workers is specifically prohibited or restricted under any law. By definition, the Equal Remuneration Act is applicable only to establishments that employ ten or more workers.

⁵ From the website of Labour and Employment Department, Government of Gujarat. http://labourandemployment.gov.in/

3.4.3 Laws Relating to Social Security

11. The Employees' State Insurance Act, 1948

The Employees' State Insurance Act, 1948 is considered the pioneering step by the state in providing social insurance for workers in the country. The Employees State Insurance (ESI) scheme that has evolved due to this regulation covers both workers and their families. There are two types of insurance benefits provided under the scheme. First is medical care, in which the insured workers and their families are provided medical care through a vast network of panel clinics, ESI dispensaries and hospitals not far from the residence of the worker. Second, cash benefits are also provided in case of sickness, maternity, disablement, benefits of retirement, funeral expenses and so on.

The ESI scheme is financed by contributions from the employers, workers and the respective state governments. The employers contribute 4.75 per cent of the wage bill while the workers pay 1.75 percent of the wages they receive. Workers earning less than a minimum wage per day are exempted from contributing to the ESI.⁶ No employer covered under the Act is exempt in a similar way. The state government pays about 12.5 percent of the medical expenditure by the ESI scheme in the state. The Act is applicable in all states except Sikkim and in all factories and establishments such as shops, hotels, restaurants, cinema theatres, motor transport undertakings and newspaper establishments employing 20 or more workers. The Act excludes establishments that have a seasonal nature of economic activity. There was a wage limit of Rs. 6500 for eligibility in the ESI scheme, which was increased to Rs.7500 per month in 2004 and to Rs.10,000 in 2006 (Pais, 2008, pp.20-21).

12. Employees' Provident Funds and Miscellaneous Provisions Act, 1952

This Act seeks to ensure the financial security of the employees in an establishment by providing for a system of compulsory savings. The Act provides for establishments of a contributory Provident Fund in which employees' contribution shall be at least

⁶ The wage limit below which workers do not have to contribute to the ESI was Rs. 50 per day in 2006.

equal to the contribution payable by the employer. In certain class of establishments, again listed in the government in its official gazette, the employers' contribution is 12 per cent of the total wages including dearness allowance. Minimum contribution by the employees shall be 10-12% of the wages. This amount is payable to the employee after retirement and could also be withdrawn partly for certain specified purposes (Pais, 2008; Papola et al, 2008).

Under this Act, in certain establishments, including factories, employing twenty persons and more, workers and employees are provided with a provident fund. Not all industrial sectors are covered under the Act. The Act does not apply to the employees of the central government, state government or local bodies. The Act also does not apply to establishments registered under the Co-operative Society Act. The Act is applicable in all states in India except Jammu and Kashmir (Ibid.).

13. Workmen's Compensation Act, 1923

The said Act was aimed at encouraging employers to provide adequate safety measures in the workplace so that the possibility of work related accidents were greatly reduced. The employer is required to pay compensation for any accident suffered by an employee during the course of employment and in accordance with the Act. The employer must submit a statement to the Commissioner (within 30 days of receiving the notice) giving the circumstances involving the death of a worker as result of an accident and indicating whether the employer is liable to deposit any compensation for the same. He should also submit an accident report to the Commissioner within seven days of the accident. All compensation is calculated as a multiple of wages earned by the workers with a prescribed minimum rate of compensation.

The Act applies to all workers under the Mines Act, the Factories Act, government servants except armed forces. Workers who are covered under the Employees' State Insurance for similar provisions are also excluded from the scope of this Act.

14. Maternity Benefit Act, 1961

The Maternity Benefit Act regulates the employment of the women in certain establishments for a prescribed period before and after child birth and provides certain other benefits. The Act does not apply to any factory or other establishment to which the Employees State Insurance Act 1948 is applicable. Every women employee who has actually worked in an establishment for a period of at least 80 days during the 12 months immediately preceding the date of her expected delivery, is entitled to receive maternity benefits under the Act. The employer is thus required to pay maternity benefits and/or medical bonus and allow maternity leave and nursing breaks.

15. Payment of Gratuity Act, 1972

Following the enactment of the Gratuity Act by the states of Kerala and West Bengal and a similar move by other states, the Central Payment of Gratuity Act was enacted in 1972. Workers covered by the Payment of Gratuity Act having continuous service of 5 years and above are entitled to a gratuity at the time of superannuation, retirement, resignation or death. The Payment of Gratuity Act provides for a scheme for the payment of gratuity to all employees in all establishments employing ten or more employees. Gratuity is payable to an employee on his retirement/resignation at the rate of 15 days salary of the employee for each completed year of service (Pais, 2008; Papola et al, 2008).

3.4.4 Laws on Employment Security and Industrial Relations

16. The Trade Unions Act, 1926

The Trade Unions Act, 1926 is an important labour regulation on industrial relations and confers a legal status to trade unions that are registered under the Act.. It extends to the whole of India. The main provisions of the Trade Union Act relate to the registration of unions, the rights and privileges of registered trade unions and their obligations and liabilities. The Act provides that any group of seven or more persons can come together to form a trade union and get it registered. Other than general

labour unions that are not attached to any particular industry and may be exempted from this provision, any trade union that is connected to an industry should have half its office bearers as workers in that industry. In order to ensure organised growth of trade unions and reduce multiplicity of trade unions, certain provisions of the Act were amended in 2001 (with effect from 9.1.2002). The amendments require that at least 10 percent of the workers in an enterprise or industry (or hundred workers whichever is higher) is the minimum number required to form a trade union associated with that enterprise or industry. The minimum number of members in a general trade union still remains seven (Pais, 2008,pp.26-27).

Other Regulations & Rules(i) The Central Trade Unions regulations 1938 - it applies to trade unions whose objects are not confined to one state.(ii) Gujarat Trade Unions Regulations 1958 - applies to the whole State of Gujarat. (iii) Gujarat Trade Unions Regulations,1963 applies to the whole State of Gujarat.⁷

17. Industrial Employment (Standing orders) Act, 1946

The Industrial Employment Act requires employers in industrial establishments to clearly define the conditions of employment by issuing standing orders duly certified. Model standing orders issued under the Act deal with classification of workmen, holidays, shifts, payment of wages, leaves, termination etc. Generally, the workers are classified as apprentice/trainee, casual, temporary, substitute, probationer, permanent and fixed period employees.

The Act extends to all states in the country. In general, it applies to all establishments employing 100 or more workers. Some states such as Maharashtra, Karnataka have extended the provisions of the Act to establishments employing 50 or more workers. In case of Gujarat, this Act applies to industrial establishments employing 10 and more workers to define formally conditions of employment and make the said conditions known to workmen. There is the Gujarat Industrial Employment (Standing

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⁷ From the website of Labour and Employment Department, Government of Gujarat. http://labourandemployment.gov.in/

Orders) Rules, 1961 - which applies to all the units in the State of Gujarat. Model Standing Orders are given in Schedule 1 of the Rules which can be adopted by the establishment with suitable modifications and the same may be submitted to the certifying officer i.e., ACL of concerned area. In Model Standing Order, Provision of 'Fixed Term Employment' is inserted. The term 'sexual harassment' is also defined⁸.

18. <u>Industrial Disputes Act</u>, 1947⁹

In the debate on nature of labour regulations or the reforms in labour laws in India, the single most controversial law is perhaps the Industrial Disputes Act, 1947. The Industrial Disputes Act, passed in 1947, was in fact adopted as a comprehensive measure by the central government with a view to improving industrial relations. The Act provides for the investigation and settlement of industrial disputes in an industrial establishment relating to strikes, lockouts, layoffs, retrenchments, closures, etc. It provides the machinery for the reconciliation and adjudication of disputes or differences between the employees and the employers. Industrial undertaking includes an undertaking carrying any business, trade, manufacture etc. The Act prohibits strikes without notice in public utility services.

The Act clearly defines terms such as 'industrial dispute', 'strikes' and 'lockouts'. On the event of termination of service of employment, the Act defines termination systems such as lay-offs, retrenchments and closure of the establishments. 11 Chapters V-A and V-B are the most contentious of the different chapters in the Industrial

⁸ ibid.

⁹ For a more detailed discussion, see Pais, 2008, pp.28-32.

¹⁰ Under the Act, a 'strike' means a cessation of work by a body of persons employed in an industry acting in combination, or a concerted refusal, or a refusal under a common understanding, of any number of persons who are or have been so employed to continue to work or to accept employment. A 'lockout' means the temporary closing of place of employment or the suspension of work, or the refusal by an employer to continue to employ any number of persons employed by him.

¹¹ In the Industrial Disputes Act, a 'lay-off' is defined as the failure, refusal or inability of an employer on account of shortage of coal, power or raw materials or the accumulation of stocks or the breakdown of machinery (or natural calamity or for any other connected reason) to give employment to a workman whose name is borne on the muster-rolls of his industrial establishment and who has not been retrenched. The term 'retrenchment' is defined as the termination by the employer of the service of a workman for any reason whatsoever, other than as a punishment inflicted by way of disciplinary action. And 'closure' is defined as the permanent closing down of a place of employment or part thereof.

Disputes Act. These sections define when and how lay-offs and retrenchments of industrial establishments are permitted and when they are not. The Chapter V-A applies to relatively smaller industrial establishments employing 100 or less workers and establishments that are seasonal in nature. The provisions of Chapter V-B on the other hand apply to relatively larger establishments employing on an average not less than 100 workers. The provisions of Chapter V-B applicable to establishments with over 100 workers are more stringent than those in Chapter V-A.

Under Chapter V-A, employers are permitted to lay-off workers provided they are provided adequate compensation which is defined as at least half the average wages received by the workers. In establishments employing between 50 and 100 workers, in the event of retrenchment, the employer is expected to give at least one month's notice, provide a retrenchment compensation that is equal to 15 days of average pay for each year of completed service and a notification is issued to the appropriate government. If an establishment covered under this Chapter intends to close down, the Act provides for the procedure for closure. This includes a sixty-day notice and compensation package to workers similar to the compensation package for retrenchment.

Under Chapter V-B, however, employers are not permitted to lay-off or retrench workers or close down operations of the establishment without prior permission from the government. Once, the employer has received the necessary government permission for lay-off, retrenchment or closure, as the case may be, the compensation package for workers involved under Chapter V-B is similar to that under Chapter V-A.

The provisions of the Act are applicable only to establishments employing 10 or more workers. However, the main provisions relating to lay-offs, retrenchments and closures, provisions that are highly debated and blamed the most for the presumed "rigidity" in the labour market, are applicable only to establishments employing 100 or more workers (Chapter V-B). There are some provisions such as in Chapter V-A that are applicable to establishments employing between 50 and 100 workers. Further, the provisions of the Act do not apply to managerial and supervisory staff or to staff

in administrative responsibilities. Also, the Act does not apply to casual or temporary workers including badly workers. New workers, who have not yet completed one year of continuous service, are also not covered under the Act. The Government of Gujarat has amended The Industrial Disputes Act, 1947 and Chapter - V D for Special Economic Zones is inserted.

3.5 Major Labour Laws in Selected States

Gujarat:

The activities of the Labour and Employment Department of Gujarat can be divided broadly into two wings pertaining to Labour and Employment. The Labour wing is responsible for the implementation of 28 Labour Laws (Central & State) with a view to establishing and maintaining peace in the Industrial Establishments. The Employment wing is responsible for registration, sponsoring and giving vocational guidance to the interested candidates and collection of employment market information. Its objectives consist of deciding rules and regulations for worker welfare, labour training and human empowerment. The list of various Acts and labour laws dealing with wages, working conditions, welfare measures, industrial relations, is provided in the annexure (Refer Box 3.3 in the annexure). The various central and state labour laws and rules that are in force, are being enforced by the Labour Commissionerate.

Orissa:

The Labour and Employment Department of Orissa is a nodal department for formulating plans, policies and programmes for development of labourers including child labourers engaged under organised and unorganised sectors / unemployed youths / social security measures for industrial workers / safety and health workers in factory boilers. The Department takes up activities which are mostly regulatory in nature and administers the various labour legislations towards the broad objectives relating to industrial relations, social security, payment of wages, and so on (Refer Box 3.4 in the annexure).

The subject of 'Labour' being included in concurrent list of the Constitution of India; most of the labour legislations in force in Orissa have been enacted by the Central Government but enforced by the State Government except the Orissa Shops and Commercial Establishments Act, 1956 and the Orissa Industrial Establishment (N & F) Holidays Act, 1969 which are State Government legislations. The Labour & Employment Department implements and enforces the labour laws through the following six Directorates.

- 1. Labour Commissioner, Orissa
- 2. Director of Factories & Boilers, Orissa
- 3. Director, Employees' State Insurance Scheme, Orissa
- 4. Director of Employment, Orissa
- 5. Presiding Officer, Industrial Tribunal, Bhubaneswar
- 6. Presiding Officer, Industrial Tribunal, Rourkela

Rajasthan:

The Labour Department of Rajasthan was established in 1950 with the broad objectives relating to maintenance of industrial peace, enforcement of labour laws (18 in number), settlement of industrial disputes and complaints, providing compensation in case of fatal/non-fatal accidents on the job, registration of trade unions, regulation and abolition of contract labour system, registration of shops and commercial establishments, ensuring equal remuneration to female workers, identification, release and rehabilitation of child labour, abolition of bonded labour system and welfare of unorganised workers. A list of various labour laws in operation in Rajasthan can be seen as shown in Box 3.5 in the annexure.

Tamil Nadu:

The Labour Department of Tamil Nadu functions under the administrative control of the Labour & Employment Department in the Secretariat. The Commissioner of Labour is the Head of the Department. The functions of the Labour Department involve resolving industrial disputes, enforcement of various labour enactments, enforcement of Weights & Measures Act to safeguard the interest of the labour and consumers. The maintenance of industrial peace and harmony by the timely intervention and settlement of industrial disputes between the management of industrial establishments and their workers are the main functions of the Labour

Department. The list of various labour enactments that are enforced by the Labour Department has been given in the annexure (See Box 3.6).

3.6 Some Recent Policy Trends vis-à-vis the Labour Laws

This section focuses on some recent important initiatives and pronouncements either by the various organs of the state or entities on its behalf, reflecting the change in stance of the state towards labour through changes in policies and regulatory practices, that had been envisioned to protect the interests of the working class.

Among the various policies and initiatives in the recent past, the prescriptions of the Report of the Second National Labour Commission (henceforth SNCL Report) may be taken to reflect the contemporary official policy perspective vis-à-vis labour (GoI, 2002). The Commission was appointed by the government of India in December in 1998 and it had several mandates. This report, released on June 29, 2002, correctly identified some of the principal problems confronting the working class in India. The report acknowledged that there was a marked deceleration in employment generation in the nineties, compared to the 1980s. Employment growth in the organised sector in the 1990s almost came to a standstill and towards the end of 1990s, the number of openly unemployed in the economy was higher than the number employed in the organised sector. The proportion of workforce outside the purview of any kind of social security net or protection was close to 93 percent, whereas only a miniscule percentage comprising the organised labour had any protective coverage. The Report also observed that the pressures of global competition have resulted in a widespread loss of jobs in the organised sector, due to Voluntary Retirement Schemes (VRS), outsourcing, sub-contracting and so on.

Further, based on the review of industrial relations between the pre-reform (1981-90) and post-reform (1991-2000) decades, the SNCL noted that the person-days lost during the latter decade was almost half of that in the former, and lockouts accounted for higher proportion of the losses compared to strikes. The Report also expressed concern over the issue that there were a large number of complaints on Voluntary Retirement Schemes, including, 'elements of indirect compulsion, pressure tactics, innovative forms of mental harassment, compelling employees to resign by seeking to

terminate them, and in some cases, physical torture and threats of violence against themselves or dependents.' The Report observed that it has been increasingly noticed that trade unions do not normally give a call for strike because they are afraid that a strike might lead to the closure of the unit. Also, the nature of disputes or demands is changing, with a trend to resolve major disputes through negotiations at bipartite level. The attitude of the government, especially of the central government, towards workers and employers seems to have undergone a change, with permissions for closure or retrenchment being granted more easily. The conciliation machinery is more eager to consider problems of employers and consider issues like increase in productivity, cost reduction, financial difficulties of the employer, competition, market fluctuations, etc. The labour adjudication machinery has been more willing to entertain the concerns of the industry.¹²

Hence, the inevitable conclusion emerging from the observations of the SNCL is that there has been a significant shift in the relative bargaining power, in the domain of industrial relations, with the power relations tilting in favour of the employers, away from the workers. Thus, even in the miniscule formal sector, capital's onslaught on labour has clearly been on the rise. However, what is ironical is that, the SNCL Report, after clearly documenting and acknowledging the growing vulnerability of labour even in the small organised sector, it makes recommendations that would worsen matters further. For instance, some of the key recommendations of the SNCL Report are listed below:

- i. Unfettered right to close establishments without prior permission that employ up to 300 workers. Currently, as per the Chapter V-B of the Industrial Disputes Act, establishments employing up to 100 workers are required to secure prior permission from the government concerned.
- ii. In the case of closure of establishments employing more than 300 workers, the recommendation is that the employer shall apply for permission to the appropriate government 90 days before the closure and also serve a copy of the application to the recognised negotiating agent. If the government does not

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¹² Second National Commission on Labour, Conclusions and Recommendations, pp.27-28.

- respond within 60 days of receipt of such an application, permission will be deemed to have been granted.
- iii. Employers may be granted unfettered right of retrenchments and lay offs in all establishments of any size without any prior permission. The only suggested requirement is that the workers be entitled to two months notice, or notice pay in lieu of notice.
- iv. Employers may be given the right to effect changes unilaterally in the service/working conditions of the workers just by giving 21 days notice.
- v. A distinction between 'core' and 'non-core' activities is suggested and the commission recommends that contract labour shall not be engaged in the former. However, even in such activities, it is suggested that, to meet sporadic seasonal demand, contract labour may be engaged, thereby effectively sanctioning the use of temporary and contract labour across the board.
- vi. It recommends the 'rationalisation' and 'judicious consolidation' of all labour laws, including the Industrial Disputes Act, 1947, The Trade Unions Act, 1926 and all other Acts pertaining industrial relations into a single law which may be called the Labour Management relations Law or the Law on Labour Management Relations. Further, it visualises minimising the role of government intervention in matters such as closure of establishments and proposes that in case of dispute in such matters, the Labour Relations Commission should address the issues and redress the same.

Apart from the above mentioned recommendations, the Report also proposes recommendations of the kind that curb the power of the trade unions, it suggest the imposition of a virtual ban on strikes in the of 'essential' services, and a complete ban on strikes in sectors considered 'socially essential' as decided by the government. It also suggests that establishments employing less than 20 workers be taken out of the purview of general labour laws.

It is clearly evident that the recommendations as made by the SNCL Report, aim at curtailing whatever bargaining strength a small section of workers has had. It has taken the view that labour markets in India are not flexible enough to face global

competition, and following the line of argument as propounded by the 'flexibility' school, the SNCL had called for greater labour market 'flexibility'.

Continuing along the same lines, the then Finance Minister, in his Budget Speech, 2001, announced amendments to the Industrial Disputes Act, 1947 and the Contract Labour (Regulation and Abolition) Act, 1970, as reproduced below:

- (i) "Amendment to the provision of Chapter V-B of the Industrial Disputes Act prior approval of appropriate Government Authority for effecting lay-off, retrenchment and closure after following prescribed procedures to now apply to industrial establishments employing not less than 1000 workers (instead of 100 workers at present) and separation compensation to be increased from 15 days to 45 days for every completed year of service."
- (ii) "Section 10 of the Contract Labour Act to be amended to facilitate outsourcing of activities without any restrictions as well as to offer contract appointments. It would not differentiate between core and non-core activities and provide protection to labour engaged in outsourced activities in terms of their health, safety, welfare, social security, etc. It would provide for larger compensation based on last drawn wage as retrenchment compensation for every year of service."

Likewise, the central government, in 2003, constituted a Group of Ministers (GoM), to finalise the proposed amendments in the Industrial Disputes Act and the Contract Labour Act. Taking its cue from the SNCL, the GoM pushed for unrestrained flexibilisation. One of the proposed amendments under consideration, with respect to the Contract labour Act, was to exempt certain activities from the application of Section 10 of the existing Act¹³. The GoM identified the following ten activities and proposed their exemption:-

- (1) Sweeping, cleaning, dusting and gardening;
- (2) Collection and disposal of garbage and waste;
- (3) Security, watch and ward;
- (4) Maintenance and repair of plant, machinery and equipments;

¹³ Section 10 of the Contract Labour (Regulation and Abolition) Act, 1970 provides for prohibition of contract labour under certain circumstances, such as, perennial nature of the process, operation or work etc.

- (5) House keeping, laundry, canteen and courier;
- (6) Loading and unloading
- (7) Information technology;
- (8) Support services in respect of an establishment relating to hospital, educational and training institution, guest house, club and transport;
- (9) Export oriented units established in Special Economic Zones and Units exporting more than seventy five percent or more of their production; and
- (10) Construction and maintenance of buildings, roads and bridges.

If one is to go by the above mentioned suggestions, it would mean that the ambit of 'non-core' jobs with reference to the Contract Labour Act, gets expanded such that well in excess of eighty percent of workers in any major establishment could easily get into such a net. And if the above mentioned proposals get the legislative sanction, it would compromise the sanctity of the Contract Labour (Regulation and Abolition) Act immensely.

Carrying forward, the same policy stance, in 2005 the prime minister's office (PMO), prepared a note ("PMO Note on Labour Market") where the proposals for introducing greater labour market flexibility were clearly stated: Amendments to Chapter VB of the Industrial Disputes Act (IDA), 1947 and the Contract Labour Act, 1970. Currently Chapter V-B of the IDA says that industrial establishments employing not less than 100 workers have to seek prior permission from the appropriate government department to effect lay-off, retrenchment or closure. The PMO note proposed that the present filter number of 100 under Chapter V-B of the IDA, 1947 be raised to 300. In their proposal to amend the Contract Labour Act, 1970, the PMO note proposed that certain activities where contract labour was sought to be allowed. The attempt is to introduce two kinds of changes in the laws governing the labour market. First, to give greater freedom to the employers to retrench or lay-off permanent workers by diluting the provisions under Chapter VB of the IDA (i e, to introduce hire and fire) and second, expanding the scope of employing contractual or casual labour in greater number of jobs as well as industries. These measures, it is argued, would impart the required "flexibility" to the Indian labour market, which would enable higher growth and employment generation, especially in the manufacturing sector.

Although, none of the above mentioned acts have been amended to achieve labour market flexibility, the enforcement of both the laws, especially the contract labour laws, have been poor. As a result, there is an increasing presence of temporary workers in regular work as has been highlighted by several studies (Deshpande et al, 2004; Sen et al, 2006; India Labour Market Report, 2008; Guha, 2009, and so on).

The governments both at the centre and in the states have been more liberal in other aspects of labour regulation also in recent years. Though no significant changes in labour laws have taken place, changes in implementation practices to make labour regulation more 'enterprise-friendly' have taken place (Nagaraj, 2004). During the post-liberalisation era, there has been a sea change in the state's stance regarding the issue of non-enforcement of labour laws; what was earlier (that is, in the preliberalisation period) probably inefficiency/corruption, has now become unstated policy¹⁴. Several states have relaxed the provision of enforcement of labour laws leading to flexible practices at the ground level. Some of the states have issued directives to prevent or hinder inspection of firms. For example, in Uttar Pradesh, the labour inspectors can carry out inspection only after prior consent of an officer of the rank of labour commissioner or district magistrate. Similarly, it has been reported that in the case of Haryana, the labour inspectorate was directed by the Labour Commissioner not to undertake any inspection without prior written permission from the higher authority concerned (Jha, 2005). The states of Rajasthan and Andhra Pradesh have also reduced the scope of labour inspection, and have exempted several establishments from the purview of labour inspection. Therefore, there has been a massive curtailment of routine inspections by labour officials in many states (Reddy, 2008; Shyam Sundar, 2008; Sharma and Kalpana, 2008). Almost all the laws have become serious casualties in the process, but especially, the Minimum Wages Act and the Contract Labour Act have witnessed gross violations.

Research based on fieldwork reveals how misleading a classification of states on the basis of their labour laws can be and how the de facto situation can present a completely different story. In the case of Gujarat, Streefkerk (2001), after revisiting in

¹⁴ Discussed in Jha, 2005,p.902.

1998 the area of south Gujarat where he had undertaken fieldwork in 1974, noticed greater casualisation, feminisation, and the use of contract labour in industry. He views these as a continuation of long-term trends that were legitimised by the reforms of the 1990s, not caused by them. In both 1974 and 1998, factory inspectors were indifferent to their responsibilities, and routinely paid off by employers. "The retreat of [the] Indian state does not apply to most of the industrial workers in Valsad region.... For many workers the state did not, and still does not exist" (Streefkerk, 2001, p.2404)¹⁵.

Another scholar who has spent most of his professional life closely observing the labour scenario in Gujarat has documented the inability of the thousands of workers who lost their jobs in the collapse of Ahmedabad's textile factories in the 1980s and 1990s to receive their statutory benefits (Breman, 2004, pp.160-69)¹⁶.

Therefore, apart from dismantling the system through underhanded means, instances of official orders from the government amounting to a severe compromise of the inspection machinery have been documented. Also, in many states, in the name of attracting investment, several sectors of the economy are being exempted from different labour laws, and the system of 'self-certification' by employers with respect to whatever they are supposed to adhere to, is increasingly gaining importance. Relaxations of various kinds have been allowed, say in the use of contract labour and in hours of work and so on in export-oriented units and IT establishments (e.g., Government of Gujarat, 2006)¹⁷. Yet another objective of the government seems to be delegitimizing the trade unions as representatives of workers' rights, to stifle their voice of dissent, and ultimately to deprive the working classes from initiating organised resistance even in the face of increased vulnerabilities and adversities (Jha, 2005).

¹⁵ This has also been discussed in Bhattacharjea, 2006, p.30-31.

¹⁶ Also mentioned in Bhattacharjea, 2006, p.31.

¹⁷ Jha (2005) provides an illuminating narrative on this aspect.

The Indian state has thus, tended to become relatively less tolerant towards labour during the neo-liberal era, and in the wake of globalisation, it is the pursuit of capital that is increasingly being accorded legitimacy by the state. This spells doom for the world of labour, which in any case is already on the back foot, and is being badly battered by the rising onslaught of capital.

3.7 Enforcement of Labour Regulations: Some Key Findings

As discussed in the preceding section, even though there has been no recent change in labour laws such as the Industrial Disputes Act or the Contract Labour (Regulation and Abolition) Act, real developments in the labour market seem to indicate de facto deregulation, with large shares of contract labour and liberal hiring and firing practices. Introduction of schemes like the Voluntary Retirement Scheme in the early 1990s, has accorded some sort of tacit legitimacy to layoffs and retrenchments across the board in India's registered manufacturing sector, despite stringent labour regulation 'on paper'. Recent developments like coming up of Export Promotion Zones (EPZs), Information Technology (IT) parks, Business Process Outsourcing unit (BPOs), etc., have further diluted the efficacy of labour regulations.

Against this background, it would perhaps be pertinent to draw a brief sketch of the industrial relations scenario in India, as well as with respect to the four select states. It would be perhaps better to make it clear at the outset itself that using regional level data is fraught with difficulties, as much of the data is not available for the states for many of the years considered in the study. Hence, there might be a considerable degree of under reporting as most states do not submit data for quite many years. There are some pretty evident data gaps especially in case of Gujarat and Tamil Nadu. However, even though it can not be inferred conclusively, yet an indicative picture can be drawn from the data furnished in this section.

Even though labour laws have largely remained unchanged on paper, their efficacy and implementation stands to question as their enforcement appears to have undergone substantial dilution as the government at various levels seem to have become apathetic with regard to their enforcement. With respect to the landscape on enforcement of labour regulations in India, the data for inspections conducted under Factories Act, 1948, over the years, has been used as a sort of proxy, to give us a broad and generalized idea as to what has been happening over the years on the enforcement front¹⁸.

3.7.1 Enforcement under Factories Act, 1948

The state government is designated as the chief administrative authority with regard to the Factories Act. The state government ensures the enforcement of the provisions of the Act through the Inspectorate of Factories. Contrary to popular belief, data on factory inspection shows that a large majority of the factories do not have a visit from the factories inspector every year and over the years the inspection rate in the factories sector has declined considerably. The proportion of factories not inspected has been on the rise in the recent period. Though there are some data gaps, one can still infer that the enforcement of the provisions of the Factories Act has slackened in recent years, through a relative decline in the inspection rate of factories (Refer table 3.2 in the annexure).

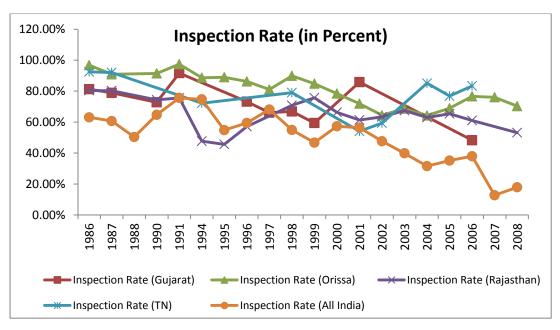


Figure 3.1: Rate of Inspection under the Factories Act over the years

Source: Based on data presented in table 3.2 (Refer annexure)

¹⁸ Use of the data on enforcement of Factories Act can be justified on the grounds that this whole empirical exercise covers the factory sector, and the conditions of work in factories are regulated by the Factories Act, 1948.

As is evident from the above figure, the rate of inspection under Factories Act, 1948, has been going down for India, and this has also been observed in case of Gujarat, Rajasthan and Orissa. However, Tamil Nadu does not seem to be conforming to this trend. The frequency of factory inspections has significantly reduced, a large number of factories are not inspected even once a year, while new schemes such as the system of self certification¹⁹ has been launched in many states to minimise routine inspections of complying employers. It strengthens the argument that labour laws in India, as in many developing countries, tend to be aspirational with limited enforcement (Nagaraj, 2004).

What is interesting is that, as is evident from the figure, the rate of inspection under the Factories Act had been going down even before schemes like self-certification and system of joint inspections came in. And these much talked about schemes appear to be a kind of *de jure* official recognition of the *de facto* laxity in the inspection process that has been prevailing in the neo-liberal era (Reddy, 2008).

3.7.2 Industrial Disputes Act, 1947: Strikes and Lockouts

The data on industrial disputes provides a snapshot of the industrial labour relations climate in the country. The industrial relations in India are governed under the Industrial Disputes Act, 1947. That the labour market is flexible enough to accept the terms and conditions laid down by employers and that the labour, in general, has been docile is evident from the fact that both the number of industrial disputes and the number of days of work lost due to industrial strife has fallen in absolute terms over the years, more so since the 1990s as can be observed from table 3.3 and 3.4 (Refer annexure). ²⁰

¹⁹ A system of self-certification by employers has been introduced w.e.f. 1st April, 2008 under which employers employing upto 40 persons will be required to give only a self-certificate regarding compliance while those employing 40 or more persons would submit self-certificate duly certified by a Chartered Accountant.(Ministry of Labour and Employment, GoI, Annual Report 2008-09).

²⁰ The number of industrial disputes and work days lost due to workstoppages have been standardised by deflating them per thousand workers in the organised manufacturing sector, to make the figures somewhat comparable across states.

It has been well-documented that the number of person-days lost on account of strikes has been fewer than those due to lock-outs since the early 1990s, in most of the Indian states, signalling a shift in power equations, with "employer offensive" attaining new heights, and an erosion of the bargaining strength of workers vis-à-vis the employers (Banerjee, 2005; Reddy, 2008; Sharma and Kalpana, 2008; Shyam Sundar, 2008; among others). Similar trends can be discerned in case of the organised manufacturing sector in India as a whole as the figure below shows(Figure 3.2); while there has been a decline in the total number of strikes and lockouts over the years, the share of strikes in total disputes has exhibited a fall, while the share of lockouts in total disputes has shored up. This indicates a general weakening of the power of workers vis-à-vis the employers.

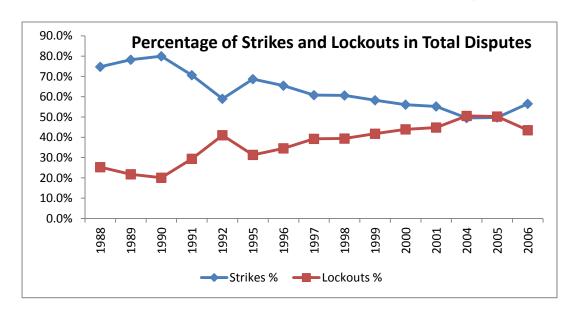


Figure 3.2: Percentage Distribution of Strikes and Lockouts in Total Disputes: All India

Source: Based on data in Indian Labour Year Book, Indian Labour Statistics, Labour Bureau.

Comparing the percentage distribution of workdays lost due to strikes and lockouts, the share of workdays lost due to lockouts has been higher than that for strikes since the nineties, reflecting a significant shift in the relative bargaining power in industrial relations, away from workers to employers, in the Indian registered manufacturing sector.

90.0% 80.0% 70.0% 60.0% 50.0% 40.0% 30.0% 20.0% 1988 1989 1990 1991 1992 1995 1996 1997 1998 1999 2000 2001 2004 2005 2006 —% of Mandays lost due to Strikes —% of Mandays lost due to Lockouts

Figure 3.3: Percentage distribution of mandays lost due to strikes and lockouts: All India

Source: Based on data in Indian Labour Year Book, Indian Labour Statistics, Labour Bureau.

Increasing Casualisation and the Contract Labour (Regulation and Abolition) Act, 1970

There has been growing contractualisation of industrial labour in India. There has occurred a casualisation of the organised manufacturing sector itself with greater use of subcontracting and increasing employment of contract and temporary workers. Workers employed through contractors (hereafter, contract workers) as percentage of total workers employed in organized manufacturing has increased from about 16 percent in 1998-99 to 29 percent in 2005-06 and then to around 33 percent in 2009-2010 (Table 3.5 in annexure). This estimate is based on the Annual Survey of Industries data.

This increasing incidence of contractual labour has been witnessed in the case of the four select states as well as can be seen from the figure provided (Figure 3.4). While all the four states considered in the study have witnessed steady increases in the proportion of contract workers employed, the use of contract labour has been substantially high particularly, in the case of Orissa and Gujarat.

Figure 3.4: Proportion of contract workers in the total work force in the factory sector

Source: Based on data given in table 3.5 (Refer annexure).

This shows that despite the existence of labour laws like the Contract Labour Act, contractualisation or casualisation of labour has already occurred significantly, as far as the Indian labour market is concerned. Contract labour has emerged as the most viable and economical option of hiring in the organised sector. However, unlike the directly employed workers, this section of labour does not enjoy any benefits such as bonus or wage increases, and in most cases are paid wages substantially lower than those of regular workers (Pages and Roy, 2006). Those employed under contract almost invariably have no bargaining power and remain scattered. Thus, employers frequently prefer taking workers employed through contractors rather than employ them directly, since apart from the flexibility it gives within the existing legal parameters, it also allows for lower costs and extracting more work from workers. The Contract Labour Act was passed essentially to prevent exploitation of labour and introduce better conditions of work, but it does not seem to have succeeded in its objective.

In other words, manufacturing industries have already achieved substantial labour market flexibility through increase in the share of non-permanent workers in total employment. This reflects the incidence of labour flexibility, despite labour laws remaining unchanged on paper. The evidence that there has been growing casualisation and the strength of regular workers has been decreasing in the factories, despite there being the Contract Labour Act, further belittles the 'inflexibility' argument.

3.8 Some Policy Pointers

Labour laws pertaining to various aspects of work have often been blamed for inducing 'rigidities' in the labour market in India, mainly by the economists of the 'distortionist' persuasion, which in turn lead to a variety of inefficiencies, reflected in terms of poor economic outcomes, such as low employment expansion, sluggish economic growth, etc. (Fallon and Lucas, 1993; Blanchard and Wolfers, 2000; Forteza and Rama, 2002; Besley and Burgess, 2004, and so on). This view has had a substantial following among the policy makers as well, more so in recent times. In recent times, several government documents also assign a large part of the blame on inflexible labour markets for the slowdown in growth in industrial production (GoI, 2006). The Second National Commission for Labour (SNCL,2002) also endorsed this view. However, as discussed in a couple of earlier sections, the prudence of this view in case of the Indian labour market stands to question, especially given the various changes in regulatory practices that have come about in recent years, many of them being de facto changes that have diluted the regulatory framework and have undermined the effectiveness of many labour laws that now seem 'rigid' only on paper (Jha, 2005; Bhattacharjea, 2006; Sharma, 2006; Papola and Pais, 2007; Jha and Goldar; 2008).

However, it cannot be denied that there are a number of critical issues relating to the existing legislations, their implementation, enforcement and applicability, which need to be addressed and reappraised in today's context. This section discusses some key concerns in this regard.

As discussed in an earlier section, under Article 246 of the Indian Constitution, the subject of labour has been put on the concurrent list, empowering both the Centre and the States to legislate on matters pertaining to labour. As a result, governments at both the levels appear to have been over-enthusiastic in formulating laws. A oft repeated comment on the labour regulations in India is that there are too many labour laws As

noted by Debroy (2005), overall there may be about 2500 central laws and as many as 30,000 state-level laws in India, including laws other than those relating to labour and industry. In the same article, Debroy lists 45 central acts and 16 associated rules that are directly related to labour. Anant et al (2006) provide a list of 47 central laws and 200 state laws. According to the Labour Bureau, there are 236 important labour acts as on March 2003 (Labour Bureau, 2004), of which 76 are in the central sphere and 160 in the state sphere²¹.

The problem of there being too many laws is compounded by the fact that often there is overlap in laws. Multiplicity of laws often covering the same subject makes compliance cumbersome for the employers and gives scope for exclusion of many workers. There is a belief in some quarters that the reason behind these numerous laws is the placing of labour in the concurrent list, and this has led to a demand that labour be removed from the concurrent list and placed in the state list (TeamLease, 2006).²² Many a times, there has been inadequate coordination between the central and state governments, giving rise to conflicts relating to matters of appropriate authorities for jurisdiction and implementation. Also, many of the laws are poorly designed. There are often varying definitions of key items in different statutes leading to massive chaos and confusion. Terms like 'worker', 'employee', 'factory', 'child', 'wages', etc are defined differently in different Acts²³. Also the provisions stipulated in the laws are often so detailed that it becomes arduous to implement them and often, gives scope to the unscrupulous inspecting officials for resorting to nebulous practices (Basu et al., 1996; Debroy, 2005; Papola and Pais, 2007). As Chandra puts it: 'the complexity and contradictions of Indian labour regulations....cry for resolution, simplification, rationalization and consolidation. The crusade of the employers' organization for simplification of labour laws makes sense background'(Chandra, 2006, p 35).

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 $^{^{\}rm 21}\,$ Cited from Papola and Pais ,2007, p.196.

²² Ibid.

²³ For instance, to quote Chandra (2006), 'the term wage has been defined in 11 different ways in 11 different laws' (Chandra, 2006, p.33).

Further, the evolution of labour laws in India, since the middle of the nineteenth century, has been in a haphazard and ad-hoc manner (Jha and Goldar, 2008). There were institutions that evolved in a certain context many years ago; it has to be borne in mind that the context has witnessed a sea change in recent years. On the basis of this, it might be advocated that the system of labour regulation in Indian industry requires revisiting and reappraising in the present context, particularly, because many of the premises and assumptions underlying the existing regulations have changed.

As discussed in a paper by Papola and Pais (2007), the most important limitation of the existing labour regulations lies in their limited coverage. With most laws applying only to relatively bigger establishments employing workers beyond a certain number (usually 10 workers), an overwhelming majority of workers of workers working in establishments employing less than 10 workers, have been left outside the purview of such regulations (that is, about 92 percent of all workers and 84 percent of all wage earners)²⁴. This issue has also been taken up by Jha and Goldar (2008), whereby they raise the relevance of all this hullabaloo about absence of flexibility in India's labour market, when for all practical purposes, most labour laws are enacted to cater to the organised sector, and well in excess of 90 percent of the workers are hardly affected, in a de facto sense, by the existing legislations. Furthermore, as highlighted by Chandra(2006), most pieces of labour legislation appear to leave out most enterprises and workers outside their coverage with the help of relevant number and wage filters (Refer table 3.6 provided in the annexure). Hardly any enterprise in the informal sector comes under the domain of these legislations, with close to 97 percent of the informal sector enterprises employing less than 10 workers.

This issue has also been elaborated upon in Pais (2008), where he provides estimates of the coverage of some important labour regulations, by definition and in practice. He finds that among the major labour regulations, there is wide discrepancy between the definitional coverage and actual coverage, with none of them covering more than 3 percent of the workforce and 6 percent of the hired workforce (except the Employees Provident Fund Act). Of all the labour laws, the Minimum Wage Act has the widest coverage by definition, as in principle, it is applicable to the informal sector as well. About 38 percent of the workforce or 83 percent of hired workers are

²⁴ Discussed in Papola and Pais, 2007, p.197.

technically covered under the Act. But as noted by Pais (2008), the estimates from the report on functioning of the Act shows that in 1999-2000, only about 8 percent of hired workers in India were actually covered under the Act, as ensured by the law.

Taking a cue from the set of recommendations suggested in Jha and Goldar (2008), it would be of importance to list some key issues in the context of the reform of labour laws, to bring it to the attention of the policy-makers (Refer Jha and Goldar, 2008, pp.42-44). Streamlining and simplification of labour laws should be addressed on a priority basis. While undertaking simplification and rationalisation, the problem, that most of the laws are quite old and give rise to inconsistencies and ambiguities, will obviously need to be addressed in the present context. In the existing laws, basic definitions (e.g. workers, employees, industry, child labour, establishment, appropriate government etc.) are full of ambiguities, which must be removed at the earliest. With respect to the fixing of minimum wage, minimum wage payable to anyone, in whatever occupation, should be such that it satisfies the basic needs of the worker and her/his family. The recommendation of the Second National Labour Commission (2002) that the minimum wage rate be revised every two years may be implemented.

Most of the laws should be designed as 'Central Laws' and must cover all types of workers (both from organised and unorganised sectors), so that it can be implemented universally within the country. There is a need to develop appropriate mechanisms for efficient coordination between multiple authorities. Another critical area that screams for attention is that of social infrastructure. Priority needs to be accorded to investments in human capital development, with decent provisioning of education and health for workers and their families, along with active labour market policies. Absence of social security provisions has been among the biggest problem towards efficient functioning of India's labour market. Recent proposal of NCEUS, aimed at social security for unorganised workers may be seen as an important first step in this regard.

Issues relating to adequate infrastructure and institutions for enforcement and implementation of labour laws need to be addressed, at different levels, and on an

urgent basis. In recent times, there has been much talk about 'self-certification'. There is no problem in experimenting with such innovative ideas, where feasible, but such schemes should be considered as part of a well-organised system of regular inspection, and should not become an excuse for noncompliance of labour laws. Independent auditors could probably be roped in, to monitor the self-certification process.

Transparency, simplicity, effective implementation are the most important aspects in any system of labour regulation and need careful consideration. However, while discussing a just and rational agenda for labour reforms, the basic vision that forms the foundation of such legislations, a right-based vision, where workers have rights as workers and as citizens, should not be ignored or compromised. These proposals need to be carefully considered and can serve as policy pointers when it comes to the issue of reforms of labour laws and the labour market in India.

Chapter 4

Some Critical Issues Relating to Output and Employment in the Organised Manufacturing Sector

Labour laws in general, the job security regulation in particular, have been an apple of discord since the initiation of economic reforms in 1991. Many economists and policy-makers believe that the nature and extent of state intervention in labour market in the industrial sector is excessive, inducing a rise in labour costs and reducing flexibility to respond to vagaries of business in an increasingly open and competitive economy. The lack of managerial freedom to 'hire and fire' is widely believed to adversely affect output and employment growth (Besley and Burgess, 2004). Lack of adaptable labour market is said to have imposed a binding constraint on expansion of labour-intensive manufacturing and their export, restraining India's ability to effectively compete with East Asia in general, and China in particular. Such an analysis has been widely disputed. However, the Second Labour Commission that was set up a few years ago to examine this contentious issue has broadly endorsed the view that labour markets in India are not flexible enough to face global competition and need to be reformed (Nagaraj, 2004).

A study of labour in the organised manufacturing sector can thus be of help in throwing light on the status of labour in the market-led flexibilisation regime in the neo-liberal era in India, over the past couple of decades. In this context, we look at the labour market conditions prevailing in the organised manufacturing sector in India and the selected states (in terms of certain industrial parameters) in the recent years to try and investigate whether the whole labour market 'rigidity' argument holds in case of India in general, and the individual selected states in particular.

4.1 Growth in Employment and Value Added in Organised Manufacturing

The relevant starting point for our study would be to have a brief glance at the growth of output (as measured by Gross Value Added at constant prices)¹ and employment in the organised manufacturing sector, keeping in mind the ubiquitous debate in India about the impact of growth of output on employment especially in the organised manufacturing sector for different periods since the early 1980s.

As is evident from the table which shows the growth rates of real gross value added (refer table 4.1 provided in the annexure) based on compound annual growth rate(CAGR)², during the pre-liberalisation phase, that is, over the period 1980-81 to 1990-91, the real gross value added increased at the rate of 8.7 percent per annum for all India at the aggregate manufacturing level. The growth rate stayed at the level of 8.7 percent per annum in the period from 1990-91 to 1997-98 and then came down to 7.2 percent in the next decade. In the case of Gujarat, the compound annual growth rate of real gross value added was lower in the period from 1980-81 to 1990-91 at 7.7 percent per annum, and it increased to hover at more than 10 percent per annum in the post-liberalisation periods. In case of Orissa and Tamil Nadu, compound annual growth rates of real gross value added has fallen in the subsequent periods as compared to that during the eighties. Similar is also the case of Rajasthan, where the

$$r = ((Yf/Yb)^{1/n} - 1) * 100,$$

where, r =Compound Annual Growth Rate ,Yf =final year , Yb =base year , n =Number of years.

¹ Real Gross Value Added is obtained by deflating the nominal figures by the Wholesale Price Index for Manufactured Products with base 1993-94=100. The WPI series for manufacturing sector was obtained from the RBI Handbook of Statistics on Indian Economy. To deflate the GVA, single deflation method has been used with the assumption being that the prices of intermediate inputs and raw materials have changed at the same rate output prices.

² The compound annual growth rate is calculated by taking the nth root of the total percentage growth rate, where n is the number of years in the period being considered. It is calculated using the formula,

decline in the growth rate is more pronounced over the last decade, with the growth rate of real output (represented by GVA) falling to about 4 percent per annum. However, it is to be noted that the annual compound annual growth rate of real value added in case of Rajasthan, has registered a marked increase over the period 2004-05 to 2007-08 as compared to the period from 2000-01 to 2004-05. Such spurt in compound annual growth rates can also be observed in case of the other three states as well, particularly Tamil Nadu, and even at the all India level.

It would be relevant to look at the compound annual growth rates of employment to try and make a comparison if the growth rate of employment³ kept pace with the growth rate of output (in real terms as measured by the gross value added at constant prices).

Employment in the organised manufacturing sector remained virtually stagnant in the 1980s. As can be seen from the relevant table (see table 4.2), employment in the organised manufacturing sector grew at the rate of only 0.5 percent per annum, in case of India. In case of Gujarat, it registered a negative growth rate of -0.4 percent per annum, while the situation was a bit better for the states of Rajasthan and Tamil Nadu with compound annual growth rate of employment in the 1980s being over 2 percent per annum for Rajasthan and roughly 2 percent (1.9 percent) for Tamil Nadu. In the period, 1990-91 to 1997-98, the growth rate of employment in the organised manufacturing sector picked up and increased to settle at 2.7 percent per annum. Tamil Nadu was the state to register the highest compound annual growth rate of employment (4 percent per annum) among the four states, while Gujarat too registered a growth of employment of 3.6 percent per annum, compared to the negative growth rate it had displayed in the previous decade. In the next decade, employed in the organised manufacturing sector grew again at a low rate of 0.4 percent per annum in case of all India. In the period 1996-97 to 2000-2001, the compound annual growth rate of employment displayed negative rates for the four states as well as for India.

³ Total employment is represented by the number of total persons engaged. It is to be noted that the ratio of workers to total persons engaged has remained more or less constant for all the states and India as a whole.

What explains the unprecedented employment contraction during this period? According to Nagaraj (2004), setting up of the National Renewal Fund as a component of structural adjustment programme in 1991 to finance Voluntary Retirement Scheme (VRS) in public sector enterprises seems to have provided the initial impetus. Taking cues from it, private sector retrenched and laid off workers, as enforcement of labour laws was relaxed, which can be considered "reform by stealth". Shedding of excess labour was perhaps one of the initiatives of industrial restructuring in the face of increased domestic and external competition under changed policy regime (Nagaraj, 2004, p.3388).

However, in the period 2004-05 to 2007-08, there has been a sudden spurt in the growth of employment in the organised manufacturing sector, not only for India as a whole, but for the four individual states as well, with Rajasthan displaying the highest growth of 11.3 percent per annum for the decade in question.

Thus, it is to be borne in mind that while the growth rate of value added has been on the increase, it hasn't been accompanied by a growth in employment to the same measure. This reflects the serious inadequacy of even high rates of growth of output to create employment expansion.

We consider the growth rates of employment and gross value added (at constant prices) for different two-digit industries, to ensure better inter-temporal comparability of data and look at a more disaggregated picture⁴. A comparison is then made between the periods 1980-81 to 1990-91 and 1990-91 to 2003-04 (See table 4.3, refer annexure). Even at the 2-digit level, the compound annual growth rate of real gross value added is greater than that of employment for all major industry groups in both the periods (Except for 1980-81 to 1990-91 for industry group 36, that is, Manufacture of furniture). Between 1980-81 and 1990-91, employment growth in organised manufacturing was positive but negligible. The deceleration in employment growth took place not only at the aggregate level but also for most two-digit industry

⁴ For data at the two-digit level, we have used the ASI time series data provided by the Economic and Political Weekly Research Foundation (EPWRF). They have prepared these time series data by using the ASI data of the Central Statistical Organisation (CSO) and the concordance table between NIC 1998, NIC 1987 and NIC 1970.

groups. Amongst the various industry groups, manufacture of coke, refined petroleum products and nuclear fuel (industry group 23) shows the greatest disparity. Manufacture of wearing apparel and dressing and dyeing of fur(industry group 18)exhibited a really high growth rate of gross value added (at constant 1993-94 prices) as compared to employment till 1990-91. But in the post-liberalisation phase, the growth in its real gross value added is comparable to that of employment. Overall, the compound annual growth rate of employment has been lagging behind the growth in real gross value added, in both the periods- that is, in the pre-reforms as well as post-reforms phase.

4.2 Distribution by Size of Employment

The single most important piece of regulation that has generated a lot of hue and cry by the proponents of the 'flexibility' school or 'distortionists' as they are labelled⁵, has been the Industrial Disputes Act(IDA) of 1947. Particular attention has been paid to its Chapter V-B, introduced by an amendment in 1976, which required firms employing 300 or more workers to obtain government permission for layoffs, retrenchments and closures. A further amendment in 1982 (which took effect in 1984) expanded its ambit by reducing the threshold to 100 workers. It is argued that since permission is difficult to obtain, employers are reluctant to hire workers whom they cannot easily get rid of. Also since many of the other labour laws are applicable on establishments employing large number of workers (say the Industrial Employment (Standing Orders) Act 1946, etc.), so it is often argued that there has been a shift in employment towards the lower employment size category.

Table 4.4 (refer annexure) shows the distribution of employment by employment size class of factories. It is seen that there was a marked change in the size structure in the 1980s and more so in the 1990s. The size classes 50 to 500 employment gained while the size classes 2000 to 4999 and 5000+ lost heavily. The size class that displayed the highest growth rate during the period from 1990-97 was the class 200-499. Even in the time period from 1980-90, after the 1982 amendment of the Industrial Disputes Act (Chapter V-B) had come to place, the compound annual growth rate of

⁵ See Jha and Goldar (2008).

employment of the class 500-999 was about 2.7 percent, which was comparable to the growth rate of the class 0-49, which grew at about 3 percent per annum during this period. However, in the period from 1997-98 to 2002-03, the size class 5000+ came back strongly to display a high compound annual growth rate of 7 percent per annum. It may be noted that the size class 5000+ is the most capital-intensive (least labour-intensive).

What we therefore, observe is that the above 100 size has increased much more than that of below 100, even though the IDA Chapter V-B has a threshold of 100 workers(1982 amendment). There has been a deceleration of employment in case of above 1000 size class of employment, but it is probable that this decline is less due to labour regulations than due to other factors like industrial restructuring of the large public sector units and traditional manufacturing industries, like cotton textiles, jute manufacturing, steel and engineering etc. (Anant et al, 2006).

4.3 Wage, Productivity and Profitability

One striking feature of the organised manufacturing sector has been a sharp and persistent increase in labour productivity as crudely approximated by the Net Value Added (NVA) at constant prices, generated per worker. It can be seen from table 4.5 in the annexure.

The said table can be represented graphically to have a better picture of what has happened to labour productivity over the years. It can be observed that labour productivity in the India factory sector, measured in terms of net value added per worker (at 1993-94 prices), has increased steadily over the years for India and the four states considered in the study. In case of Rajasthan though, a dip is discernible since 2006-07.

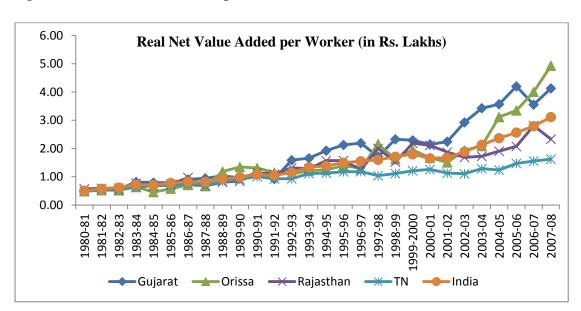
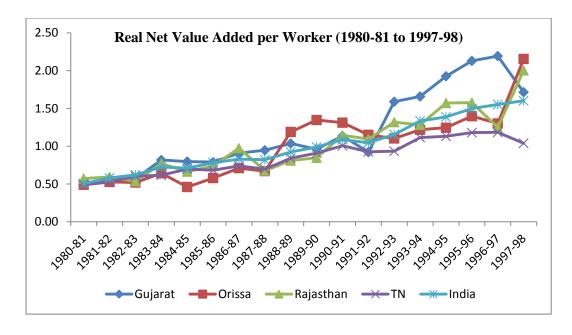


Figure 4.1 Real Net Value Added per Worker in Rs. Lakhs (1980-81 to 2007-08)

Source: Based on data presented in table 4.5 (Refer annexure)

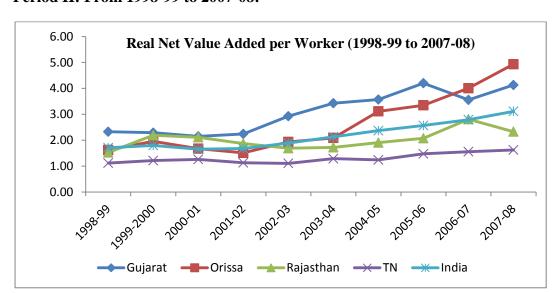
The above figure has been broken into two series as the data for the aggregate manufacturing sector as compiled from the Annual Survey of Industries (ASI) are not strictly comparable over time due to a definitional change.⁶ However, the trends remain the same even when we represent the figures from 1980-81 to 1997-98 and then 1998-99 to 2007-08 separately in the form of two line graphs.



⁶ From ASI 1998-99, electricity, water supply, gas storage etc. are excluded from the purview of the manufacturing sector. But the aggregate figures prior to 1998-99 includes figures for electricity, water supply, storage etc. as well.

Period I: From 1980-81 to 1997-98:

Net value added per worker was steadily increasing for all states till 1990-91. Post reforms it increased at a much higher pace only for Gujarat while for other states and even at all India level it increased by pretty much the same rate. Moreover for Tamil Nadu, the rate of growth of net value added per worker(at 1993-94 prices) has increased at a decreasing rate post reforms. Orissa and Rajasthan saw their (real) net value added per worker registering a dip, in 1996-97, after which it again shored up for both the states. Tamil Nadu has more or less remained below the all India average level in terms of (real) net value added per worker.



Period II: From 1998-99 to 2007-08:

In case of Orissa and Rajasthan, the (real) net value added per worker was marginally lower than what it was in the last year of the preceding series, that is, 1997-98. While it was Rs. 2.15 lakhs in 1997-98, it came down to Rs.1.62 lakhs in 1998-99 in case of Orissa. For Rajasthan, while it was Rs. 2 lakhs in 1997-98, it registered a slowdown in 1998-99, coming down to Rs.1.53 lakhs in 1998-99. From 1999 onwards real net value added per worker has been increasing for all the states and all India as well. The maximum increase has been observed in case of Orissa, with the increment being by almost 200 % over the 10 years. Gujarat, Rajasthan and Tamil Nadu have also witnessed about 77 percent, 52 percent and 46 percent increase respectively. Thus though the rate of increase in (real) net value added per worker slowed down during 1990-91 to 1997-98, it has again started increasing from 1999 onwards. In case of

India, the (real) net value added per worker increased by about 82 percent over the ten year period.

What about the wages, as a measure of welfare? Real wages per worker⁷ over the years has been represented in the form of a table (see table 4.6).

Contrary to the perception in the dominant mainstream policy circles, the average real wage of workers in the organised manufacturing sector has been more or less constant right through the 1990s. As table 4.6 shows, average real wages increased somewhat in the early years of the 1990s, until 1996-97, and then fell quite sharply. The subsequent recovery after 1998 has been muted, and real wages have stagnated since 2000.

It is held in common parlance, often prompted by the mainstream discourse, that it is the wages of the workers that play the culprit. It is widely advocated that wages need to be reduced as they are high enough and do not reflect the productivity of workers. Hence, if the labour market institutional rigidities are done away with, that is, with respect to labour laws, trade unions etc., wages would come down to be equal to the productivity of labour. Contrary to the above, what has been seen in the organised manufacturing sector (which comes under the purview of labour regulations and where some bargaining arrangements still exist), is that, over the past few decades average real wage of workers increasingly fell behind the labour productivity, roughly measured in terms of real net value added per worker. It is evident from table 4.7 (refer annexure), showing the growth rates of real average wages and real net value added per worker. As is observed from the table, the compound annual growth rates of real average wages have always been lagging behind the rates of growth of real net value added per worker, both in the pre-reforms and post-reforms period.

Even at the 2-digit level, with a comparable set of manufacturing industries, the same phenomenon is observed with some industry-level variations, across the industry groups (see table 4.8).

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⁷ Real wage per worker has been computed from ASI Factory Sector, CSO, using consumer price index for industrial workers with base: 1993-94=100) and deflating the nominal wage to workers over the time period considered. The annual average series of CPI for Industrial Workers is taken from RBI Handbook of Statistics on Indian Economy.

Growth rate of real wage per worker was positive for all major industry groups in the period from 1980-81 to 1990-91 except for industry group 36, that is, manufacture of furniture. Even then the growth rate of net value added per worker was always greater than real average wages. At the aggregate level, when real average wages grew by 2.7% per year, real net value added grew by 7.8% per worker during the same period. But post liberalisation, the growth rates of real wage per worker have been either negative or very low. It has declined across all major industry groups. In the same period, growth rate of net value added per worker has also declined as compared to the period from 1980-81 to 1990-91, but it has still remained positive for most of the major industries.

The levels of disparity can be seen quite clearly with respect to the following industry groups, namely, industries dealing with publishing, printing and reproduction of recorded media, manufacture of chemicals and chemical products and manufacture of medical, precision and optical instruments, watches and clocks (industry codes 22, 24, 33 respectively). The same is observed even at the aggregate level.

An interesting development is that, while real wages per worker – nominal wages deflated by consumer price index – has roughly stagnated in the 1990s, real emoluments for supervisors (or average salary in real terms)⁸ went up by 77 per cent between 1992 and 2001 (see table 4.9).

Average salary in real terms or real emoluments per supervisor/manager shows an increasing trend over the years for all the selected states and at the all India level as well. Comparing the periodic growth rate over the entire 28 year period, we find that the real average salary grew by 166 percent for the whole of India, while it grew at the rate of 191 percent for Gujarat, 181 percent for Orissa, 74 percent for Rajasthan and

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⁸ In the ASI all that one can find is 'number of workers', 'number of employees', 'total persons engaged' (including casual blue-, and white-collar employees not elsewhere classified), 'wages to workers', and 'total emoluments'. So for the average salary income, the study had to depend on 'total emoluments less wages less provident fund and other benefits' as ratio of 'total persons engaged less workers;. This leads to a slight underestimate of the 'average salary', since the sum of workers and salaried employees is often less than the 'total persons engaged'. To convert the average salary or real emolument per supervisor into real terms, it has been deflated using CPI for industrial workers with base 1993-94=100.

142 percent for Tamil Nadu. . For Gujarat, the average salary has gone up from Rs.24,000 in 1980-81 to Rs.69,000 in 2007-08. Similar increases can be seen for all India and the other states as well. Thus, salary has been increasing rapidly over the years without a comparable increase in wages. Therefore, the gap between workers and those in managerial positions has been widening. The percentage increase is the highest in case of Gujarat followed by Orissa, Tamil Nadu and Rajasthan being the last.

The widening gap between real wage per worker and the real average salary per supervisor can be discerned from the charts provided below, for India, and the four states separately.

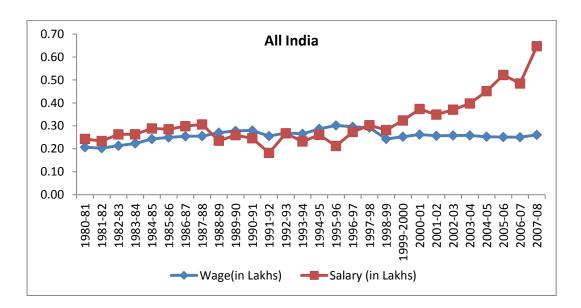


Figure 4.2 (i) Average wage and average salary (in real terms): All India

Source: Computed from ASI data summary results, CSO, various issues

0.80 **Gujarat** 0.70 0.60 0.50 0.40 0.30 0.20 0.10 0.00 1995-96 1998-99 1989-90 1992-93 1994-95 1996-97 1991-92 1993-94 1990-91 999-2000 Wage(in Lakhs) -Salary (in Lakhs)

Figure 4.2 (ii) Average wage and average salary (in real terms): Gujarat

Source: Computed from ASI data summary results, CSO, various issues

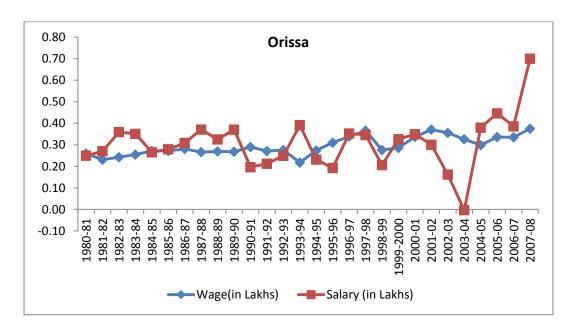


Figure 4.2 (iii) Average wage and average salary (in real terms): Orissa

Source: Computed from ASI data summary results, CSO, various issues

0.60
0.50
0.40
0.30
0.20
0.10
0.00

Wage(in Lakhs)

Salary (in Lakhs)

Figure 4.2 (iv) Average wage and average salary (in real terms): Rajasthan

Source: Computed from ASI data summary results, CSO, various issues

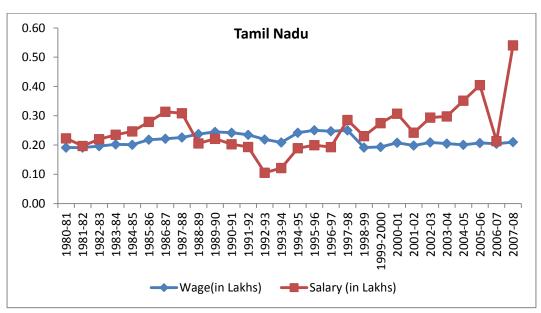


Figure 4.2 (v) Average wage and average salary (in real terms): Tamil Nadu

Source: Computed from ASI data summary results, CSO, various issues

Thus, the occupational divisions between blue-collar and white-collar workers are deepening in India with return to managers and supervisors that is, the non-wage component, growing at a higher rate than the earnings of workers in general (Banerjee, 2005). Education, skill and experience probably explain the divergence in earnings of workers and supervisors, reflecting the industrial sector's growing

technological complexity. Abolition of ceiling on managerial pay in 1991 could also have added to the widening gap (Nagaraj, 2004).

The corporate strategy of 'downsizing' has become a watchword of the 1990s. It is often advocated by the apex organisations of Indian corporate manufacturing that corporations are becoming lean, but that a corresponding downsizing of workers has not been possible because of the existing labour laws. It is true that many managers and supervisors have been laid off in recent years, but it is also true(as revealed from the figures above) that their salaries have increased by leaps and bounds. Where does the money come from? It is unlikely to come from reduced distributed profits. The corporations need raise money on equity markets, so dividends cannot be low. Neither does the money come from deferred interest obligations, because that would reduce the creditworthiness of the firms to the lenders. One of the most obvious targets is workers' compensation (Banerjee, 2005,pp.77-78). The declining share of wages as well as a slow growth in real wages of workers would suggest a declining power of workers and their organisations. The support for economic liberalisation and globalisation from employers and higher paid supervisory and managerial staff and the opposition to it from the workers and their organisations seem to be grounded in the distribution of benefits to these groups.

Let us look at the wage bill from the employers' perspective by studying the labour cost per unit of output produced, or the unit labour cost. Unit labour costs (ULCs) represent a direct link between productivity and the cost of labour used in generating output. A rise in an economy's unit labour costs represents an increased reward for labour's contribution to output and vice versa. However, a rise in labour costs higher than the rise in labour productivity may be a threat to an economy's cost

⁹ According to the OECD, Unit labour costs (ULC) measure the average cost of labour per unit of output and are calculated as the ratio of total labour costs to real output. In broad terms, unit labour costs show how much output an economy receives relative to wages, or labour cost per unit of output. ULCs can be calculated as the ratio of labour compensation to real GDP.

Unit labour costs (ULCs) can be calculated either in nominal terms or real terms. In case of real unit labour costs, the nominal labour costs are adjusted for price changes in the given period by using an appropriate deflator, that is, compensations per employee are deflated.

competitiveness, if other costs are not adjusted in compensation. In the case where the real unit labour costs are declining, it means that real labour productivity (measures in terms of value of output or value added) is growing faster than real labour costs per the labour force.

In this study, total emoluments per person engaged has been taken as the measure of average labour cost and net value added per person engaged has been used to measure average labour productivity. The table presented in annexure, that is, table 4.10, (broken down into two series) represents unit labour costs- calculated as total emoluments per person engaged(in real terms with the nominal values being deflated by WPI for manufactured products with base 1993-94=100, as they represent costs incurred by producers) as a proportion of real net value added per person engaged (net value added deflated by the WPI for manufactured products at 1993-94 prices).

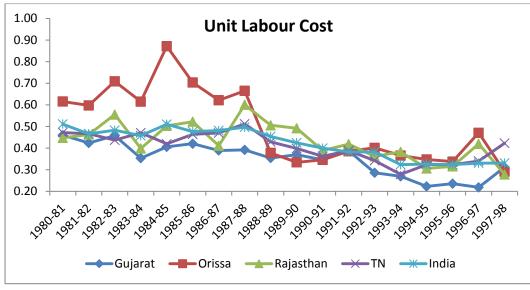


Figure 4.3 (i) Unit Labour Cost in real terms (1980-81 to 1997-98)

Source: Based on data presented in table 4.10 (i), refer annexure

It can be seen from the above chart that, total emoluments per person engaged by net value added per person engaged (both at constant prices) i.e. unit labour cost(in real terms) has been decreasing consistently over the last 18 years for India as well as the four selected states, namely, Gujarat, Orissa, Tamil Nadu and Rajasthan. Gujarat has the lowest percentage shares of labour costs per unit of output, while Rajasthan and Tamil Nadu have unit labour costs comparable to that at the all India level. During the early eighties, Orissa had higher unit labour costs than the all India average and

among the rest of the states considered. But since 1988-89, Orissa too has witnessed a drastic reduction in its unit labour costs.

Unit Labour Cost

0.50

0.40

0.30

0.20

0.10

0.00

Gujarat

Orissa

Rajasthan

TN

MIndia

Figure 4.3 (ii) Unit Labour Cost in real terms (1998-99 to 2007-08)

Source: Based on data presented in table 4.10 (ii), refer annexure

Unit labour costs have been declining over the decade. In case of Gujarat, the unit labour costs are at a lower level than that of all India, as has also been the case for Rajasthan, though unit labour costs for Rajasthan are at a higher level than that of Gujarat. On the other hand, in case of Tamil Nadu and Orissa, unit labour costs involved are at a higher level when compared to all India, with Orissa having the higher share of labour costs amongst the group. However, the fact still remains that for the four states as well as for India, there has been a consistent decline in (real) unit labour costs.

Growth in real average wage (wages per worker deflated by CPI-IW) has been lagging behind growth in labour productivity (defined as NVA per worker deflated by WPI-MP), which may be attributed to the weakening of the bargaining strength of labour. The decline of the public sector may have been a contributing factor since the wage setting in public sector plays an important on the wage setting in the private sector. What has been witnessed has been greater productivity per worker, the gains of which have accrued mainly to employers, since the real wages have remained stagnant. In other words, there has been an incredible decline in relative unit labour

costs, and thereby an enhancement of India's competitiveness. However, with increased competition in product market, some of these gains are likely to have been passed on to consumers in terms of lower prices, or improved quality. It is to be noted that a decline in real unit labour costs, also reflects a relative shift in income distribution, from labour to capital and other factors of production.

But it is to be borne in mind that, unit labour costs should not be interpreted as a comprehensive measure of competitiveness, but as a reflection of cost competitiveness. Unit labour cost measures deal exclusively with the cost of labour, which though important, should also be considered in relation to changes in the cost of capital, especially in advanced economies. (Key Indicators of the Labour Market (KILM): 2001-2002, International Labour Organisation, Geneva, 2002, page 622).

4.4 Changes in Capital Intensity

Given the indisputable fact that there has been a consistent increase in labour productivity over the years, we need to try and investigate the factors behind such an increase. When capital is substituted for labour (that is, increasing capital intensity or capital deepening), it leads to an increase in labour productivity. In a paper by Goldar and Banga(2004), in which they tried to investigate and analyse the factors influencing the wage setting process in organised manufacturing sector in India; they considered inter-state and inter-industry variations, and found that higher labour productivity is generally associated with higher capital intensity.

Capital intensity is the term for the amount of fixed or real capital present in relation to other factors of production, especially labour. So, it is necessary to look at the trends of capital intensity over the years, measured as fixed capital per worker or the capital-labour ratio.¹⁰

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¹⁰ Fixed capital as defined in the Annual Survey of Industries, covers all type of assets, new or used or own constructed, deployed for productions, transportation, living or recreational facilities, hospitals, schools, etc. for factory personnel. It would include land, building, plant and machinery, transport equipment etc. It includes the fixed assets of the head office allocable to the factory and also the full value of assets taken on hire-purchase basis (Whether fully paid or not) excluding interest element. It excludes intangible assets and assets solely used for post-manufacturing activities such as, sale, storage, distribution, etc.

The figures for fixed capital as given for the manufacturing sector in the ASI are given at current prices. Therefore, the figures have been deflated using WPI for machinery and machine tools at base 1993-94=100, to derive the figures for fixed capital at constant prices.

Fixed Capital per Worker - In Rs.Lakhs

12.00

10.00

8.00

4.00

2.00

0.00

Gujarat

Orissa

Rajasthan

TN

India

Figure 4.4 (i) Fixed Capital per Worker at 1993-94 prices (1980-81 to 1997-98)

Source: Based on data presented in table 4.11 (i), refer annexure

Fixed capital per worker measures how much capital is being used per worker. Greater the value the more capital intensive it is. Fixed capital per worker has significantly increased for India as a whole, particularly for Orissa and Gujarat, and also for Rajasthan and Tamil Nadu, thereby showing that the industrial sector has moved towards more capital intensive techniques of production. In case of Orissa and Gujarat the increase has been more than 5 times in the entire time span while it has grown only twice for Rajasthan which is less than both Tamil Nadu and all India figures of 3.58 and 3.74 respectively. Thus, at an overall India level also there has been capitalization in production but it is high in case of Orissa and Gujarat while on the other hand, Tamil Nadu has persistently remained below the all India levels of fixed capital per worker¹¹ (see table 4.11(i) in the annexure).

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 $^{^{11}}$ The values of fixed capital have been expressed in terms of 1993-94 prices.

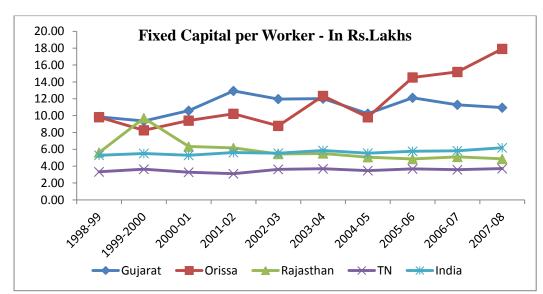


Figure 4.4 (ii) Fixed Capital per Worker at 1993-94 prices (1998-99 to 2007-08)

Source: Based on data presented in table 4.11 (i), refer annexure

In this period, fixed capital per worker has remained pretty much constant for all the states except Orissa. For Orissa it has increased by almost 83% over the 10 years. Both Gujarat and Orissa have higher levels of fixed capital per worker than the all India level. And as was the case in the previous period, for Tamil Nadu, the levels of fixed capital per worker have maintained a fairly constant trend over this period. But overall, there has been a trend of increasing capital intensity over the years, as is evident from the following chart, where we bring together both the time periods in order to have an indicative picture.

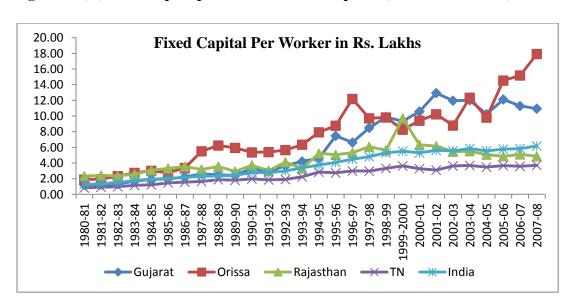


Figure 4.4 (iii) Fixed Capital per Worker at 1993-94 prices (1980-81 to 2007-08)

Higher labour productivity is associated with higher capital intensity which has been reflected by a continuous increase of fixed capital per worker. Now, the question that arises is, has the cost of capital relative to labour become cheaper such that the employers found it more attractive to continuously increase capital intensity of production for maximising output growth?

4.5 Has Capital Become Relatively Cheaper? Comparing the Cost of Capital visà-vis Labour

In the above context, it is important to further examine the thesis of relative cheapness of capital vis-à-vis labour. For this, the wage-rental ratio has been considered, where wages goes to workers (labour) and rent accrues to fixed capital.¹²

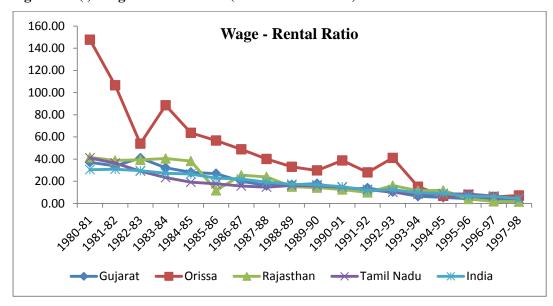


Figure 4.5 (i) Wage – Rental Ratio (1980-81 to 1997-98)

Source: Based on data presented in table 4.12 (i), refer annexure

¹² Wage-rental ratio is in real terms, with wages being deflated by CPI for Industrial Workers (Base 1993-94=100), and rent being deflated by WPI for machinery and machine tools with base 1993-94=100.

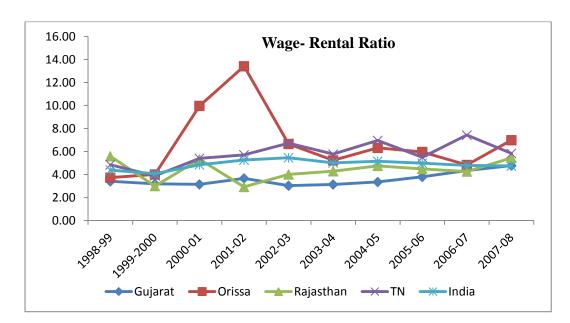


Figure 4.5 (ii) Wage – Rental Ratio (1998-99 to 2007-08)

Source: Based on data presented in table 4.12 (ii), refer annexure

Over the last quarter century, the ratio of wages to cost of capital (wage-rental ratio) has steadily declined except for a few years in between, suggesting a relative cheapening of labour vis-à-vis capital(Nagaraj,2007). The ratio of wages to rent paid shows that it is the cost of labour that has cheapened over time vis-à-vis cost of capital. The puzzle here then is to explain the continuous increase in capital intensity that has been witnessed in organised manufacturing sector in India.

Therefore, it would appear that there is a strong case to move away from cost of production and problems in labour hiring explanations (as propounded by the flexibility school) to those which are related to the changing nature and composition of demand for manufactured products both in the domestic and foreign markets. In the Indian case, the shift in demand takes place in favour of those goods demanded by the newly rich classes, which has been made easy by a rather aggressive pursuit by banks expanding personal finance loans. This satisfied the demand for products that are similar to "foreign goods" that were not earlier satisfied. Since the enterprises also have to compete in an open economy context, they have to produce goods, which would be similar to those that could now be imported. If they are export-oriented, then they have to produce goods that are demanded in the world market, produced with

modern technology, packaging, branding and so on. In a nutshell, what we are witnessing is a drastic change in the quality of products characterised by high capital intensity, branding, import intensity and so on that results in slowing down both the absorption of direct labour as well as backward and forward linkages within the domestic economy (Kannan and Raveendran, 2009,p.90). In a recent paper Chandrasekhar (2008) pointed out that there were additional incentives encouraging capital intensity offered by central and state governments in the form of cash subsidy based on level of investment, interest subsidies and a range of other incentives such as exemption from payment of electricity in several cases.

From the above arguments, one can conclude that the relative cost of labour did not seem to matter in employment decisions, as the wage-rental ratio declined secularly over the years.

In this context, an interesting exposition is provided by Braverman (1974)¹³. As Braverman argued, with advancement in the capitalist production process, past or dead labour (following the Marxian terminology), embodied in the instruments of production, becomes the property of the capitalist, and assumes the form of capital. The ideal towards which capitalism strives is the domination of dead labour over living labour¹⁴. This is brought about, by the relentless drive to enlarge and perfect machinery on the one hand and to diminish the worker on the other (Braverman, 1998,p.92).

¹³ The widely acclaimed work by Harry Braverman, 'Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century', was first published in 1974. There was a subsequent edition of the same in 1998. The arguments expressed in this study are based as per the ones given in the 1998 edition of the book.

¹⁴ He goes on to elaborate, "In the beginning this ideal is seldom realized, but as capitalism develops machinery and makes use of its every suitable technical peculiarity for its own ends, it brings into being this system of the domination of living by dead labor not just as an allegorical expression, not just as the domination of wealth over poverty, of employer over employed, or of capital over labor in the sense of financial or power relationships, but as a *physical fact*", (Braverman,1998,p.92).

4.6 Changes in the Structure of Employment: Blue Collar v/s White Collar

As discussed in Banerjee (2005), as a first approximation, technological changes (possibly associated with the computer revolution) are likely to raise the relative demand for better educated and flexible workers, and reduce the demand for physical labour. Following the Hicks- Marshall hypothesis, as a particular category of labour becomes more expensive- because the workers indulge in gross violation of discipline, demand higher wages, etc.- the employer has an incentive to substitute labour by alternative means of production. This type of capital- labour substitution is easier at places where the jobs require little skill and are highly repetitive. The technological change is reflected in declining relative proportion of total production workers to the total persons employed 15.

Hence, in this context, it would be relevant to see if the above mentioned technological changes have occurred in the Indian context and in case of the four states- Gujarat, Orissa, Tamil Nadu and Rajasthan. ¹⁶

Over both the time periods, the ratio of workers to total persons engaged, has remained fairly stable (see table 4.13, refer annexure). Therefore, the technological change as described above cannot be said to have occurred in case of India as a whole, and in case of the states that have been considered.

It is argued that, the technological change resulting out of wage push becomes apparent as the relative proportion of production workers to the total goes down; in the case of labour saving technology, the proportion would fall even more. However, in the Indian organised manufacturing sector in general, the ratio of workers to total persons employed remained almost constant at 76 percent. Thus, it is difficult to

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¹⁵ See Banerjee ,2005,p.59.

¹⁶ As in the case of other variables and ratios, the data has been divided into two time periods (the first period being from 1980-81 to 1997-98 and the next ranging from 1998-99 to 2007-08), to accommodate the discrepancy in the coverage of Annual Survey of Industries in the view of electricity, water supply, storage and other departmental undertakings, being excluded from the purview of the manufacturing sector, since 1998-99, which affects the aggregate figures.

directly observe the technological phenomenon that plays such a central role in the explanation of declining wage share in industrial income (Gordon 1996: Ch. 7).¹⁷

4.7 Wage and Profit Distribution

The distribution between wages and profits is not merely an issue of cost composition. It basically reflects the distribution of value added or output between social classes (Roy,2007). However, the benefits of increases in labour productivity have accrued largely to those deriving rent, interest and profit incomes, rather than workers. The share of wages has fallen sharply indicating a fall in product wage (i e, share of wages in the net value added) which is the relevant element of cost of labour in production.

This is clear from table 4.14, which shows that the share of wages in net value added, which was stable through much of the 1980s, has been declining almost consistently since the late 1980s till 1996-97 and then after a period of stability fell sharply to less than half of its level in the mid 1990s. The relevant table can be represented graphically, by breaking down the data into two series to ensure better inter temporal comparability of the data, with the period from 1980-81 to 1997-98, constituting the first time frame, and the period from 1998-99 to 2007-08 being the next.

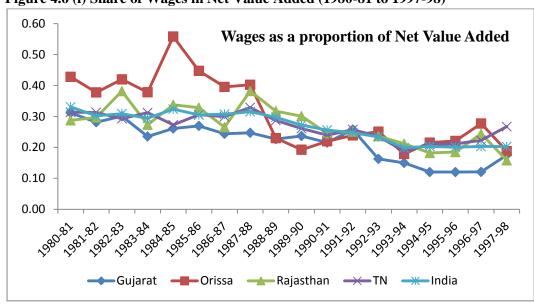


Figure 4.6 (i) Share of Wages in Net Value Added (1980-81 to 1997-98)

Source: Based on data presented in table 4.14, refer annexure

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¹⁷ Discussed in Banerjee, Debdas, 2005,p.59.

The ratio of wages to net value added shows a declining trend for all the states over this 18 year period. The maximum decrease is for Orissa followed by Rajasthan, Gujarat and Tamil Nadu. Thus, it is completely evident that the share of wages as a proportion of net value added has significantly decreased. Thus, the size of the pie might have increased but wages did not increase in the same proportion and it is the workers who saw their claims being squeezed over the years. In 1980-81, wage share was as high as 43 percent in case of Orissa, and about 31 percent in case of Gujarat and Tamil Nadu, and about 29 percent in case of Rajasthan. At the end of the 1990s, that is, during 1997-98, it declined to about 18 percent in case of Gujarat, 19 percent in case of Orissa, about 16 percent in case of Rajasthan and around 27 percent for Tamil Nadu. Thus, the decline was most severe in case of Orissa. Even at the all India level, there a decline was observed in the share of wages in net value added. From approximately 37 percent in 1980-81, wages as a proportion of net value added went down to 20 percent in 1997-98, registering a decline of about 46 percent over this eighteen year period.

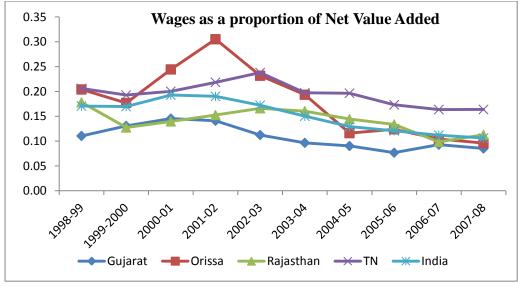


Figure 4.6 (ii) Share of Wages in Net Value Added (1998-99 to 2007-08)

Source: Based on data presented in table 4.14, refer annexure

Wages as a proportion of net value added shows more or less a declining trend in case of all four states over this 10 year period as well. The maximum decrease is observed for Orissa followed by Rajasthan, Tamil Nadu and Gujarat. At the aggregate all India

level, there was a compression of wage share with wages as a proportion of net value added declining by about 23 percent.

It would be relevant to have a look at the share of profits in net value added to understand what has happened to the relative bargaining power of the workers vis-à-vis the employers.

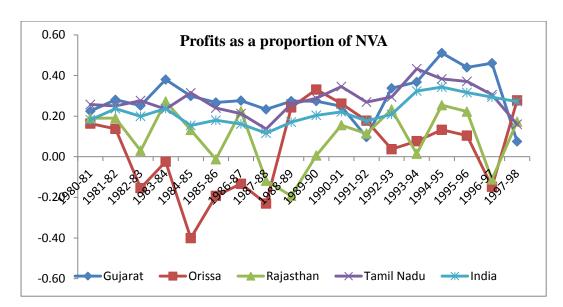


Figure 4.7 (i) Share of Profits in Net Value Added (1980-81 to 2007-08)

Source: Based on data presented in table 4.15(i), refer annexure

As is evident from the above figure, at the all India level, profits by net value added, that is, the share of profits in value added, shows a steady increase throughout the 18 year period but it is extremely topsy- turvy in the case of all individual states. Over the years, in case of Gujarat and Tamil Nadu, the profit share in output has been at a higher level than in case of all India, while in case of Rajasthan and Orissa; the profit share in value added has displayed a wildly fluctuating trend, turning negative in certain years. In case of Orissa, in the eighties, some kind of distress might have prevailed in the manufacturing sector as is evident from the negative values of profit as a proportion of net value added. However, after 1996-97, the share of profits in net value added, registered a sudden increase. This can also be seen from table 4.15(i), as provided in the annexure.

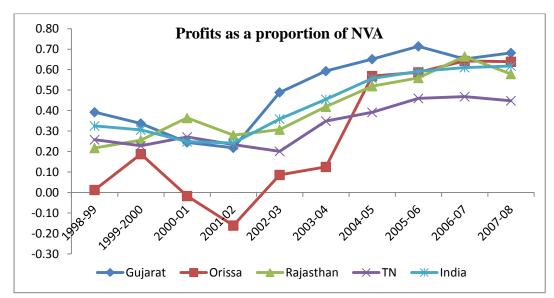


Figure 4.7 (ii) Share of Profits in Net Value Added (1998-99 to 2007-08)

Source: Based on data presented in table 4.15(i), refer annexure

In the second period of analysis, the ratio of profits to net value added seen an increase at the all India level as well as the states considered, except Orissa. In the case of Orissa, in the initial part the share of profits in net value added exhibits a sharp decline, but then rises at an extremely rapid pace. Thus, after 1998, the profits have been pocketed at a much higher rate than before.

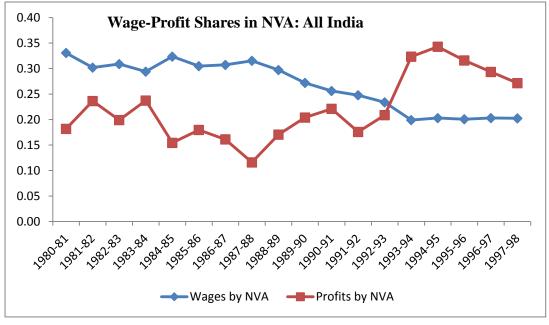
The wage squeeze contributes to an explanation of the explosion in corporate profits in the very recent period. There could not be stronger confirmation of the dramatically reduced bargaining power of workers in organised industry over the past decade. The rise in the share of profits in value added and a fall in the share of wages in value added, have ensured that the benefits of the rise in labour productivity have largely gone to the surplus earners in the sector, who have been the main beneficiaries in the organised manufacturing sectors of the policies of liberalisation in general and trade liberalisation in particular (Chandrasekhar and Ghosh, 2007).

Considering the shares of wages and profits in net value added for major industry groups at the two-digit level, it can be seen that for most industry groups, while the wage share has seen a decline over the years considered, profit share in net value added has increased over the time periods considered (see table 4.16 in the annexure).

At the two-digit level, industries involved in manufacture of tobacco products (industry group 16), manufacture of coke, petroleum products and nuclear fuel (industry group 23) and manufacture of office, accounting and computing machinery (group 30), have witnessed marked increase in their share of profits in net value added over the periods considered, with the profit shares being more than 60 percent for these manufacturing groups. However, an exception is industry group 17, that is, manufacturing of textiles, which has seen a substantial fall in its share of profit, with profits as a proportion of net value added being only 0.7 percent in 2003-04. Although, in case of the textile industry, share of wages in net value added has also exhibited a decline, the wage shares remained at a higher level than the profit shares over the period considered.

It would perhaps be pertinent to plot profit and wage shares in net value added together, in case of India as a whole, as well as the four selected states, to make a comparative analysis of the pattern of distribution of profits and wages in net value added, over the years.

Figure 4.8(i) Share of wages and profits in net value added (1980-81 to 1997-98): All India



Source: Computed from ASI data summary results, CSO, various issues

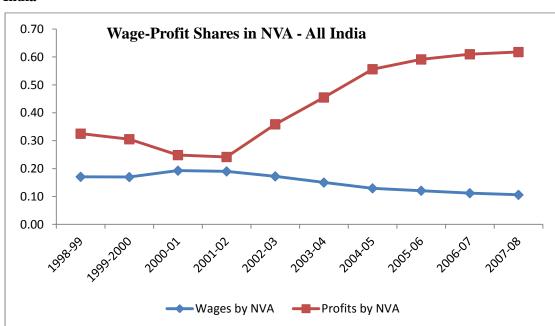


Figure 4.8(ii) Share of wages and profits in net value added (1998-99 to 2007-08): All India

Source: Computed from ASI data summary results, CSO, various issues

There have visibly been two phases in the movement of wage-profit gaps. In the first phase, the wage share and profit share showed a converging trend, with declining wage share and rising profit share. A second phase then appeared in 1992-93, whereby divergence between wage and profit began to appear and widen, with a secular decline in the wage share. In brief, the share of profit on each unit of output(as measured by net value added) has increased significantly over the last two decades.

However, when the Government of India appointed the second National Labour Commission, this aspect of capital-labour relations, especially the deteriorating industrial income distribution, was thoroughly ignored. Instead two tasks were set before the Commission. For the organised sector, the Commission was to 'suggest rationalisation of existing laws relating to labour in the organised sector' and for the unorganised sector it was to suggest an umbrella legislation for ensuring a minimum level of protection to the workers' (GoI 2002, Vol. 1: 1)¹⁸.

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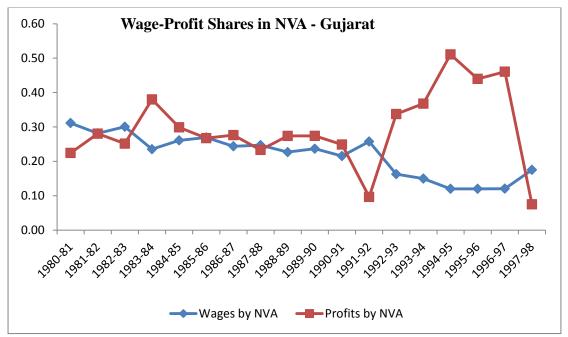
¹⁸ Cited in Banerjee, 2005,p.57-58.

4.8 Wage-Profit Distribution in Selected Indian States:

The state-wise trend of factor distribution, that is, distribution of net value addition between wages and profits, needs to be discussed.

Figure 4.9(i) Share of wages and profits in net value added (1980-81 to 1997-98):

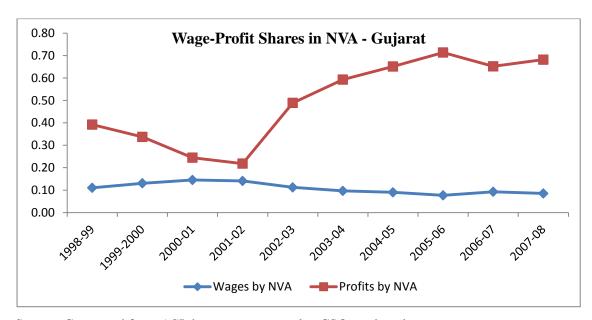
Gujarat



Source: Computed from ASI data summary results, CSO, various issues

Figure 4.9(ii) Share of wages and profits in net value added (1998-99 to 2007-08):

Gujarat



Source: Computed from ASI data summary results, CSO, various issues

In case of Gujarat, profit share was greater than the wage share in the late 1980s and early 1990s. Since 2001-02, the trend of factor shares in Net Value Added shows a wide divergence, with profit share exceeding the wage share at a much faster rate.

0.60 - 0.40 - 0.20 - 0.20 - 0.40 - 0.40 - 0.40 - 0.20 - 0.60 - 0.40 - 0.60 - 0.40 - 0.60 - 0.40 - 0.60 - 0.40 - 0.60 - 0.40 - 0.60 - 0.40 - 0.60 - 0.40 - 0.60 - 0.

Figure 4.10(i) Share of wages and profits in net value added (1980-81 to 1997-98): Orissa

Source: Computed from ASI data summary results, CSO, various issues

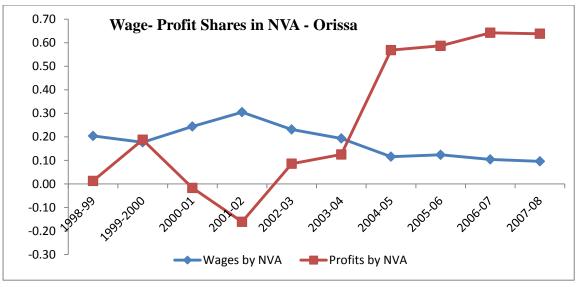


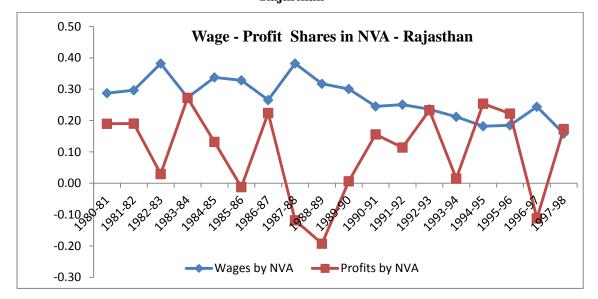
Figure 4.10(ii) Share of wages and profits in net value added (1998-99 to 2007-08):
Orissa

Source: Same as above

In case of Orissa, till the late 1980s, wage share remained at a higher level than the profit share. In 1988-89, the share of profits and wages converged briefly and in the early part of the 1990s, the wage share remained above the profit share. Since 2003-04, the converging trend of the factor shares in net value added has given way to a divergence, with profit share remaining much higher that the wage share in the subsequent years.

Figure 4.11(i) Share of wages and profits in net value added (1980-81 to 1997-98):

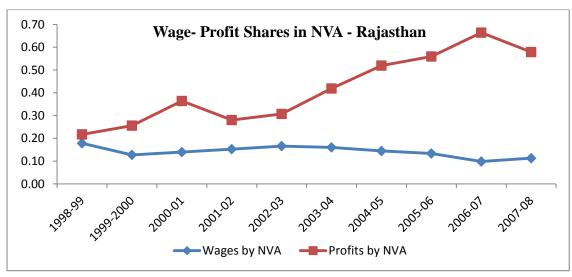
Rajasthan



Source: Computed from ASI data summary results, CSO, various issues

Figure 4.11(ii) Share of wages and profits in net value added (1998-99 to 2007-08):

Rajasthan



Source: Same as above

In case of Rajasthan, the distribution of profits has all along been fluctuating, but wage share has experienced a secular decline. Since the late nineties, wage share and profit share have displayed a diverging trend, with the share of profits in Net Value Added remaining at a higher level than the share of wages in Net Value Added.

Figure 4.12(i) Share of wages and profits in net value added (1980-81 to 1997-98):

Tamil Nadu

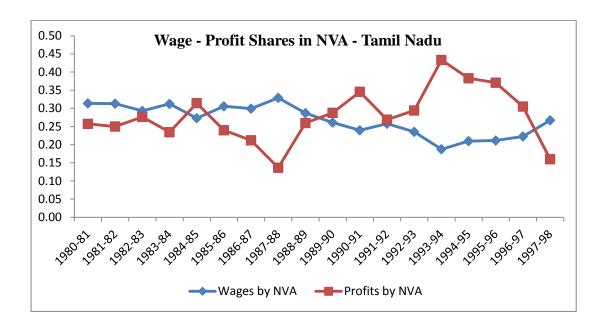
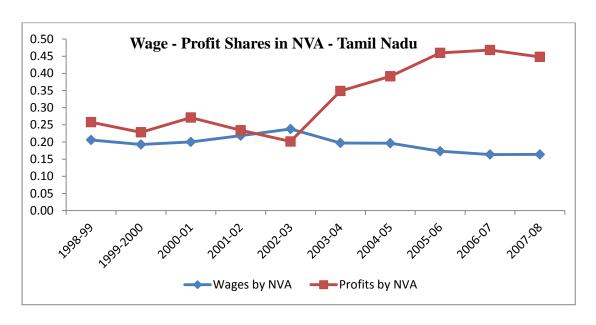


Figure 4.12(ii) Share of wages and profits in net value added (1998-99 to 2007-08): Tamil Nadu



In case of Tamil Nadu, like in the case of Gujarat, profit share was greater than the wage share in the late 1980s and early 1990s. Since 2002-03, the converging trend of factor shares in Net Value Added has given way to a diverging trend, with profit share exceeding the wage share in Net Value Added.

The state-wise trend of factor distribution as can be seen from the above figures, might have to a large extent, been an outcome of the decline of the public sector. Not only were public sector wages and benefits generally higher compared to those in private manufacturing, but the former was a good influence on local industrial labour markets. For getting skilled workers, the private sector had to compete with the public sector enterprises. On many occasions, private sector wage settlements took place only after wage agreements were finalised in the private sector. Second, as the restructuring programme introduced in the wake of economic reforms, reduced the role of the government, the wage settlement institutions gradually became ineffective to varying degrees across states, depending on the ideologies of the political parties in power (Banerjee, 2005, p.82).

4.8 Summing Up

Analysis of the economic status of labour in the organised manufacturing industries of India as discussed in this chapter reflects a rather dismal scenario. The growing wage-profit disparities and wage inequalities are not adequately explained by the demand and supply side factors. Rather the institutions epitomising the power relations between capital and labour have stronger explanatory capacity. In other words, the primary and overriding determinant of the wage rate is the shifting balance of power between capital and labour. The distribution of surplus generated in a production system between workers and capitalists is a classical problem because of its implications on the long-term development of capitalism in general and the welfare of the workers in particular (Kannan and Raveendran, 2009).

As far as the performance of the organised manufacturing sector in India is concerned, it is seen that growth in output has been achieved by increasing labour productivity and a corresponding increase in capital intensity. It has also been observed that a higher proportion of the incremental surplus has gone to capital

resulting in a declining share of wages to all employees in general (except perhaps a thin layer of managerial staff) and workers in particular. There are two aspects of wages here. When expressed in terms of product prices (i e, share of wages in value added) it represents the cost to the employers and a declining share means a declining cost of labour. When expressed in purchasing power terms, or what is usually referred to as real wages, it represents the income to the workers. The declining share of wages as well as a slow growth in real wages of workers would suggest a declining power of workers and their organisations. The workers as a class lost in terms of both additional employment as well as real wages (Kannan and Raveendran, 2009).

A sharp rise in the profit share in net value-added has been witnessed and this skewed distribution in favour of profit incomes amply reflects the freedom already enjoyed by the capitalists in our country in squeezing the claims of the working class (Roy, 2007). The capitalists are pushing the issue of labour market reforms basically to make the workers disposable and to try and legitimise the normal practice of flouting of existing laws so as to reap both absolute and relative surplus value. Capital is certainly interested in unhindered control of labour that would give them much flexibility and discretion in the manner and pace of accumulation.

Concluding Remarks

As discussed in the earlier chapters of this study, the need for greater flexibility in the labour market has been widely debated in contemporary policy discourses in India. The theorists and analysts belonging to the 'distortionist' persuasion blame labour laws as the prime source of rigidity plaguing the industrial sector and believe that such 'rigidities' in the labour market lead to a host of inefficiencies in the labour market reflected in terms of poor economic outcomes, such as sluggish growth performance, low employment expansion, etc. However, as the previous chapters brought out such claims as meted out by the proponents of 'flexibility' school, rest on extremely weak foundations both theoretically and empirically. It emerges from a review of some of the major empirical constructs analysing the linkages between labour regulation and different aspects of economic performance, that many of these empirical studies are fraught with several statistical and methodological flaws.

The attempt to empirically examine the whole labour market rigidity/flexibility debate in the context of the Indian organised manufacturing sector as a whole and specifically, considering a few select Indian states, brought out some critical findings. Among the long-term trends of several economic variables considered within the organised industrial sector, it would be relevant to provide a brief resume of some of the findings that are of significance. The growth rates of employment as well as of real wages per worker have either declined or have remained stagnant, except for a sudden spurt in the rate of growth of employment in the last five years or so. In contrast, the growth rate of real output, as measured by real gross value added, has seen consistent increases over the years, reflecting jobless growth.

Labour productivity in the India factory sector, roughly measured in terms of net value added (real) per worker, has increased by about three times, during the last two decades, probably brought about by a rise in capital intensity measured in terms of fixed capital per worker. This spurt in net value added(at constant prices) per worker has not been accompanied by a concomitant rise in real wage per worker, thereby the wage-productivity gap has widened much faster since the 1990s. Remuneration to non-wage (white-collared) employees has been increasing much faster than to wage earners (blue-collared), displaying rising disparity within the ranks of the workforce.

There has been an incredible decline in relative unit labour costs, disparaging the whole 'high' labour cost imposed due to rigidities kind of argument, propounded by the advocates of labour market flexibility. Over the last quarter century, the ratio of wages to cost of capital (wage-rental ratio) has steadily declined, suggesting a relative cheapening of labour vis-à-vis capital. Wage share has been seen to be experiencing a secular decline, while the profit share in net value added, has been rising steadily, reflecting a relative shift in income distribution in the favour of profit-earners or the capitalists, vis-à-vis the workers.

Positive trends in the industrial relation atmosphere have been observed in recent years, with a secular decline in both the number of disputes as well as the person-days lost due to disputes. It has also been seen, that lockouts have been becoming more and more frequent during the 1990s, and eating up more and more number of mandays, as opposed to strikes. This is tantamount to an increase in the relative power of employers vis-à-vis workers, as lockouts act as a proxy for employers' offensive. These developments clearly portray a system characterised by iniquitous power distribution in the states as well as the nation as a whole. It is natural to expect increase in employer militancy when the state withdraws support to labour, and this is what has been the case in the Indian industrial sector as well. Problem of nonenforcement of labour laws has received tacit acceptance from the state and central governments alike, with introduction of schemes like self-certification, etc. The inspection machinery has been allowed to become dysfunctional in many states. Incidence of contract workers in the workforce has been rising tremendously. This rising recourse to contract labour has allowed industries to escape whatever little application and enforcement of laws existed, indicating de facto deregulation on the ground.

These trends have been observed at the national level, with respect to the Indian organised manufacturing sector as a whole. The same trends are also seen to hold broadly, at the regional level in case of the four select states, namely, Gujarat, Orissa, Rajasthan and Tamil Nadu, with some inter-state variations now and then. All these trends together indicate that even when there is a substantial growth in manufacturing output, the workers are not benefiting. The capitalist class is reaping the larger benefits of the output growth. This is being done through the combination of adopting

capital-intensive technologies and greater labour market flexibility, incited through a spate of implicit measures, even though the labour laws have more or less remained unchanged on paper. Therefore, more labour market flexibility seems to have no influence on output, employment growth, apart from making a redistribution of income in favour of the capitalist class.

In the context of the Indian factory sector, the much hyped 'rigidity' concerns about the labour market do not seem to be supported by adequate empirical evidence. There is little evidence that would suggest that the labour market in India is rigid and the claims of labour are eating up capitalists' profits or shoring up prices that adversely affect competitiveness. Even when states at different levels of industrial development are considered, Gujarat and Tamil Nadu being among the better performers, and Orissa and Rajasthan languishing at the bottom end of the scale; still all of them have been seen to display similar trends at a broad generalised level, when it comes to the various aspects of the labour market and it surely, does not bode well for the world of work. So there seems to be little or no economic rationale for arguing in favour of labour flexibility across the board, and blaming "rigid" labour regulations for differences in economic outcomes. It is more likely that incentives for investments, profitability levels, etc, are determined by a complex nexus of a whole range of macroeconomic variables; than by the rigidity/flexibility of labour laws of a region. There are more important issues that need to be looked at, such as the state of physical and social infrastructure, market linkages, access to credit, development of human resources, etc.; in order to improve economic outcome all around, both at the national level, as well as the regional level.

It may be noted that the discussion on rigidity or inflexibility is related to the labour markets that cater to the organised sector of the economy. Organised sector employment roughly accounts for only about 7 to 10 percent of the total workforce, depending on the measure used. Therefore, in a sense, the discourse on rigidity of labour markets in India indirectly concedes that labour market rigidity caused by labour regulations is not a significant factor by the very fact that a large proportion of the workforce are left outside the purview of labour regulations, with no protective net whatsoever, to fall back upon, in times of need and distress. An extremely important

concern thus, relates to the provision of minimum conditions of work and social security to the workers not covered by the existing labour regulations.

The prevailing view is that too much attention has so far been paid to the organised sector, which employs not more than 10 per cent of the industrial workforce, ignoring the plight of the sector which contributes about two-thirds of the industrial value added in India. Hence, it is often argued by the supporters of the 'flexibility' persuasion that, wage and job flexibilisation in the organised factory sector would ultimately benefit the entire working class. It was the Indian corporate capital that wanted the Second National Labour Commission to pay more attention to the informal/ non-factory sector, leaving the organised sector at its mercy. They were not too successful, if the sequence of events after the Commission's report was made public was any indication. There are more questions now than before about the rights of the factory workers to 'island wages', while the vast majority of the unorganised workers subsist on abysmally low incomes. This very approach is the 'low road to development'. "Is it not the same as arguing that since a quarter of Indian families are homeless, the home-owning families should lose their entitlements to their homes? In fact, lowering factory sector wage or labour standards would entail further declines in standards in the unorganised sector" (Banerjee, 2005,p.42).

The plight of the workers in the organised manufacturing sector, despite so many labour laws covering almost all aspects of work and working conditions in factories, in fact, puts forth a cautionary note against the withdrawal of the laws or parts of these. Relaxation and exemption from labour laws should not therefore be treated as the means to bringing in flexibility in the labour market, as these not only result in a lowering of working standards and thus are detrimental not only to the overall welfare of labour but also to the dynamic efficiency of industry. This is not to say that some labour reforms are not the need of the day. There are a plethora of labour laws that are complex and cumbersome and there is indeed an urgent need for consolidation, simplification and rationalisation of such laws by simplifying administrative procedures, streamlining enforcement and reducing cost of compliance. In the existing laws, ambiguities in the basic definitions and the problem of appropriate government, etc., need to be addressed.

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Annexure

Concepts and Definitions:

In order to have a better understanding of the terminology used in ASI, the concepts and definitions of some of the important terms that have been used in the study are given below¹.

Fixed capital: It represents the depreciated value of fixed assets owned by the factory as on the closing day of the accounting year. Fixed assets are those that have a normal productive life of more than one year. Fixed capital includes land including leasehold land, buildings, plant and machinery, furniture and fixtures, transport equipment, water system and roadways and other fixed assets such as hospitals, schools etc. used for the benefit of factory personnel.

Rent paid: It represents the amount of royalty paid in the nature of rent for the use of the fixed assets in the factory.

Workers: Workers are defined to include all persons employed directly or through any agency whether for wages or not and engaged in any manufacturing process or in cleaning any part of the machinery or premises used for manufacturing process or in any other kind of work incidental to or connected with the manufacturing process or the subject of the manufacturing process. Labour engaged in the repair and maintenance or production of fixed assets for factory's own use or labour employed for generating electricity or producing coal, gas etc. are included.

Employees: Employees include all workers defined above and persons receiving wages and holding supervisory or managerial positions engaged in administrative office, store keeping section and welfare section, sales department as also those engaged in purchase of raw materials etc. or purchase of fixed assets for the factory and watch and ward staff.

¹ Based on the definitions given in the reports and manual of the Annual Survey of Industries.

Total persons engaged: These include the employees as defined above and all working proprietors and their family members who are actively engaged in the work of the factory even without any pay and the unpaid members of the co-operative societies who worked in or for the factory in any direct and productive capacity.

Contract workers: All persons who are not employed directly by an employer but through the third agency, i.e. contractor, are termed as contract workers. Those workers may be employed with or without the knowledge of the principal employer.

Man-days: Man-days represent the total number of days worked and the number of days paid for during the accounting year .It is obtained by summing-up the number of persons of specified categories attending in each shift over all the shifts worked on all days.

Wages and salaries: Wages and salaries are defined to include all remuneration in monetary terms and also payable more or less regularly in each pay period to workers as compensation for work done during the accounting year. It includes (a) direct wages and salary (i.e., basic wages/salaries, payment of overtime, dearness, compensatory, house rent and other allowances) (b) remuneration for the period not worked (i.e., basic wages, salaries and allowances payable for leave period, paid holiday, lay- off payments and compensation for unemployment, if not paid from sources other than employers) (c) bonus and ex-gratia payment paid both at regular and less frequent intervals (i.e., incentive bonuses, productive bonuses, profit sharing bonuses, festival or year-end bonuses etc.)

It excludes lay off payments which are made from trust or other special funds set up exclusively for this purpose i.e., payments not made by the employer. It also excludes imputed value of benefits in kind, employer's contribution to old age benefits and other social security charges, direct expenditure on maternity benefits creches and other group benefits Travelling and other expenditure incurred for business purposes and reimbursed by the employer are excluded. The wages are expressed in terms of gross value i.e., before deduction for fines, damages, taxes, provident fund, employee's state insurance contribution etc.

Total emoluments: It is defined as the sum of wages and salaries, employers' contribution as provident fund and other funds and workmen and staff welfare expenses.

Total input: This comprises total value of fuels, materials consumed as well as expenditures such as cost of contract and commission work done by others on materials supplied by the factory, cost of materials consumed for repair and maintenance work done by others to the factory's fixed assets, inward freight and transport charges, rate and taxes (excluding income tax), postage, telephone and telex expenses, insurance charges, banking charges, cost of printing and stationery and purchase value of goods sold in the same condition as purchased. Rent paid and interest paid is not included.

Total output: It comprises total ex-factory value of products and by-products manufactured as well as other receipts from non industrial services rendered to others, work done for others on material supplied by them, value of electricity produced and sold, sale value of goods sold in the same conditions purchased, addition in stock of semi-finished goods and value of own construction.

Depreciation: Depreciation is consumption of fixed capital due to wear and tear and obsolescence during the accounting year and is taken as provided by the factory owner or is estimated on the basis of cost of installation and working life of the fixed assets.

Net value added: It is arrived by deducting total input and depreciation from total output.

Box 3.1: List of Important Labour Legislations

Legislations on Social Security i. Workmen's Compensation Act 1923 ii. The Employees' State Insurance Act 1948 iii. The Employees' Provident Funds and Miscellaneous Provisions Act 1952 iv. The Maternity Benefit Act 1961 v. The Payment of Gratuity Act 1972 **Legislations on Industrial Relations** i. The Trade Unions Act 1926 ii. The Industrial Employment (Standing Orders) Act 1946 iii. The Industrial Disputes Act 1947 iv. The Bombay Industrial Relations Act 1946 v. The Maharashtra Recognition of Trade Unions and Prevention of Unfair Labour Practices Act 1971 **Legislations on Wages** i. The Payment of Wages Act 1936 ii. The Minimum Wages Act 1948 iii. The Payment of Bonus Act 1965 iv. The Equal Remuneration Act 1976 **Legislations on Working Conditions** i. The Factories Act 1948 ii. The Plantations Labour Act 1951 iii. The Mines Act 1952 iv. The Contract Labour (Regulation and Abolition) Act 1970 v. Shops and Establishment Acts enacted by various state governments **Legislations on Labour Welfare Funds** i. Mica Mines Labour Welfare Fund Act 1946 ii. Iron Ore, Manganese Ore & Chrome Ore Mines Labour Welfare Fund Act 1976 iii. Limestone and Dolomite Labour Welfare Fund Act 1972 iv. Beedi Workers Welfare Fund Act 1976 **Legislations on Employment and Training**

Source: Compiled from Papola et al, 2008, pp.3-4

ii. The Apprentices Act 1961

i. The Employment Exchanges (Compulsory Notification of Vacancies) Act 1959

Box 3.2: Occupations in which Child Labour is Prohibited : Part A and Part B of the schedule

Part -A Occupations: Any occupation connected with -

Transport of passengers, goods or mails by railway

Cinder picking, cleaning of an ash pit or building operation in the railway premises

Work in a catering establishment at a railway station, involving the movement of a vendor or any other employee of the establishment from one platform to another or into or out of a moving train

Work relating to the construction of a railway station or with any other work where such work is done in close proximity to or between the railway lines;

A port authority within the limits of any port.

Working relating to selling of crackers and fireworks in shops with temporary license.

Abattoirs / Slaughter Houses.

Automobile workshops and garages

Foundries

Handling of toxic or inflammable substances or explosives

Handloom and power loom industry

Mines (underground and underwater) and collieries

Plastic units and fiberglass workshops.

Employment of children as domestic workers or servants.

Employment of children in dhabas (road side eateries), restaurants, hotels, motels, tea-shops, resorts, spas or other recreational centres.

Part -B Processes

Beedi-making.

Carpet-weaving including preparatory and incidental process thereof

Cement manufacture, including begging of cement

Cloth printing, dyeing and weaving including processes preparatory and incidental thereto.

Manufacture of matches, explosive and fire-works.

Mica-cutting and splitting.

Shellac manufacture.

Soap manufacture.

Tanning.

Wool-cleaning.

Building and construction industry including processes and polishing and polishing of granite stones.

Manufacture of slate pencils (including packing).

Manufacture of products from agate.

Manufacturing processes using toxic metals and substances, such as lead, mercury, manganese, chromium, cadmium, benzene, pesticides and asbestos.

"Hazardous Processes" as defined in Sec.2 (cb) and "Dangerous Operations" as noticed in rules made under Sec.87 of the Factories Act, 1948 (63 of 1948).

Printing as defined in Sec.2(k)(iv) of the Factories Act, 1948 (63 of 1948).

Cashew and cashew nut descaling and processing.

Soldering processes in electronic industries.

Aggarbatti manufacturing.

Automobile repairs and maintenance including process incidental there to namely, welding, lathe work, dent beating and painting.

Brick Kilns and Roof tiles units.

Cotton ginning and processing and production of hosiery goods.

Detergent manufacturing.

Fabrication workshops (ferrous and non-ferrous).

Gem cutting and polishing.

Handling of chromites and manganese ores.

Jute textile manufacture and coir making.

Lime Kilns and Manufacture of Lime.

Lock making.

Source: Ministry of Labour, Available at: labour.nic.in/cwl/childlabouract.doc

Box 3.3: List of Various Acts and Labour Regulations in Gujarat

- 1. The Minimum Wages Act, 1948 & The Minimum Wages (Gujarat) Rules 1961
- 2. The Payment Of Bonus Act, 1965 & The Payment of Bonus Rules 1975
- 3. The Payment Of Gratuity Act, 1972 & Gujarat Rules 1973
- 4. The Child Labour (Prohibition & Regulation) Act,1986 & Gujarat Rules 1994
- 5. The Contract Labour (Regulation & Abolition) Act, 1970 & The Contract Labour (P & R)(Gujarat) Rules 1972
- 6. The Inter state Migrant Workers Act, 1979 & The Inter state Migrant Workers (Gujarat) Rules 1981
- 7. The Motor Transport Workers Act, 1961 & Gujarat Rules 1965
- 8. The Industrial Disputes Act, 1947 & Gujarat Rules 1966
- 9. The Industrial Employment Standing Order Act, 1946 & Gujarat Rules 1955
- 10. The Sales Promotion Employees (Conditions of Service) Act, 1976
- 11. The Bombay Industrial Relations Act, 1946 & Gujarat Rules 1961
- 12. The Equal Remuneration Act, 1976 & Gujarat Rules 1976
- 13. The Trade Unions Act 1926 & The Gujarat Trade Unions Regulations, 1963
- 14. The Beedi & Cigar Workers (Conditions Of Employment) Act, 1966 & Gujarat Rules 1968
- 15. The Working Journalists And Other Newspaper Employees' (Condition Of Services) And Miscellaneous Provisions Act, 1955
- 16. The Working Journalists(Conditions of Service) and miscellaneous Provisions Rules, 1957
- 17. The Labour Laws (Exemption From Furnishing Returns And Maintaining Registers By Certain Establishments) Act,1988.

Source: Website of Labour and Employment Department, Government of Gujarat. http://labourandemployment.gov.in/

Box 3.4: List of Various Acts and Labour Regulations in Orissa

- 1. Industrial Dispute Act, 1947
- 2. Indian Trade Union Act, 1948
- 3. Factories Act, 1948
- 4. Indian Boilers Act, 1923
- 5. Minimum Wages Act, 1948
- 6. Workmen's Compensation Act, 1926
- 7. Maternity Benefit Act, 1953
- 8. Payment of Wages Act, 1936
- 9. Payment of Bonus Act, 1965
- 10. Payment of Gratuity Act, 1972
- 11. Industrial Employment (Standing Order) Act, 1946
- 12. Motor Transport Workers' Act, 1961
- 13. Working Journalists' & Other Newspapers Employees (Conditions of Service) and Miscellaneous Provisions Act, 1955
- 14. Child Labour (Prohibition & Abolition) Act, 1986
- 15. Beedi & Cigar Workers (Conditions of Employment) Act, 1966
- 16. Contract Labour (Regulation & Abolition) Act, 1970
- 17. Inter-state Migrant Workmen (Regulation of Employment & Conditions of Service) Act, 1979
- 18. Equal Remuneration Act, 1976
- 19. Orissa Shops & Commercial Establishments Act, 1956
- 20. Orissa Industrial Establishment (National & Festival) Holidays Act, 1969.
- 21. Building & Other Construction Workers' (Regulation of Employment & Conditions of Service) Act, 1996
- 22. Building & Other Construction Workers' Welfare Cess Act, 1996

Source: Government of Orissa, Labour and Employment Department. Available at: http://www.orissa.gov.in/labour&employment/labour&empl.pdf

Box 3.5: List of Various Acts and Labour Regulations in Rajasthan

- 1. The Trade Unions Act, 1926
- 2. The Industrial Employment (Standing Orders) Act, 1946 and The Industrial Employment (Standing Orders) Rules, 1946
- 3. The Payment of Wages Act, 1936 and The Payment of Wages Rules, 1937
- 4. The Minimum Wages Act, 1948 and The Minimum Wages (Central) Rules, 1950
- 5. The Working Journalist (Fixation of Rates of Wages) Act, 1958 and the Working Journalist (Conditions of service) and Miscellaneous Provisions Rules, 1957
- 6. The Factories Act, 1948
- 7. The Dock Workers (Regulation of Employment) Act, 1948
- 8. The Plantation Labour Act, 1951
- 9. The Mines Act, 1952
- 10. The Working Journalists and other Newspaper Employees' (Conditions of Service and Misc. Provisions) Act, 1955 and The Working Journalists and other Newspaper Employees' (Conditions of Service and Misc. Provisions) Rules, 1957
- 11. The Merchant Shipping Act, 1958
- 12. The Motor Transport Workers Act, 1961
- 13. The Beedi & Cigar Workers (Conditions of Employment) Act, 1966
- 14. The Contract Labour (Regulation & Abolition) Act, 1970
- 15. The Sales Promotion Employees (Conditions of Service) Act, 1976 and The Sales Promotion Employees (Conditions of Service) Rules, 1976
- 16. The Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979
- 17. The Shops and Establishments Act
- 18. The Cinema Workers and Cinema Theatre Workers (Regulation of Employment) Act, 1981 and The Cinema Workers and Cinema Theatre Workers (Regulation of Employment) Rules, 1984
- 19. The Cine Workers' Welfare Fund Act, 1981.
- 20. The Dock Workers (Safety, Health & Welfare) Act, 1986
- 21. The Building & Other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996
- 22. The Dock Workers (Regulation of Employment) (inapplicability to Major Ports) Act, 1997
- 23. The Maternity Benefit Act, 1961
- 24. The Bonded Labour System (Abolition) Act, 1976

- 25. The Workmen's Compensation Act, 1923
- 26. The Employees' State Insurance Act, 1948
- 27. The Mica Mines Labour Welfare Fund Act, 1946
- 28. The Limestone & Dolomite Mines Labour Welfare Fund Act, 1972
- 29. The Beedi Workers Welfare Fund Act, 1976
- 30. The Beedi Workers Welfare Cess Act, 1976
- 31. The Iron Ore Mines, Manganese Ore Mines & Chrome Ore Mines Labour Welfare Fund Act, 1976
- 32. The Iron Ore Mines, Manganese Ore Mines & Chrome Ore Mines Labour Welfare Cess Act, 1976
- 33. The Cine Workers Welfare Fund Act, 1981
- 34. The Cine Workers Welfare Cess Act, 1981
- 35. The Employment Exchanges (Compulsory Notification of Vacancies) Act, 1959. The Employment Exchanges (Compulsory Notification of Vacancies) Rules, 1959
- 36. The Apprentices Act, 1961

Source: Labour Department, Government of Rajasthan

Box 3.6: List of Various Acts and Labour Regulations in Tamil Nadu

- 1. The Workmen's Compensation Act, 1923.
- 2. The Trade Unions Act, 1926.
- 3. The Payment of Wages Act, 1936 and Rules 1937.
- 4. The Child Labour (Prohibition and Regulation) Act, 1986.
- 5. The Industrial Employment (Standing Orders) Act, 1946 and Rules 1947.
- 6. The Tamil Nadu Shops and Establishments Act, 1947 and Rules 1948.
- 7. The Industrials Disputes Act, 1947.
- 8. The Minimum Wages Act 1948 and Rules 1950.
- 9. The Plantations Labour Act, 1951.
- 10. The Working Journalists & Other News Paper employees (conditions of Service) and Miscellaneous Provision Act, 1955.
- 11. The Tamil Nadu Catering Establishments Act, 1958 and Rules.
- 12. The Tamil Nadu Industrial Establishments (National and Festival Holidays) Act, 1958
- 13. The Maternity Benefit Act, 1961 and Rules 1967.
- 14. The Motor Transport Workers Act 1961 and Rules 1965.
- 15. The Payment of Bonus Act, 1965 and Rules 1975.
- 16. The Beedi and Cigar Workers (Conditions of Employment) Act, 1966 and Rules, 1968
- 17. The Contract Labour (Regulation and abolition) Act, 1970 and Rules 1975.
- 18. The Payment of Gratuity Act, 1972 and Rules 1973.
- 19. Tamil Nadu Labour Welfare Fund Act, 1972 and Rules 1973.
- 20. The Equal Remuneration Act, 1976 and Rules.
- 21. The Sales Promotion Employees (Conditions of Service) Act, 1976.
- 22. The Tamil Nadu Industrial Establishment (Conferment of permanent Status to Workmen) Act. 1981.
- 23. Tamil Nadu Manual Workers (Regulations of Employment and Conditions of work) Act, 1982
- 24. Tamil Nadu Payment of Subsistence Allowance Act, 1981.
- 25. Cine Workers and Cinema theatre Workers (Regulations of Employment) Act, 1981 and Rules 1982.
- 26. Standards of Weights and Measures (Enforcement) Act, 1976 and Standards of Weights and Measures (Packaged Commodities) Rules 1977.
- 27. Standards of Weights and Measures (Enforcement) Act, 1985 and the Tamil Nadu Standards of Weights and Measures (Enforcement) Rules 1989.
- 28. Inter/State Migrant workmen (Regulation of employment and Conditions of service) Act, 1979
- 29. The Tamil Nadu Handloom workers (Conditions of Employment & miscellaneous Provisions) Act 1981.

Source: Labour and Employment Department, Government of Tamil Nadu

Table I: Selection of States on the basis of Per Capita Net State Domestic Product at Factor Cost (Constant 1993-94 prices) – in Rupees ('000)

Table I (a): State wise Per Capita Net State Domestic Product at Factor Cost (At Constant 1993-94 Prices)

STATE	AP	GUJ	HAR	НР	KAR	KER	MAH	ORI	PUN	RAJ	TN	WB
1980-81	4.6	6.5	7.5	5.8	4.9	5.7	7.1	4.2	8.4	4.3	5.3	5.0
1984-85	5.0	7.6	8.0	5.4	5.7	5.6	7.5	4.2	9.7	4.8	6.2	5.3
1988-89	6.3	9.1	10.4	7.0	6.4	6.1	8.8	5.2	11.1	6.2	7.0	5.8
1992-93	6.8	10.3	10.8	7.7	7.4	7.3	11.2	4.7	12.4	6.9	8.3	6.4
1996-97	8.5	13.2	12.6	9.1	9.0	9.1	13.5	4.8	13.7	7.9	10.5	7.9
2000-01	10.1	12.1	14.0	11.6	10.8	10.6	14.5	5.5	15.0	8.1	12.7	9.5
2004-05	12.2	16.5	17.6	13.9	12.4	13.5	17.6	7.2	16.1	9.4	14.4	11.4
2009-10	17.5	25.2	25.7	17.4	17.3	19.6	28.2	10.0	21.3	11.9	22.4	15.3

Table I (b): State wise Ranking based on Per Capita Net State Domestic Product

STATE	AP	GUJ	HAR	HP	KAR	KER	MAH	ORI	PUN	RAJ	TN	WB
1980-81	10	4	2	5	9	6	3	12	1	11	7	8
1984-85	10	3	2	8	6	7	4	12	1	11	5	9
1988-89	8	3	2	6	7	10	4	12	1	9	5	11
1992-93	10	4	3	6	7	8	2	12	1	9	5	11
1996-97	9	3	4	7	8	6	2	12	1	11	5	10
2000-01	9	5	3	6	7	8	2	12	1	11	4	10
2004-05	9	3	2	6	8	7	1	12	4	11	5	10
2009-10	7	3	2	8	9	6	1	12	5	11	4	10

Table I (c): Final Ranking based on Per Capita Net State Domestic Product

STATE	AP	GUJ	HAR	HP	KAR	KER	MAH	ORI	PUN	RAJ	TN	WB
Averag e Rank	9.0	3.5	2.5	6.5	7.6	7.3	2.4	12.0	1.9	10.5	5.0	9.9
Final	7.0	3.3	2.3	0.5	7.0	7.5	2.4	12.0	1.7	10.5	3.0	7.7
Rank	9	4	3	6	8	7	2	12	1	11	5	10

Source: Computed from the Handbook of Statistics on Indian Economy, RBI

Table II: Selection of States on the basis of Net Value Added in Factory Sector

Table II (a): State wise Net Value Added as a Percentage of All India

STATE	AP	GUJ	HAR	HP	KAR	KER	MAH	ORI	PUN	RAJ	TN	WB
1980-81	4.9	9.5	2.9	0.5	5.1	3.3	25.0	1.7	3.2	2.8	10.3	11.5
1984-85	6.9	10.2	2.8	0.7	5.0	3.3	22.8	1.1	3.0	2.6	11.3	8.8
1988-89	5.3	9.8	2.9	0.9	4.7	2.7	23.7	2.5	3.1	2.6	10.9	6.3
1992-93	6.0	11.3	2.3	0.6	5.8	2.5	22.8	2.0	4.1	3.3	10.2	5.9
1996-97	5.8	12.3	3.9	0.8	6.1	2.1	21.2	1.6	3.6	2.5	10.2	5.5
2000-01	6.2	11.7	3.9	0.9	5.8	2.5	21.8	1.6	3.0	3.7	11.5	4.0
2004-05	6.1	13.9	4.5	0.8	7.9	1.6	19.7	2.3	2.2	2.5	8.3	4.1
2009-10	6.6	15.2	4.7	2.3	6.2	1.2	19.9	2.5	2.5	3.4	10.0	3.3

Table II (b): State wise Ranking based on Net Value Added

STATE	AP	GUJ	HAR	HP	KAR	KER	MAH	ORI	PUN	RAJ	TN	WB
1980-81	6	4	9	12	5	7	1	11	8	10	3	2
1984-85	5	3	9	12	6	7	1	11	8	10	2	4
1988-89	5	3	8	12	6	9	1	11	7	10	2	4
1992-93	4	2	10	12	6	9	1	11	7	8	3	5
1996-97	5	2	7	12	4	10	1	11	8	9	3	6
2000-01	4	2	7	12	5	10	1	11	9	8	3	6
2004-05	5	2	6	12	4	11	1	9	10	8	3	7
2009-10	4	2	6	11	5	12	1	9	10	7	3	8

Table II(c): Final Ranking based on Net Value Added

STATE	AP	GUJ	HAR	HP	KAR	KER	MAH	ORI	PUN	RAJ	TN	WB
Avg Rank	4.8	2.5	7.8	11.9	5.1	9.4	1.0	11.0	8.4	8.8	2.8	5.3
Final Rank	4	2	7	12	5	10	1	11	8	9	3	6

Source: Computed from ASI data summary results, CSO, various issues

Note:

AP - Andhra Pradesh	GUJ - Gujarat	HAR – Haryana	HP - Himachal Pradesh
KAR – Karnataka	KER - Kerala	MAH - Maharashtra	ORI - Orissa
PUN - Punjab	RAJ - Rajasthan	TN - Tamil Nadu	WB - West Bengal

Table III: Annual average series of various deflators after making adjustments in the base (Base:1993-94=100)

Year	WPI - MP	WPI - Machinery and Machine tools	CPI - IW
1980-81	39.10	38.45	31.54
1981-82	41.12	42.03	35.47
1982-83	42.56	43.15	38.23
1983-84	45.15	44.42	43.02
1984-85	48.31	46.46	45.74
1985-86	51.19	51.03	48.84
1986-87	53.13	53.51	53.10
1987-88	56.95	55.61	57.75
1988-89	62.29	63.39	63.18
1989-90	69.33	69.86	67.05
1990-91	75.16	75.75	74.81
1991-92	83.63	87.56	84.88
1992-93	92.76	96.93	93.02
1993-94	100.00	100.00	100.00
1994-95	112.30	106.00	110.08
1995-96	121.90	111.80	121.32
1996-97	124.40	115.70	132.56
1997-98	128.00	115.30	141.86
1998-99	133.60	116.00	160.47
1999-00	137.20	116.10	165.89
2000-01	141.70	123.00	172.09
2001-02	144.30	129.10	179.46
2002-03	148.10	130.30	186.82
2003-04	156.50	132.70	193.80
2004-05	166.30	140.20	201.55
2005-06	170.29	147.40	210.08
2006-07	179.94	155.60	224.42
2007-08	188.58	166.60	238.78
2008-09	200.23	174.50	260.33
2009-10	204.72	174.20	292.64

Source: Calculated from data in the Handbook of Statistics on Indian Economy, RBI

Note: The base year in all three cases is 1993-94. WPI-MP refers to the Wholesale Price Index series for Manufactured Products, while CPI-IW implies the Consumer Price Index for Industrial Workers.

Table 1.1: Classification of OECD countries According to strictness of overall EPL $score^2$

Period	Liberal	Medium	High
Late 1980's	US, UK, Canada,	Switzerland, Austria,	France, Netherlands, Norway,
(Version 1)	Australia, Ireland (5)	Denmark, Finland (4)	Belgium, Germany, Sweden,
			Italy, Spain, Portugal (9)
Late 1990's	US, New Zealand,	Switzerland, Denmark,	Belgium, Germany, Sweden,
(Version 2)	UK, Canada, Ireland,	Finland, Netherlands,	Norway, France, Spain, Italy,
	Australia (6)	Austria (5)	Portugal (8)
2003	US, UK, Canada,	Switzerland, Denmark,	Belgium, Germany, Norway,
(Version 2)	Ireland, New	Finland, Austria,	Sweden, France, Spain,
	Zealand, Australia (6)	Netherlands, Italy (6)	Portugal (7)

Note: For late 1980's: up to 1.0 liberal; 1.1 to 2.4 Medium; 2.5 & over High. For the other two periods: up

to 1.5 liberal; 1.6 to 2.4 Medium; 2.5 & over High

Source: OECD (2004: Annexure 2.A.1)

² Reproduced from Shyam Sundar in Garibaldi et al (2008), p.53.

Table 1.2: Unemployment Rates According to Strictness of EPL, 1995³

Category/Country]	Both Sexes		15-64			
Category/Country	15-24	25-54	55-64	All	Males	Females	
Liberal	14.7	7.2	6.3	8.5	8.9	8.9	
	(13.9)*	(6.4)	(6.0)	(7.7)	(8.1)	(7.2)	
U.S.	12.1	4.5	3.6	5.6	5.6	5.7	
Medium	12.2	6.5	7.7	7.4	6.8	8.3	
	(8.5)**	(4.9)	(4.5)	(5.4)	(4.6)	(6.6)	
Austria	5.9	4.1	3.9	3.9	4	4.9	
High	23.1	9.6	7.1	11.2	9.6	13.7	

Source: Overall EPL scores from OECD (2004), unemployment rates from OECD (1999).

³ Reproduced from Shyam Sundar in Garibaldi et al (2008),p.59.

Table 1.3: Standardized Unemployment Rates (UR) by Gender and Age, 2003

Countries	N	I ale	Fe	male
Countries	15-24	25-54	15-24	25-54
Average for Liberal OECD countries	11.5	4.2	10.2	4.1
High UR European countries				
Belgium	15.8	6	19.5	7.4
Finland	22.2	7	19.4	7.6
France	20.8	7.4	22	9.8
Germany	13.3	9.8	9.7	9
Italy	20.7	5.2	27.2	9.2
Spain	18.7	6.9	26.4	13.8
Average	18.6	7.1	20.7	9.5
Average for Low UR	·		·	·
European Countries	11	4.3	10	4.5

Note: Liberal OECD countries include US, UK, Australia, Canada, Ireland, New Zealand and High and Low UR European countries are as stated in the text. We have given the average figures for the first and third type of countries because we do not find much variation in the rates among the countries in the groups.

Source: Howell, Baker, Glyn and Schmidt (2006, Table 3.1)

Table 2.1: Details Relating to the Aspects Considered for Constructing EPL scores by the OECD

EPL for	Aspects Considered	Sub-Aspects	Scoring System
Regular	(a) Regular procedural		
Employment	inconveniences	(a) Procedures	Scale 0 to 3
		(b) Delay of start of notice	in days
	Difficulty of dismissal	Definition of unfair dismissal	Scale 0 to 3
		Trial period before eligibility	1 2 3 3 3 3 3 3
		arises	Months
		Unfair dismissal compensation at	
		20 years of tenure	In Months
		Extent of reinstatement	Scale 0 to 3
Overall strictness	s of protection against dism	nissals: average of scores of (a) to (c)
Temporary	(a) Temporary work	Types of work for which	1
Employment	agencies (TWA's)	employment is legal	Scale 0 to 4
		Restrictions on the number of	
		renewals	Yes/No
		Maximum cumulated duration of	
		temporary work contracts	In Months
		Valid cases other than usual	
	(b) Fixed term contracts	objective reasons	Scale 0 to 3
		Maximum number of successive	
		contracts	Number
		Maximum cumulated duration	In Months
Overall strictness and (b)	s of regulation regarding te	mporary employment: average of s	cores of (a)
Regulation of			
collective	(a) Definition of		
dismissals	collective dismissals		Scale 0 to 4
	(b) Additional		
	notification		
	requirements		Scale 0 to 2
	(c) Additional delays		
	involved before notice		
	can start		In days
	(d) Other special costs		Scale 0 to
_	to employers		2
Overall strictness	s of collective dismissals		

Overall EPL (version 1) combines scores for all the three aspects for all the three periods, viz. late 1980's, late 1990's and 2003

Overall EPL (Version 2) Combines scores for all the three aspects for all the three periods, viz. late 1990's and 2003

Note. (a) In the scoring system strictness increases as scores increase. (b) see OECD 2004: Chapter II, Appendix tables for details for each aspect and the weighting system followed for arriving at the overall score

Source: OECD (2004 Chapter II)

Table 3.1: Appropriate government for the enforcement of different labour regulations enacted by the Central Government

Laws related to	Central government	State government	Both State and Central government
Conditions of work	Mines Act, 1952	Factories Act, 1948	Contract Labour (Regulation & Abolition) Act, 1970
	Dock Workers (Safety Health & Welfare) Act, 1986	Plantation Labour Act, 1951	Inter-State Migrant Workmen (Regulation of Employment and conditions of service) Act, 1979
		Shops and Commercial Establishments Act	
		Weekly Holiday Act, 1942	
		Working Journalists and other Newspaper Employees (Conditions of service and Misc. Provisions) Act, 1955	Building & Other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996 Cine workers and Cinema
		Beedi & Cigar Workers (Conditions of Employment) Act, 1966	Theatre Workers (Regulation of Employment) Act, 1981
		Motor Transport Workers Act, 1961	
Wages and Remunera- tion			Minimum Wages Act, 1948 Payment of Wages Act, 1936 Payment of Bonus Act, 1965 Equal Remuneration Act, 1976
Social Security	Employees' State Insurance Act, 1948	Workmen's Compensation Act, 1923	Payment of Gratuity Act, 1972
	Employees' Provident Fund & Miscellaneous Provisions Act, 1952		Maternity Benefit Act, 1961
Labour Welfare	Limestone & Dolomite Mines Labour Welfare Fund Act, 1972		
	Beedi Workers Welfare Fund Act, 1976		
	Iron Ore Mines, Manganese Ore Mines & Chrome Ore Mines Labour Welfare Fund Act, 1976		
	Cine Workers Welfare Fund Act, 1981		
	The Mica Mines Labour Welfare Fund Act, 1946		
Industrial Relations		Trade Unions Act, 1926	Industrial Employment Standing Order Act, 1946 Industrial Disputes Act, 1947

Source: Papola et al, 2008,p.56-57 (Originally based on Pais, 2008).

Table 3.2: Rate of Inspection under the Factories Act, 1948: State wise and all India (1987-2008)

Year	Gujarat	Orissa	Rajasthan	Tamil Nadu	All India
1986	81.26%	96.80%	80.41%	92.48%	63.05%
1987	78.89%	90.86%	80.30%	92.04%	60.67%
1988	N.A	N.A	N.A	N.A	50.34%
1990	72.79%	91.46%	74.40%	N.A	64.69%
1991	91.67%	97.39%	75.55%	N.A	75.64%
1994	N.A	88.66%	47.67%	72.21%	74.72%
1995	N.A	88.99%	45.63%	N.A	54.78%
1996	73.20%	86.26%	57.12%	N.A	59.44%
1997	66.10%	81.03%	N.A	N.A	68.12%
1998	66.87%	89.91%	70.79%	79.01%	54.92%
1999	59.40%	84.84%	75.67%	N.A	46.70%
2000	N.A	78.41%	66.31%	N.A	57.31%
2001	85.81%	71.90%	61.34%	54.04%	56.41%
2002	N.A	64.40%	63.38%	59.36%	47.63%
2003	N.A	68.65%	67.47%	N.A	39.86%
2004	N.A	64.25%	62.98%	85.10%	31.56%
2005	N.A	68.94%	65.39%	76.80%	35.13%
2006	48.26%	76.63%	61.06%	83.38%	37.92%
2007	N.A	76.05%	N.A	N.A	12.71%
2008	N.A	70.29%	53.15%	N.A	17.88%

Source: Compiled from Indian Labour Year Book and Statistics of Factories, Labour Bureau (Various issues)

Table 3.3: State wise distribution of total industrial disputes per thousand workers (1982-2007)

Year	Gujarat	Orissa	Rajasthan	Tamil Nadu	India
1982	0.35	0.57	0.62	0.32	N.A
1983	0.32	0.75	0.57	0.37	N.A
1984	0.39	0.81	0.68	0.31	N.A
1985	0.37	0.46	0.62	0.31	N.A
1986	0.42	0.58	0.67	0.40	N.A
1987	0.42	0.68	0.58	0.32	N.A
1988	0.36	0.38	0.46	0.30	0.29
1989	0.35	0.16	0.47	0.24	0.28
1990	0.40	0.12	0.52	0.28	0.29
1991	0.31	0.34	0.54	0.23	0.29
1992	0.29	0.36	0.35	0.28	0.26
1995	0.18	0.30	0.19	0.14	0.14
1996	0.23	0.25	0.26	0.17	0.16
1997	0.23	0.26	0.25	0.23	0.17
1998	0.22	0.18	0.19	0.25	0.17
1999	0.19	0.17	0.20	0.20	0.15
2000	0.14	0.26	0.15	0.16	0.13
2001	0.10	0.10	0.14	0.14	0.11
2004	0.06	0.05	0.07	0.07	0.07
2006	0.04	0.06	0.07	0.05	0.05
2007	0.04	0.05	0.05	0.07	0.05

Source: Computed from data in Indian Labour Year Book and Indian Labour Statistics, Labour Bureau (Various issues)

Table 3.4: State wise distribution of mandays lost due to industrial disputes per thousand workers (1982-2007)

Year	Gujarat	Orissa	Rajasthan	Tamil Nadu	India
1982	1326	1751	2397	3029	N.A
1983	1219	3415	4314	3398	N.A
1984	2064	3651	3878	5924	N.A
1985	1804	1078	5522	5230	N.A
1986	2205	1372	4144	5294	N.A
1987	3101	2880	5508	4646	N.A
1988	560	3413	2809	2760	5633
1989	984	1409	4333	2502	5163
1990	1445	618	7214	3426	3819
1991	1226	1561	3380	9188	4216
1992	812	2041	2097	3400	4701
1995	1207	879	2050	1023	2134
1996	2848	1705	2822	1476	2739
1997	1554	1106	6142	1895	2232
1998	2001	546	5504	3453	3466
1999	639	299	4273	2962	4265
2000	1108	1126	4218	1994	4381
2001	431	366	7050	2054	3989
2004	269	620	6418	609	3617
2006	268	1269	5555	535	2579
2007	122	71	3420	1099	3314

Source: Computed from data in Indian Labour Year Book and Indian Labour Statistics, Labour Bureau (Various issues)

Table 3.5: Ratio of Contract Workers to Total Workers in the Factory Sector (in %) (1998-2010)

Year	Gujarat	Orissa	Rajasthan	Tamil Nadu	India
1998-1999	24.97%	26.78%	20.96%	9.00%	15.51%
1999-2000	25.59%	32.64%	19.65%	7.14%	19.73%
2000-2001	26.91%	28.74%	22.73%	8.03%	20.42%
2001-2002	30.84%	30.49%	25.47%	9.22%	21.78%
2002-2003	31.38%	33.17%	30.54%	9.75%	23.08%
2003-2004	33.74%	38.31%	32.01%	11.41%	24.57%
2004-2005	33.74%	37.36%	33.14%	13.36%	26.49%
2005-2006	34.12%	42.01%	33.47%	14.57%	28.54%
2006-2007	34.86%	36.20%	33.88%	14.22%	30.00%
2007-2008	37.18%	38.10%	31.56%	15.19%	30.96%
2008-2009	39.89%	45.14%	35.28%	14.88%	31.90%
2009-2010	38.15%	49.68%	34.55%	17.25%	32.80%

Source: Computed from ASI Reports, CSO, Various issues

Table 3.6: Major Labour Laws and their Applicability

No	Laws related to Industrial Relations	Applicability Criterion (Number Filter)
1	The Industrial Disputes Act, 1947	Generally applicable to all establishments (limitations are Chapter V A)(Lay Off and Retrenchment not applicable to establishments of seasonal nature or less than 50 workers; VB (Provisions relating to lay off, Retrenchment and closure in certain establishments applies to establishments with 100 or more workers)
2	The Industrial Employment (Standing Orders) Act, 1946	100 or more, State Amendments Karnataka, West Bengal, Gujarat, Tamil Nadu the no. of workers is more than 50, in UP this limit is further reduced and all the factories under section 2m are covered i.e., 10 workers with power or 20 without power.
3	The Payment of Wages Act, 1936	Applicable to Factories
4	The Minimum Wages Act, 1948	One or More employees in any scheduled employment where min wage rate have been fixed under this act
5	The Payment of Bonus Act, 1965 The Payment of Bonus Rules, 1975	Where 20 or more workers are employed inclusive of those also who are drawing more than Rs. 1600 per month. The establishment shall continue to be governed by this act notwithstanding that the number of persons employed therein falls below 20.
6	The Factories Act, 1948	10 or more workers on any manufacturing activity with the aid of power, and 20 or more workers working without any aid of power.
9	The Contract Labour (Regulation & Abolition) Act, 1970	Applies to all establishments where 20 or more workmen are employed Applies to contractor employing 20 or more workmen
10	The Workmen's Compensation Act, 1923	Applicable to all establishments
11	The Employee's State Insurance Act, 1948	In the first Instance to the Factories and could be extended to other establishments with due process.
12	The Employees' Provident Fund & Miscellaneous Provisions Act, 1952	To every establishment which is a factory and in which twenty or more persons are employed
13	The Shops and Establishments Act	Applies to every shop and establishment, not registered under Factories Act
14	The Maternity Benefit Act, 1961	Applies to every shop and establishment employing 10 or more persons are employed
15	The Equal Remuneration Act, 1976	Applicable to all establishments
16	The payment of Gratuity Act, 1972	All factories and establishments where ten or more persons are employed

Source: Chandra, 2006, p. 27

Table 4.1: Growth Rates of Gross Value Added (at constant 1993-94 prices)

Table 4.1(a): Compound Annual Growth Rates (CAGR) of Real Gross Value Added

Period	Year	Gujarat	Orissa	Rajasthan	Tamil Nadu	India
Period1	1980-81 to1984-85	11.3%	-1.8%	9.0%	11.8%	9.9%
Period2	1984-85 to1988-89	5.9%	32.4%	6.4%	6.5%	6.7%
Period3	1988-89 to1992-93	12.1%	1.6%	13.2%	6.6%	8.3%
Period4	1992-93 to1996-97	13.0%	3.7%	5.4%	10.5%	10.4%
Period5	1996-97 to 2000-01	-1.4%	-2.4%	5.2%	0.8%	-2.1%
Period6	2000-01 to 2004-05	13.4%	19.6%	1.5%	3.2%	10.3%
Period7	2004-05 to 2007-08	14.1%	22.7%	16.9%	15.3%	16.3%

Table 4.1(b): Compound Annual Growth Rates (CAGR) of Real Gross Value Added
(Pre & Post Liberalisation)

Period	Year	Gujarat	Orissa	Rajasthan	Tamil Nadu	India
Period1	1980-81 to1990-91	7.70%	11.30%	9.60%	9.70%	8.70%
Period2	1990-91 to1997-98	10.60%	9.50%	10.60%	5.40%	8.70%
Period3	1997-98 to 2007-08	10.50%	8.30%	4.10%	6.70%	7.20%

Table 4.2: Growth Rates of Employment (Compound Annual Growth Rates)

Table 4.2(a): Compound Annual Growth Rates (CAGR) of Employment

Period	Year	Gujarat	Orissa	Rajasthan	Tamil Nadu	India
Period1	1980-81 to1984-85	-0.6%	1.5%	3.6%	2.5%	0.4%
Period2	1984-85 to1988-89	-0.5%	2.4%	1.2%	0.4%	-0.4%
Period3	1988-89 to1992-93	1.8%	3.6%	3.1%	4.5%	3.0%
Period4	1992-93 to1996-97	3.9%	0.7%	4.0%	3.7%	2.6%
Period5	1996-97 to 2000-01	-3.2%	-8.7%	-6.9%	-2.4%	-5.0%
Period6	2000-01 to 2004-05	1.8%	3.2%	3.7%	2.8%	1.4%
Period7	2004-05 to 2007-08	8.9%	8.3%	11.3%	6.9%	7.3%

Table 4.2(b): Compound Annual Growth Rate (CAGR) of Employment

(Pre & Post Liberalisation)

	CAGR (Pre & Post Liberalisation)									
Period	Year	Gujarat	Orissa	Rajasthan	Tamil Nadu	India				
Period1	1980-81 to1990-91	-0.4%	1.4%	2.4%	1.9%	0.5%				
Period2	1990-91 to1997-98	3.6%	2.2%	2.6%	4.0%	2.7%				
Period3	1997-98 to 2007-08	1.7%	0.3%	2.3%	1.9%	0.4%				

Table 4.3: Growth Rates in Employment and (Real) Gross Value Added; Two-Digit Industries

Industry		Using CAGR (Per	cent Per Annum)		
Code	Employment	Growth Rate	Growth Rate of G	ross Value Added	
	1980-81 to 1990-91	1990-91 to 2003-04	1980-81 to 1990-91	1990-91 to 2003-04	
15	-1.5%	0.9%	10.5%	6.4%	
16	3.8%	0.8%	10.9%	9.5%	
17	-1.7%	-0.4%	4.1%	3.3%	
18	8.1%	9.8%	19.1%	10.4%	
19	5.0%	1.9%	15.4%	1.6%	
20	-1.5%	-1.7%	5.0%	2.9%	
21	1.3%	1.5%	8.8%	4.8%	
22	-0.4%	-1.9%	5.2%	8.3%	
23	3.1%	1.9%	14.5%	15.7%	
24	1.4%	1.9%	8.2%	9.3%	
25	4.0%	3.5%	10.9%	8.6%	
26	2.0%	0.2%	12.1%	5.9%	
27	0.7%	-1.2%	8.9%	8.1%	
28	1.9%	1.1%	7.4%	6.9%	
29	0.7%	-1.1%	6.2%	5.4%	
30	0.2%	-1.9%	8.9%	9.9%	
31	2.6%	-0.9%	8.6%	3.6%	
32	5.3%	-1.0%	15.1%	7.6%	
33	2.1%	1.9%	4.5%	10.6%	
34	1.9%	2.5%	9.5%	10.3%	
35	0.4%	-4.7%	6.5%	6.1%	
36	0.6%	7.7%	0.1%	17.7%	
Total	0.5%	0.6%	8.3%	7.8%	

Source: Computed from the database of EPWRF on ASI, Time Series Data, Second Edition.

Note: Two-digit industry codes (As per NIC-1998):15- manufacture of food products & beverages; 16-manufacture of tobacco products; 17-manufacture of textiles; 18- manufacture of wearing apparel; dressing and dyeing of fur; 19- leather and leather products; 20-wood and wood products; 21- paper and paper products; 22- publishing, printing and reproduction of recorded media; 23- manufacture of coke, refined petroleum products and nuclear fuel; 24-chemicals and chemical products; 25- rubber and plastics products; 26- non-metallic mineral products; 27- basic metals and alloys; 28- metal products and parts;29- machinery and equipment; 30-manufacture of office, accounting and computing machinery; 31- manufacture of electrical machinery and apparatus; 32- manufacture of radio, television and communication equipment and apparatus; 33- manufacture of medical, precision and optical instruments, watches and clocks; 34- manufacture of motor vehicles, trailers and semi-trailers; 35- manufacture of other transport equipment; 36- manufacture of furniture; manufacturing n.e.c.

Table 4.4: Distribution by Size of Employment

	Distribution of Employment					Growth Rate (CAGR)			
	Percent					Percent per Annum			
	1973- 74	1980- 81	1990- 91	1997- 98	2002- 03	1973- 80	1980- 90	1990- 97	1997- 2002
0-49	14.4	13.8	17.5	16.8	20.5	3.5%	3.0%	2.2%	-0.5%
50-99	8.2	9.0	10.8	13.1	11.7	5.5%	2.4%	5.7%	-6.5%
100-199	9.4	9.2	10.7	12.9	12.8	3.8%	2.1%	5.6%	-4.5%
200-499	13.1	12.1	13.5	19.0	17.2	2.9%	1.7%	8.0%	-6.3%
500-999	11.6	9.7	12.0	13.6	12.2	1.5%	2.7%	4.7%	-6.5%
1000-1999	12.8	13.7	10.1	9.4	8.4	5.2%	-2.5%	1.8%	-6.7%
2000-4999	16.7	15.9	9.5	10.0	8.3	3.4%	-4.5%	3.7%	-8.0%
5000+	13.8	16.7	15.9	5.2	9.0	6.9%	0.1%	-12.5%	7.0%
Total	100.0	100.0	100.0	100.0	100.0	4.1%	0.6%	2.8%	-4.4%

Source: Computed from the database of EPWRF on ASI, Time Series Data, Second Edition.

Table 4.5: Net Value Added (at constant 1993-94 prices) per Worker (in Rs. Lakhs)

Year	Gujarat	Orissa	Rajasthan	Tamil Nadu	India
1980-81	0.51	0.49	0.57	0.49	0.50
1981-82	0.56	0.53	0.59	0.53	0.58
1982-83	0.57	0.52	0.53	0.60	0.62
1983-84	0.82	0.64	0.77	0.62	0.72
1984-85	0.80	0.46	0.66	0.70	0.71
1985-86	0.79	0.58	0.74	0.68	0.78
1986-87	0.91	0.71	0.97	0.74	0.83
1987-88	0.95	0.67	0.68	0.70	0.82
1988-89	1.04	1.19	0.81	0.84	0.92
1989-90	0.96	1.35	0.85	0.91	0.99
1990-91	1.13	1.31	1.14	1.01	1.09
1991-92	0.92	1.15	1.10	0.93	1.05
1992-93	1.59	1.10	1.32	0.93	1.16
1993-94	1.66	1.22	1.28	1.11	1.33
1994-95	1.93	1.24	1.57	1.13	1.39
1995-96	2.13	1.40	1.58	1.18	1.50
1996-97	2.19	1.30	1.25	1.18	1.55
1997-98	1.71	2.15	2.00	1.04	1.60
1998-99	2.33	1.62	1.53	1.12	1.71
1999-2000	2.29	1.95	2.19	1.21	1.80
2000-01	2.15	1.67	2.11	1.26	1.65
2001-02	2.24	1.51	1.87	1.13	1.68
2002-03	2.93	1.94	1.69	1.11	1.89
2003-04	3.43	2.09	1.73	1.29	2.13
2004-05	3.57	3.11	1.91	1.24	2.37
2005-06	4.20	3.35	2.08	1.47	2.57
2006-07	3.56	4.01	2.81	1.56	2.79
2007-08	4.13	4.93	2.33	1.63	3.12

Table 4.6: Real Wages per Worker (In Rs. Lakhs)

Period I: From 1980-81 to 1997-98

Year	Gujarat	Orissa	Rajasthan	Tamil Nadu	India
1980-81	0.20	0.26	0.20	0.19	0.21
1981-82	0.18	0.23	0.20	0.19	0.20
1982-83	0.19	0.24	0.23	0.20	0.21
1983-84	0.20	0.25	0.22	0.20	0.22
1984-85	0.22	0.27	0.24	0.20	0.24
1985-86	0.22	0.27	0.25	0.22	0.25
1986-87	0.22	0.28	0.26	0.22	0.25
1987-88	0.23	0.27	0.25	0.23	0.26
1988-89	0.23	0.27	0.25	0.24	0.27
1989-90	0.23	0.27	0.26	0.24	0.28
1990-91	0.25	0.29	0.28	0.24	0.28
1991-92	0.23	0.27	0.27	0.23	0.26
1992-93	0.26	0.28	0.31	0.22	0.27
1993-94	0.25	0.22	0.27	0.21	0.27
1994-95	0.24	0.27	0.29	0.24	0.29
1995-96	0.26	0.31	0.29	0.25	0.30
1996-97	0.25	0.34	0.29	0.25	0.30
1997-98	0.27	0.37	0.29	0.25	0.29

Period II: 1998-99 to 2007-08

Year	Gujarat	Orissa	Rajasthan	Tamil Nadu	India
1998-99	0.21	0.28	0.23	0.19	0.24
1999-2000	0.25	0.29	0.23	0.19	0.25
2000-01	0.26	0.34	0.24	0.21	0.26
2001-02	0.25	0.37	0.23	0.20	0.26
2002-03	0.26	0.36	0.22	0.21	0.26
2003-04	0.27	0.33	0.22	0.21	0.26
2004-05	0.27	0.30	0.23	0.20	0.25
2005-06	0.26	0.34	0.22	0.21	0.25
2006-07	0.26	0.34	0.22	0.20	0.25
2007-08	0.28	0.37	0.21	0.21	0.26

Table 4.7: Compound Annual Growth Rates of Real Average Wage and Real Net Value Added Per Worker

		Compound Annual Growth Rate(Percent per annum)								
	G.R. of Real Wage Per Worker				G.I	R. of Real	I NVA P	er Wor	ker	
Year	Guj	Ori	Raj	TN	India	Guj	Ori	Raj	TN	India
1980-81 to										
1990-91	2.3	1.1	3.3	2.4	3.1	8.3	10.3	7.2	7.4	8.0
1990-91 to										
1997-98	1.4	3.4	0.2	0.5	0.6	6.1	7.3	8.3	0.5	5.7
1997-98 to										
2007-08	0.2	0.3	-3.1	-1.7	-1.1	9.2	8.6	1.5	4.6	6.9

Source: Computed from ASI data summary results, CSO, various issues

Note:

Guj - Gujarat	
Ori - Orissa	
Raj - Rajasthan	
TN - Tamil Nadu	

Table 4.8: Growth Rates of Real Average Wage and Real Net Value Added per Worker; Two-Digit Industries

Industry	Using Compound Annual Growth Rate							
Code	Growth Rate of Re	al Wage per Worker	Growth Rate of Res	al NVA per Worker				
	1980-81 to 1990-91 1990-91 to 2003-0		1980-81 to 1990-91	1990-91 to 2003-04				
15	7.7%	0.3%	12.3%	3.6%				
16	2.6%	0.2%	9.1%	6.9%				
17	1.2%	-1.7%	5.1%	1.2%				
18	0.9%	1.3%	10.1%	-1.6%				
19	0.2%	-0.9%	8.9%	-1.3%				
20	2.3%	1.2%	6.5%	2.7%				
21	2.0%	-0.2%	7.1%	1.9%				
22	3.4%	0.1%	5.4%	10.2%				
23	4.2%	3.0%	10.1%	12.0%				
24	3.1%	-0.7%	6.7%	6.5%				
25	2.3%	-0.5%	6.8%	2.9%				
26	1.7%	0.9%	9.2%	4.1%				
27	1.8%	2.4%	8.3%	8.3%				
28	3.5%	0.8%	5.5%	3.8%				
29	2.9%	0.4%	5.9%	5.1%				
30	0.4%	1.1%	10.7%	9.3%				
31	2.2%	-0.7%	5.9%	2.4%				
32	1.6%	1.0%	10.4%	6.1%				
33	4.1%	-0.4%	2.3%	7.7%				
34	3.6%	-0.3%	7.8%	5.1%				
35	2.2%	0.2%	7.1%	10.0%				
36	-1.5%	1.9%	-1.0%	7.7%				
Total	2.7%	-0.2%	7.8%	5.6%				

Source: Computed from the database of EPWRF on ASI, Time Series Data, Second Edition.

Note: Two-digit industry codes (As per NIC-1998):15- manufacture of food products & beverages; 16-manufacture of tobacco products; 17-manufacture of textiles; 18- manufacture of wearing apparel; dressing and dyeing of fur; 19- leather and leather products; 20-wood and wood products; 21- paper and paper products; 22- publishing, printing and reproduction of recorded media; 23- manufacture of coke, refined petroleum products and nuclear fuel; 24-chemicals and chemical products; 25- rubber and plastics products; 26- non-metallic mineral products; 27- basic metals and alloys; 28- metal products and parts;29- machinery and equipment; 30-manufacture of office, accounting and computing machinery; 31- manufacture of electrical machinery and apparatus; 32- manufacture of radio, television and communication equipment and apparatus; 33- manufacture of medical, precision and optical instruments, watches and clocks; 34-manufacture of motor vehicles, trailers and semi-trailers; 35- manufacture of other transport equipment; 36-manufacture of furniture; manufacturing n.e.c.

Table 4.9: Average Salary (in Real Terms) - in Rs. Lakhs

Year	Gujarat	Orissa	Rajasthan	Tamil Nadu	India
1980-81	0.24	0.25	0.26	0.22	0.24
1981-82	0.22	0.27	0.24	0.20	0.23
1982-83	0.26	0.36	0.18	0.22	0.26
1983-84	0.25	0.35	0.24	0.24	0.26
1984-85	0.31	0.27	0.25	0.25	0.29
1985-86	0.31	0.28	0.35	0.28	0.29
1986-87	0.31	0.31	0.31	0.31	0.30
1987-88	0.30	0.37	0.32	0.31	0.31
1988-89	0.23	0.33	0.26	0.21	0.24
1989-90	0.22	0.37	0.36	0.22	0.26
1990-91	0.24	0.20	0.28	0.20	0.25
1991-92	0.15	0.21	0.27	0.19	0.18
1992-93	0.31	0.25	0.23	0.11	0.27
1993-94	0.33	0.39	0.07	0.12	0.23
1994-95	0.30	0.23	0.35	0.19	0.26
1995-96	0.33	0.19	0.36	0.20	0.21
1996-97	0.34	0.35	0.37	0.19	0.27
1997-98	0.37	0.35	0.38	0.29	0.30
1998-99	0.34	0.21	0.32	0.23	0.28
1999-2000	0.37	0.33	0.39	0.27	0.32
2000-01	0.41	0.35	0.39	0.31	0.37
2001-02	0.44	0.30	0.38	0.24	0.35
2002-03	0.46	0.16	0.40	0.29	0.37
2003-04	0.51	0.00	0.41	0.30	0.40
2004-05	0.55	0.38	0.39	0.35	0.45
2005-06	0.57	0.45	0.46	0.40	0.52
2006-07	0.63	0.39	0.48	0.21	0.48
2007-08	0.69	0.70	0.46	0.54	0.65

Table 4.10: Unit Labour Costs (in Real Terms)

(i)Period I: 1980-81 to 1997-98

Year	Gujarat	Orissa	Rajasthan	Tamil Nadu	India
1980-81	0.46	0.62	0.45	0.47	0.51
1981-82	0.42	0.60	0.46	0.47	0.47
1982-83	0.46	0.71	0.56	0.44	0.48
1983-84	0.35	0.62	0.40	0.47	0.46
1984-85	0.41	0.87	0.50	0.42	0.51
1985-86	0.42	0.70	0.52	0.46	0.48
1986-87	0.39	0.62	0.41	0.47	0.48
1987-88	0.39	0.67	0.60	0.51	0.50
1988-89	0.35	0.38	0.51	0.43	0.45
1989-90	0.37	0.33	0.49	0.40	0.42
1990-91	0.35	0.35	0.39	0.36	0.40
1991-92	0.39	0.39	0.42	0.39	0.38
1992-93	0.29	0.40	0.36	0.34	0.38
1993-94	0.27	0.37	0.38	0.28	0.32
1994-95	0.22	0.35	0.31	0.32	0.33
1995-96	0.24	0.34	0.32	0.32	0.32
1996-97	0.22	0.47	0.42	0.34	0.33
1997-98	0.31	0.29	0.28	0.42	0.33

(ii) Period II: 1998-99 to 2007-08

Year	Gujarat	Orissa	Rajasthan	Tamil Nadu	India
1998-99	0.22	0.37	0.33	0.35	0.31
1999-2000	0.26	0.31	0.24	0.35	0.31
2000-01	0.29	0.41	0.26	0.35	0.35
2001-02	0.29	0.50	0.28	0.38	0.35
2002-03	0.23	0.38	0.30	0.41	0.32
2003-04	0.20	0.35	0.29	0.35	0.29
2004-05	0.19	0.21	0.26	0.35	0.25
2005-06	0.16	0.22	0.25	0.31	0.24
2006-07	0.19	0.19	0.18	0.30	0.22
2007-08	0.18	0.18	0.23	0.31	0.22

Table 4.11: Fixed Capital per Worker (at 1993-94 prices) - in Rs.Lakhs

(i) Period I: From 1980-81 to 1997-98:

Year	Gujarat	Orissa	Rajasthan	Tamil Nadu	India
1980-81	1.22	1.89	2.34	0.83	1.29
1981-82	1.25	1.95	2.41	0.92	1.35
1982-83	1.33	2.33	2.36	0.98	1.51
1983-84	1.68	2.74	2.57	1.16	1.78
1984-85	1.92	3.01	3.07	1.21	1.94
1985-86	1.95	2.76	3.32	1.47	2.02
1986-87	2.22	3.37	3.55	1.56	2.16
1987-88	2.62	5.50	3.18	1.65	2.33
1988-89	2.47	6.24	3.56	1.87	2.33
1989-90	2.45	5.93	2.94	1.80	2.42
1990-91	3.30	5.36	3.72	1.96	2.80
1991-92	2.89	5.40	3.03	1.86	2.77
1992-93	3.67	5.66	4.13	1.90	2.99
1993-94	4.21	6.34	3.29	2.24	3.38
1994-95	4.61	7.92	5.23	2.84	3.76
1995-96	7.47	8.77	5.06	2.74	4.08
1996-97	6.62	12.18	5.32	2.98	4.49
1997-98	8.50	9.71	6.08	2.97	4.81

(ii) Period II: From 1997-98 to 2007-08:

Year	Gujarat	Orissa	Rajasthan	Tamil Nadu	India
1998-99	9.85	9.82	5.62	3.33	5.30
1999-2000	9.35	8.26	9.71	3.64	5.51
2000-01	10.58	9.41	6.33	3.29	5.30
2001-02	12.93	10.22	6.17	3.10	5.62
2002-03	11.97	8.79	5.45	3.63	5.54
2003-04	12.01	12.34	5.51	3.69	5.86
2004-05	10.24	9.80	5.07	3.48	5.55
2005-06	12.12	14.53	4.85	3.67	5.77
2006-07	11.28	15.18	5.10	3.58	5.83
2007-08	10.94	17.92	4.87	3.71	6.19

Table 4.12: Wage-Rental Ratio

(i)Period I: From 1980-81 to 1997-98:

Year	Gujarat	Orissa	Rajasthan	Tamil Nadu	India
1980-81	37.12	147.68	41.50	41.02	30.49
1981-82	33.94	106.58	38.73	36.40	30.85
1982-83	40.90	53.93	39.34	29.19	29.49
1983-84	32.13	88.51	40.52	23.29	27.22
1984-85	28.04	63.69	38.25	19.11	26.55
1985-86	26.88	56.73	11.76	17.70	22.76
1986-87	20.03	48.81	25.46	15.74	22.01
1987-88	16.14	40.09	24.00	14.75	19.22
1988-89	16.83	33.04	15.09	16.22	17.32
1989-90	17.82	29.77	14.22	15.85	16.88
1990-91	12.43	38.75	12.57	14.61	15.10
1991-92	13.88	27.97	9.92	12.54	11.76
1992-93	10.53	41.07	16.06	10.09	12.39
1993-94	6.50	15.07	11.52	8.35	9.70
1994-95	5.46	6.80	11.79	8.60	9.04
1995-96	4.28	7.80	3.94	8.46	6.65
1996-97	4.31	5.84	1.85	6.61	6.28
1997-98	2.88	7.17	1.56	4.00	4.48

(ii) Period II: From 1998-99 to 2007-08

Year	Gujarat	Orissa	Rajasthan	Tamil Nadu	India
1998-99	3.41	3.74	5.59	4.85	4.39
1999-2000	3.19	4.01	3.00	3.89	4.06
2000-01	3.14	9.97	5.33	5.40	4.85
2001-02	3.66	13.41	2.92	5.71	5.26
2002-03	3.03	6.66	4.01	6.72	5.46
2003-04	3.14	5.23	4.28	5.77	5.02
2004-05	3.35	6.32	4.75	6.96	5.16
2005-06	3.80	5.96	4.49	5.49	4.99
2006-07	4.34	4.83	4.26	7.43	4.80
2007-08	4.78	6.99	5.45	5.84	4.74

Table 4.13: Ratio of Workers to Total Persons Engaged (%)

(i)Period I: From 1980-81 to 1997-98

Year	Gujarat	Orissa	Rajasthan	Tamil Nadu	India
1980-81	80.1%	77.2%	77.0%	78.9%	77.0%
1981-82	79.2%	76.2%	75.1%	77.9%	77.3%
1982-83	80.8%	73.6%	72.4%	79.3%	77.3%
1983-84	80.0%	74.9%	79.3%	78.9%	77.0%
1984-85	79.3%	73.4%	76.7%	78.0%	76.3%
1985-86	78.5%	74.3%	76.5%	79.2%	76.7%
1986-87	77.9%	75.7%	76.6%	78.8%	76.9%
1987-88	77.5%	76.0%	76.5%	78.6%	76.7%
1988-89	76.7%	76.1%	74.7%	78.9%	76.7%
1989-90	77.1%	75.6%	75.3%	78.7%	76.6%
1990-91	76.1%	75.7%	73.8%	78.5%	76.2%
1991-92	75.3%	75.8%	70.9%	78.3%	75.4%
1992-93	74.1%	76.6%	71.9%	77.8%	75.3%
1993-94	73.7%	74.7%	72.2%	78.7%	75.0%
1994-95	73.0%	75.7%	73.1%	78.9%	75.5%
1995-96	70.2%	76.7%	73.0%	79.1%	74.7%
1996-97	75.0%	74.3%	73.4%	79.1%	75.6%
1997-98	74.5%	75.6%	73.2%	79.0%	76.0%

(ii)Period II: From 1998-99 to 2007-08

Year	Gujarat	Orissa	Rajasthan	Tamil Nadu	India
1998-99	74.5%	67.3%	73.8%	81.3%	74.1%
1999-2000	74.5%	75.5%	75.4%	80.5%	76.8%
2000-01	73.6%	77.0%	75.6%	81.4%	76.8%
2001-02	73.2%	77.3%	77.0%	81.8%	76.9%
2002-03	73.7%	78.4%	78.2%	81.8%	77.6%
2003-04	73.8%	78.8%	78.1%	81.5%	77.3%
2004-05	75.0%	80.1%	77.3%	82.5%	78.1%
2005-06	75.4%	76.3%	78.1%	82.2%	78.3%
2006-07	76.2%	77.0%	78.7%	70.9%	76.3%
2007-08	76.3%	78.6%	75.2%	82.8%	78.4%

Table 4.14: Ratio of Wages to Net Value Added (1980-81 to 2007-08)

Year	Gujarat	Orissa	Rajasthan	Tamil Nadu	India
1980-81	0.31	0.43	0.29	0.31	0.33
1981-82	0.28	0.38	0.30	0.31	0.30
1982-83	0.30	0.42	0.38	0.29	0.31
1983-84	0.24	0.38	0.27	0.31	0.29
1984-85	0.26	0.56	0.34	0.27	0.32
1985-86	0.27	0.45	0.33	0.31	0.30
1986-87	0.24	0.40	0.27	0.30	0.31
1987-88	0.25	0.40	0.38	0.33	0.32
1988-89	0.23	0.23	0.32	0.29	0.30
1989-90	0.24	0.19	0.30	0.26	0.27
1990-91	0.22	0.22	0.25	0.24	0.26
1991-92	0.26	0.24	0.25	0.26	0.25
1992-93	0.16	0.25	0.24	0.24	0.23
1993-94	0.15	0.18	0.21	0.19	0.20
1994-95	0.12	0.22	0.18	0.21	0.20
1995-96	0.12	0.22	0.18	0.21	0.20
1996-97	0.12	0.28	0.24	0.22	0.20
1997-98	0.18	0.19	0.16	0.27	0.20
1998-99	0.11	0.20	0.18	0.21	0.17
1999-2000	0.13	0.18	0.13	0.19	0.17
2000-01	0.15	0.24	0.14	0.20	0.19
2001-02	0.14	0.31	0.15	0.22	0.19
2002-03	0.11	0.23	0.17	0.24	0.17
2003-04	0.10	0.19	0.16	0.20	0.15
2004-05	0.09	0.12	0.14	0.20	0.13
2005-06	0.08	0.12	0.13	0.17	0.12
2006-07	0.09	0.10	0.10	0.16	0.11
2007-08	0.09	0.10	0.11	0.16	0.11

Table 4.15: Ratio of Profits to Net Value Added

(i)Period I: From 1980-81 to 1997-98:

Year	Gujarat	Orissa	Rajasthan	Tamil Nadu	India
1980-81	0.22	0.16	0.19	0.26	0.18
1981-82	0.28	0.14	0.19	0.25	0.24
1982-83	0.25	-0.15	0.03	0.28	0.20
1983-84	0.38	-0.02	0.27	0.23	0.24
1984-85	0.30	-0.40	0.13	0.31	0.15
1985-86	0.27	-0.19	-0.01	0.24	0.18
1986-87	0.28	-0.13	0.22	0.21	0.16
1987-88	0.23	-0.23	-0.12	0.14	0.12
1988-89	0.27	0.24	-0.19	0.26	0.17
1989-90	0.27	0.33	0.01	0.29	0.20
1990-91	0.25	0.26	0.16	0.35	0.22
1991-92	0.10	0.18	0.11	0.27	0.18
1992-93	0.34	0.04	0.23	0.29	0.21
1993-94	0.37	0.08	0.01	0.43	0.32
1994-95	0.51	0.13	0.25	0.38	0.34
1995-96	0.44	0.10	0.22	0.37	0.32
1996-97	0.46	-0.15	-0.11	0.31	0.29
1997-98	0.08	0.28	0.17	0.16	0.27

(ii) Period II: From 1998-99 to 2007-08:

Year	Gujarat	Orissa	Rajasthan	Tamil Nadu	India	
1998-99	0.39	0.01	0.22	0.26	0.33	
1999-2000	0.34	0.19	0.26	0.23	0.31	
2000-01	0.24	-0.02	0.36	0.27	0.25	
2001-02	0.22	-0.16	0.28	0.23	0.24	
2002-03	0.49	0.09	0.31	0.20	0.36	
2003-04	0.59	0.13	0.42	0.35	0.46	
2004-05	0.65	0.57	0.52	0.39	0.56	
2005-06	0.71	0.59	0.56	0.46	0.59	
2006-07	0.65	0.64	0.66	0.47	0.61	
2007-08	0.68	0.64	0.58	0.45	0.62	

Table 4.16: Share of Wages and Profits in Net Value Added; Two-Digit Industries

Industry Code	Wages by NVA (By Years)		Profits by NVA (By Years)			
	1980-81	1990-91	2003-04	1980-81	1990-91	2003-04
15	31.5%	25.7%	20.9%	10.3%	29.9%	19.5%
16	45.3%	30.1%	16.0%	27.9%	51.6%	73.0%
17	48.7%	41.4%	35.1%	14.2%	14.1%	0.7%
18	35.2%	18.0%	32.9%	14.9%	58.3%	27.1%
19	40.9%	21.9%	28.7%	10.4%	31.4%	28.5%
20	31.4%	25.9%	26.4%	29.1%	32.3%	20.5%
21	30.5%	23.0%	21.8%	21.6%	26.6%	24.6%
22	40.4%	41.3%	14.7%	22.3%	6.4%	41.1%
23	10.5%	7.4%	3.1%	55.3%	80.4%	88.4%
24	20.3%	17.9%	9.0%	27.0%	23.1%	53.8%
25	24.9%	20.1%	16.2%	18.8%	31.4%	41.7%
26	34.3%	20.7%	17.3%	24.3%	29.6%	32.7%
27	34.4%	22.9%	13.8%	19.3%	25.8%	46.3%
28	24.9%	25.3%	21.7%	33.1%	12.3%	34.5%
29	28.3%	26.3%	18.0%	26.8%	26.7%	33.6%
30	23.7%	11.0%	5.0%	22.2%	19.8%	67.3%
31	22.5%	19.4%	16.3%	37.3%	35.2%	31.7%
32	35.3%	18.9%	12.5%	7.3%	13.3%	26.9%
33	19.5%	28.7%	13.1%	12.0%	7.9%	40.5%
34	29.1%	24.0%	15.1%	28.0%	33.5%	52.3%
35	53.4%	41.4%	15.4%	2.8%	19.9%	57.2%
36	33.0%	38.7%	23.5%	31.7%	16.9%	39.1%
Total	33.3%	25.1%	15.1%	21.7%	28.0%	45.6%

Source: Computed from the database of EPWRF on ASI, Time Series Data, Second Edition.

Note: Two-digit industry codes (As per NIC-1998):

15- manufacture of food products & beverages; 16- manufacture of tobacco products; 17-manufacture of textiles; 18- manufacture of wearing apparel; dressing and dyeing of fur; 19- leather and leather products; 20-wood and wood products; 21- paper and paper products; 22- publishing, printing and reproduction of recorded media; 23- manufacture of coke, refined petroleum products and nuclear fuel; 24-chemicals and chemical products; 25- rubber and plastics products; 26- non-metallic mineral products; 27- basic metals and alloys; 28- metal products and parts; 29- machinery and equipment; 30-manufacture of office, accounting and computing machinery; 31- manufacture of electrical machinery and apparatus; 32-manufacture of radio, television and communication equipment and apparatus; 33- manufacture of medical, precision and optical instruments, watches and clocks; 34- manufacture of motor vehicles, trailers and semi-trailers; 35- manufacture of other transport equipment; 36- manufacture of furniture; manufacturing n.e.c.