IAMR Report No. 7/2013

Factors Impacting Non-Agricultural Employment Growth: A Study in Tamil Nadu

Institute of Applied Manpower Research

Planning Commission, Government of India

Factors Impacting Non-Agricultural Employment Growth: A Study in Tamil Nadu

Institute of Applied Manpower Research
Planning Commission, Government of India

Acknowledgements

The Institute of Applied Manpower Research (IAMR) is thankful to the members of the Standing Committee on Research Programme (SCRP) of IAMR for approving the study on Non-agricultural Employment Growth in Selected States, and giving its valuable guidance to conduct the study. The study was organized in three States Uttar Pradesh, West Bengal, Tamil Nadu in close collaboration with Giri Institute of Development Studies, Lucknow; Institute for Development Studies, Kolkata. (IDSK), Institute of Development Alternatives, Chennai. IAMR is grateful to all of them for making valuable contributions.

Dr. I.C. Awasthi, Joint Director (overall in-charge) was involved in coordinating with the state teams in finalization of survey methods, development of tools, sampling and organizing fieldwork and focus group discussions at various places across the states. He was also involved in preparing a framework for report writing. The Institute put on records sincere gratitude to his valuable contributions.

Institute's faculty Mr. S.K. Sharma, Dy. Director, Mr. A.K. Mathur, Dy. Director, Dr. Bimal Kumar Sahoo, Dy. Director, Mrs. Aditi Roy, Astt. Director, Mr. Radhey Shyam, Asstt. Director and Deboshree Ghosh, Young Professional were also involved in supervising the data collection at field level. Special thanks to all the staff of IAMR who played important roles in completing the primary survey. Thanks are also due to Mrs. Dipika Sen, Asstt. Editor for editing the reports.

Contents

List of Tables

Executive Summary

Tamil Nadu is one of the most industrialised and urbanized state in the country and fast growing economy particularly since the 1990s. By 2005 the state accounted for 15.2 percent of the total number of factories in the country, 9.9 percent of fixed capital, 14.9 percent of persons employed, 9.8 percent of the gross value of output and 9 percent of the net value added. However, there have been some setbacks in recent years, as the growth rate of industrial sector has dropped drastically from 5.0 percent in 2007-08 to 1.7 percent in 2008-09. The National Sample Survey Organization (NSSO) data also point to a particularly acute decline in employment absorption in the state as compared to other states with similar growth rates in Net State Domestic Product.

Objective of the Study

1. To identify the important factors responsible for sudden decline in the growth of industrial sector from 5.0 percent in 2007-08 to 1.7 percent in 2008-09.
2. To assess the employment absorption capacity of Tamil Nadu as compared to other states with similar growth rates in Net State Domestic Product.

Methodology and Sampling Technique

This report was based on a survey of a sample of enterprises across fast growing manufacturing sectors, construction, and wholesale & retail trade in the state.

Findings of the Study

It emerges from the survey that, increase in nominal wages per se did not affect the firms' operations or profits, but issues regarding availability of workers – both skilled and un-skilled were matters of concern. Shortage of un-skilled workers was more pronounced in textiles and leather and skilled in automobiles and chemicals. While some of the effects of out-migration is nullified with in-migration, lack of training was adding to the skill deficits. NREGA was seen by a good section of the sample firms as a hindrance to accessing labour. Labour laws were not seen as a hindrance to firm expansion by the majority of the sample firms. Reduction in employment absorption appears to be an outcome of technological changes in sectors like textiles, automobiles, chemicals and garments. This is in line with world-wide trends in manufacturing. Given a greater exposure to the global market, it is also possible that firms in Tamil Nadu are accessing frontier technologies to compete and further reinforcing the decline in employment absorption observed.

Looking at the changes in demand across gender and across employment categories, we find that in manufacturing a larger share of firms report a decrease across all categories – use of female labour, regular labour and contractual labour. Interestingly, over 55 percent of the firms report a

decline in the contractual labour. In the case of large firms in manufacturing, we find that the share of firms reporting decreases across all skill types and job types is much lower as compared to the medium and smaller firms. Interestingly, in the case of retail, unlike manufacturing, we find that, on the whole, there is an increase in demand for labour across all categories. In the construction sector, increasing trends in the employment of non-managerial skilled labour have been attributed to the availability of such labour at lower wages.

Across the two-time periods 2000-05, and 2005-10, there appears to be a growing difficulty in accessing both skilled and un-skilled labour in equal measure. This difficulty is attributed mainly to the short supply of labour force. While in 2000-05, firms perceived rising wage rates of non-managerial skilled and un-skilled labour as a problem, in the subsequent period, their perception has changed. But rising wage rates of non-managerial skilled labour seem to be a more important factor in the more recent period. Rising salaries of managerial professionals is another factor that is significant in the recent period. With regard to the migration issues, both in-migration and out-migration are perceived as a problematic issue in the first period but in-migration is seen as a lesser problem in the second period. Lack of training continues to be a problem in both the periods. In the case of retail sector, social security acts are listed by all respondents to affect the sector negatively. Infrastructural issues presented very different picture across firms. First and foremost is the issue of power supply. While close to 20 percent of the firms in manufacturing considered power problems as very serious in 2005, by 2010 more than 65 percent faced serious power problems.

CHAPTER I

Introduction

Tamil Nadu is one of the most industrialised and urbanized states in the country and fast growing economy particularly since the 1990s. In the midst of the ongoing economic slowdown across the world, Tamil Nadu has posted a growth rate of 12 percentage points during 2011-12 as against the nation's overall growth rate of only 6.5 percent. Moreover, with investments to the tune of Rs. 6,711 crores in 2011-12, the state has emerged as an attractive destination for Foreign Direct Investment (FDI) inflows. With a high human capital index, the state also boasts of a well-qualified labour force and complements this with the largest number of technical institutes in the country. The state is also reputed for its excellent physical infrastructure and ranks among the top in terms of infrastructure index. It is not only home to the third largest number of Special Economic Zones (SEZ) in the country, but importantly, has used the SEZ route to attract productive investments in sectors like automobiles and electronics. In the previous fiscal, the Government has signed a total of 12 Memorandum of Understandings, (MoU) which amount to an investment worth Rs.25,050 crores. It has also undertaken Issued Structured Sanctioning Packages (ISSP) for a total of seven projects and these are valued at Rs.5,642 crores.

According to the Annual Survey of Industries (ASI) data (2005-06), Tamil Nadu holds the *numero uno* position in terms of the number of factories and total number of persons engaged in various industrial processes across the country. As for fixed and productive capital, gross value of output and net value added, the state occupies the third position in the country. The state accounts for 15.17 percent of the total number of factories in the country, 9.94 percent of fixed capital, 14.88 percent of persons employed, 9.76 percent of the gross value of output and 8.97 percent of the net value added. However, there have been some setbacks in recent years partly on account of the global economic slowdown and partly due to state level factors like acute power shortages. According to the Index of Industrial Production, the growth of industrial sector has dropped drastically from 5.0 percent in 2007-08 to 1.7 percent in 2008-09. In examining the data provided by the Tamil Nadu Economic Appraisal, the income from the manufacturing sector as a contribution to GSDP stands at Rs. 44,758 crores as opposed to Rs.43,874 crores in the previous year; a growth rate of 1.77 percent which is a decelerated growth rate as compared to the previous year.

With regard to employment in the state, organized sector employment constitutes 10 percent of the total employment. While public sector accounts for two-thirds of the labour absorption, the remaining is accounted for by the private sector. In numbers, organized employment has shown a minute increase from 23.35 lakhs in 2007-08 to 23.62 lakhs in 2008-09 and this additional employment has been emerged primarily in the private sector. A drop by 757 jobs in the public sector has been compensated by the private sector, generating an aggregate additional employment of 27,552 in 2008-09. The National Sample Survey (NSS) 61st round results on 'Employment & Unemployment Situation in India' (04-05) has defined unemployment rates according to Usual Status, Current Weekly and Current Daily status. According to the report, a higher rate of unemployment has been observed in the educated

population (15-59 years) and is also particularly higher among women. Further, the total number of applicants on the Live Register, which is a tool to assess unemployment situation in organized sectors, at the end of April 2009, stood at 54.75 lakhs. Surprisingly, 70 percent of these were educated. It has been observed that there is a consistent rise in the levels of unemployment with an increase in the level of education within the states across all categories. It is often the lowest among the illiterates and the highest among the educated.

As per unemployment rates in Tamil Nadu (in 2009-10, Usual Principal and Subsidiary Status, (UPSS) for age group 15-59 yrs) was 1.5 percent for rural males, 0.9 percent for rural females, 1.2 percent overall, and 2.2 percent for urban males, 1.6 percent for urban females and 1.8 percent overall. The urban areas showed higher rates of unemployment as compared to their rural counterparts. As for the unemployment rates, it stands 8^{th} and 6^{th} for urban and rural unemployment. The NSSO data also point to a particularly acute decline in employment absorption in the state as compared to other states with similar growth rates in Net State Domestic Product like West Bengal (Institute of Applied Manpower Research (IAMR), 2012). This report, based on a survey of a sample of enterprises across fast growing manufacturing sectors, construction, and wholesale & retail trade in the state, seeks to identify some factors responsible for this phenomenon. In the next sub-section, we situate this study in the larger context of changes in output and employment absorption in India across different sectors.

There has been a general recognition of the decline in both quality and quantity of employment generated in the post-reforms period (NCEUS, 2008; Majumdar and Sarkar 2004; Kannan and Raveendran, 2009). A recent study by IAMR (2012) shows that employment in manufacturing in the country as a whole had fallen in the second half of the decade from 55.8 million in the first half to 50.7 million. Importantly, this decline in employment has been uneven, with states like Jharkhand, Tamil Nadu and Uttar Pradesh witnessing declines and other states like Haryana, Delhi and Gujarat witnessing some increases. An even more worrying trend that the report points out is the decline in manufacturing employment in states like Maharashtra and Tamil Nadu which are known for their strong manufacturing base. Even as there is a decline in manufacturing employment, there also has been an increase in non-manufacturing employment over this time period, and this is true of all states. This can be explained by the boom in the construction sector in this period. In terms of employment generated by the service sector, on the whole, there have been increases in most of the states with the exception of Tamil Nadu, Madhya Pradesh and Tripura. On the whole, it is clear that inadequate employment generation in the manufacturing sector has emerged as a major policy concern, particularly in the wake of a massive decline in employment in the agricultural sector. While the growth in construction sector has been able to partly offset the lack of employment absorption, the quality of employment and sustainability of this process leave a lot to be desired. The motivation for this study stems from these observations. Tamil Nadu has been a state that despite having witnessed a fairly rapid economic growth has fared badly in employment generation in both absolute and relative terms. The following table provides an indication of this trend.

Table 1.1: Employment (in millions) and Employment Share of Tamil Nadu (2004-5, 2009-10)

	2004-05					2009-10				
	Agri.	**Manufacturing**	**Non-manufacturing**	**Services**	**Total**	**Agri.**	**Manufacturing**	**Non-manufacturing**	**Services**	**Total across states**
Absolute emp.	14.57	6.17	2.12	8.58	31.43	13.36	5.13	3.24	8.26	29.99
Share of emp. across sectors	46.4	19.6	6.7	27.3	100	44.6	17.1	10.8	27.5	100
Share in all India emp.	5.54	11.79	7.81	7.89		5.24	10.74	7.81	7.33	

Source: Adapted from Tables A8, A9 and A10, IAMR (2011)

As can be seen, there has been a fall in employment by over one million each in agriculture and manufacturing sectors, and a fall by 0.32 million in services. Clearly, the increase in employment in non-manufacturing sector by slightly over a million is very inadequate to compensate for the decline in agricultural and manufacturing sectors. This trend has also resulted in the decline in the share of employment in agriculture and manufacturing between the two-time points. Importantly, the state's contribution to the country's employment in the manufacturing sector too has come down during this period from 11.79 percent in 2004-05 to 10.74 percent in 2009-10.

Interestingly, as the following table shows, this decline in the share of manufacturing employment has not been due to a corresponding decline in the growth in manufacturing output. It is true that there has been a slight decline in the share of manufacturing output, but this decline of 0.2 percent is much smaller as compared to the decline in the share of manufacturing employment.

Table 1.2: Sectoral Distribution of Output

	2004-5					2009-10				
	Agriculture	**Manufacturing**	**Non manufacturing**	**Services**	**Total**	**Agriculture**	**Manufacturing**	**Non manufacturing**	**Services**	**Total across States**
GVA	11.2	19.8	11.8	57.2	100	8.7	19.5	8.4	63.5	100
Share in all-India	4.5	9.9	7.6	9		4.5	9.7	5.8	9.3	

Source: Adapted from Tables A12, A13, IAMR (2011)

This obviously leads us to the question of employment elasticity in manufacturing. As can be seen in the table below, the decline in employment in both manufacturing and agriculture is a result of decline in employment elasticity.

Table 1.3: Changes in Employment

	2004-5 to 2009-10				
	Agriculture	**Manufacturing**	**Non-manufacturing**	**Services**	**Total**
Absolute change (in millions)	-1.21	-1.04	1.12	-.32	-1.44
Percentage Change	-1.8	-2.5	4.1	0.3	
Employment elasticity	-0.73	-0.4	5.06	-.09	-0.1

Source: Adapted from Tables A 9, A 10, A15 IAMR (2011)

Chapter II

Trends in Industrial Growth in Tamil Nadu Since 2000

In the post 2000 decade, the Government of Tamil Nadu evinced keen interest in reviving the industrial sector whose contribution to the state GDP and employment were considered vital. The share of secondary sector stood at 22 percent and that of manufacturing – registered and unregistered – approximated to 72 percent of secondary sector during 2004-2005. Hence, the policy initiatives during the 10th and 11th Plan periods focused on technological improvements and modernisation of manufacturing in addition to improving support infrastructure. In fact, the new industrial policy of Tamil Nadu (2003) proposed to achieve number one status for Tamil Nadu in industrial development. The State Policy Note for 2011-2012, Industries Department, Government of Tamil Nadu, projects this province as the fifth largest economy in the India with a sizeable holding of secondary sector at 27.39 percent (2011-12). The official estimates on industrial growth in Tamil Nadu during the decade 2000 confirm robust rates, attributing the same to the industrial policy of the State government in the reforms era of early 1990s. The 'Liberalization Privatization Globalization' (LPG) strategy of the new industrial policy resolution is said to have had an incredible impact on the performance of the Indian states in the industrial frontier. In pursuing a growth-propelled development policy, Tamil Nadu witnessed rapid growth of specific industrial sectors like electronics and automobiles; the attendant impact of the growth multiplier has been the emergence of industrial hubs mainly in auto enterprises and ancillary units.

According to the Tenth Plan report, the annual average growth rate of secondary sector during the period 2002-2007 exceeded the target rate of around 7 percent and reached 9.10 percent. However, the mid-term appraisal of 11th Plan pointed out to the low growth rate of secondary sector at 1.63 percent as against the envisaged plan target of 9.2 percent. The oscillation in the industrial sector was perceptible in the second half of the decade. The state government attributed the set-back in industrial growth in the latter half of the decade to the global recession. In fact, the growth of secondary sector stood at just 1 percent in 2008-09, dwindling further from the previous year's share of 2.25 percent. To quote the list of industries facing crisis as per 11th Plan Survey, "*The manufacturing industries such as textiles, readymade garment apparels, leather and wood products, publishing and printing materials, coke and petroleum products, chemical products, basic metals, non-metallic mineral products, computing machineries and communication equipments have declined sharply in their production which had pulled down the overall GSDP in this sub-group. The export orders of these products were either cancelled or reduced considerably due to 'World Recession"*. An apparent outcome of the distortions in the manufacturing industries caused havoc on the growth of unregistered units whose production levels were dependent on the orders of the registered manufacturing industries and large scale units; the decline in the exports of the latter sector affected the unregistered industrial sector to a larger extent in the 11th Plan period.

It is not only the dismal performance of the aforementioned units that impacted the state industrial growth rate, but also the negative growth in electricity, gas and water supply that disturbed the state industrial trend. It is evident from the study of these units that pressures of

escalating costs and decelerating revenues coupled with subsidy hassles perpetuated the negative growth trend in these units during the 11th Plan period.

The performance of industrial sector is assessed using three main indicators viz., gross output, employment and investment flows. The growth trend in the industrial sector by sub-sector classification is presented in the following table.

Table 2.1: Secondary Sector: Growth Rate of Sub-Sectoral Income at Constant Prices (1999-2000)

(Rs. Crore)

Sub-Sector	2002-03	2003-04	2004-05	2005-06	2006-07 (RE)	2007-08 (QE)	2008-09 (AE)	XI Plan (2007-09)
Manu-facturing	26968 (3.83)	30055 (11.45)	32327 (7.56)	37644 (16.45)	41913 (11.34)	43894 (4.73)	44758 (1.97)	3.35
Manu. Registered	16891 (2.78)	19559 (15.80)	20980 (7.27)	25463 (21.37)	28377 (11.44)	29523 (4.04)	30104 (1.97)	3.01
Manu.Un-registered	10077 (5.64)	10496 (4.16)	11347 (8.11)	12181 (7.35)	13536 (11.12)	14371 (6.32)	14654 (1.83)	4.08
Electricity, Gas & Water Supply	3872 (85.17)	2768 (-28.51)	3098 (11.92)	3012 (-2.78)	2704 (-10.23)	1744 (-35.50)	902 (-48.27)	(-)41.89
Construc-tion	10834 (9.93)	11615 (7.21)	14324 (23.32)	16470 (14.98)	17909 (8.74)	18298 (2.17)	18912 (3.36)	2.77
Secondary Sector	**41674 (9.90)**	**44438 (6.63)**	**49750 (11.95)**	**57126 (14.83)**	**62527 (9.45)**	**63936 (2.25)**	**64572 (1.00)**	**1.63**

Note: 1. Figures in brackets indicate percentage change over the previous year.
2. RE - Revised Estimates, QE - Quick Estimates, AE - Advanced Estimates.
Source: Directorate of Economics and Statistics, Chennai-6.

As far as industrial employment is concerned, the state is said to be a better performer in terms of workforce and net value addition. Shyam Sundar (ILO, 2010) in his study on Industrial Relations System (IRS), presents an interesting table showing the predominance of Tamil Nadu with respect to industrial employment vis-à-vis important states in India.

Table 2.2: Comparison of Industrial Development in Tamil Nadu, 2004-05

Table 1.2 Comparison of industrial development in Tamil Nadu vis-à-vis some important states, 2004-05

State	No. of factories	No. of workers	Net value added (*in millions*)
Maharashtra	18 912	814 599	513 092
Gujarat	13 603	606 847	360 156
Tamil Nadu	21 053	1 046 788	215 674
Karnataka	7 596	431 196	205 318
Jharkhand	1 607	117 466	167 780

Source: http://mospi.nic.in/asi_table3_2004_05.htm, accessed 29 July 2008.

Despite the overarching thrust on increasing industrial growth, there was also a policy emphasis on expanding industrial employment as the following quote from the state government policy reveals: "*Work for all and transition from unskilled to skilled work, integrated attention to rural on-farm and non-farm employment as well as to micro enterprises*

supported by micro credit; a new deal to the self-employed through technology, training, techno-infrastructure and domestic and external trade".

A schematic analysis of sector-wise distribution of workforce sheds light on the fact that the employment potential of secondary sector had been at a low ebb (18%) as compared to primary sector (57%); the employment trend is similar to all-India industrial employment pattern. However, the employment share of manufacturing sector in Tamil Nadu seemed slightly higher than that of the employment in secondary sector as a whole for all-India. It indicates the extent of industrialization in the state. The ILO report of Shyam Sundar attributes the same to the extent of industrialization in Tamil Nadu pointing out that "*the employment and factories data further endorses this fact*".

An uncompromising thrust was laid on private and public investment in the industrial sector (manufacturing and infrastructure) so as to generate gainful employment opportunities to all and promote a balanced regional development. One of the important objectives of the state's New Industrial Policy 2003 had been to create a favourable environment for FDI inflows alongside domestic capital formation. The resources were intended for the purposes of executing infrastructural development programmes and promoting second generation reforms towards attending labour issues and fiscal requirements. According to Tamil Nadu Industrial Guidance & Export Promotion Bureau, the FDI share has seen consistent growth during 1990s and 2000 approximating to 8.56 percent, ranking as third next only to Maharashtra and Delhi. The table below projects the details on the FDI capacity of the Tamil Nadu industrial sector in the neo-liberal and post-liberal years.

Table 2.3: FDI Generation: Tamil Nadu Industrial Performance from 1991 -2004

Sl. No.	State	No. of Approvals			Amount of FDI approved (Rs. crores)	% to total
		Total	Technical	Financial		
1.	Maharashtra	4847	1309	3538	51660.07	17.62
2.	Delhi	2678	304	2374	35308.88	12.05
3.	Tamil Nadu	2621	613	2008	25101.57	8.56
4.	Karnataka	2492	496	1996	24163.69	8.24
5.	Gujarat	1210	558	652	18846.75	6.43
	All India	**25655**	**7599**	**18056**	**293109.68**	**100.00**

Source : Secretariat for Industrial Assistance, GOI.

Major initiatives undertaken by the state towards industrial development during the decade 2000 are outlined below: (a) progressive mapping of public-private-partnerships to fasten the pace of industrialisation; (b) schematic implementation of infrastructural projects like industrial parks, infra-parks, Special Economic Zones etc. and c) impetus on development of small scale industries – specific units like textiles and industrial estates as integral component of industrial employment strategy. At this juncture mention must be made of the "New Anna Marumalarchi Thittam" to promote the growth of Small Scale Industries. As per government estimate in 2005, the scheme covered 335 blocks in Tamil Nadu with an

investment support of 1 crore per block and provided employment to 8335 persons, of which 5,638 were women.

Being a dualist economy, the labour market of Tamil Nadu comprises of unorganised workforce alongside organised industrial workforce. The state assures minimum wages (which is the only legal stipulation that can be enforced on informal sector) for the workforce of unorganised units who are "*urban informal sector labour, agricultural labour, migrant labour, women and child labour and poor landless workers, etc.*" (ILO, 2010). The Labour and Employment department of Tamil Nadu takes pride in addressing concerns of unorganised sector. To quote from the Policy Note, 2011-2012, "*With the rapid growth of the economy, the role of department has widened to cover not only workers in organised sector but also those in the unorganised sector*". As per the state policy note, nearly 2.57 crore persons were employed in the unorganized sector and 2.79 crores constituted the workforce of organized sector. The share of unorganized sector stood at 92 percent in the total workforce of the state.

It is easy to cull out the efforts taken by the State Government in promoting the industrial development from an interesting report titled, "Tamil Nadu hopes to consolidate industrial growth" (*Business Line*, 22 January, 2011), State, "*A number of sector-specific industry policies aimed at sustaining Tamil Nadu's leadership position in industrial investments*", as the report notes, is verily the success strategy of the state. While it is important to appreciate the serene efforts of the state, the underlying complications of the industrial sector, primarily the increasing informalisation, latent social security norms, demand-supply imbalances in the labour market have been insufficiently addressed. Drawing cues from the work of Shyam Sundar (2010), it is put forth that the political considerations have been priority in the industrial policy changes. Admittedly, the industrial and labour market reforms have to be driven by "mass politics' rather than "elite politics", as the author notes. In this context, the author notes with respect to Tamil Nadu that, "*The State has sought to find a middle path through these conflicting policy choices*".

However, we may digress from the positive opinion as it seems that mid-way strategies have not been worked out; this is evident from the insecurity faced by the state industrial sector during the global recession in post-liberal years. In sum, it may be put forth that the unattended problems and suppression of labour force [formal & informal] connote misconstrued political concerns and a palpable need for a pro-labour institutional alliance between state, market and society. This assumes the importance of the fact that even in the services sector we observe a decline in employment generated per unit of output. The factors underlying the declining employment absorption is therefore what this study deals with. The next section addresses the design of the study and the research methods adopted.

CHAPTER III

Sampling Design and Profile of Sample Firms

For the enterprise survey design, both spatial spread and sectoral spread of the growth process were taken on board. Based on the Economic Census 2005 (Enterprise Survey) data, districts were identified according to enterprise concentration. All districts are divided into three categories i.e. high, medium and low, based on their enterprise concentration in the sectors we have chosen for the study. There are 31 districts in the state; hence, ideally each district's share of enterprise should be 3.2 percent. The districts with share less than 2 percent are categorized as low concentration districts, those with a share between 2-4 percent are categorized as medium concentrated districts, and districts with share of more than 4 percent grouped as high concentrated district. The grouping is presented below.

High (Share more than 4 percent)	Medium (Share between 2 percent to 4 percent)	Low (Share less than 2 percent)
Tiruvannamalai 06, Perambalur 16, Tiruchirappalli 15, Vellore 04, Erode 10, Salem 08, Chennai 02, Tirunelveli 29, Coimbatore 12 (These nine districts account for about 51 percentages of enterprises.)	Thiruvallur 01, Krishnagiri 31, Thanjavur 21, Virudhunagar 26, Dindigul 13, Cuddalore 18, Namakkal 09, Kancheepuram 03, Madurai 24, Thoothukkudi 28, Viluppuram 07, (These 11 districts account for about 36 percentages of enterprises.)	Ariyalur 17, The Nilgiris 11, Sivaganga 23, Ramanathapuram 27, Nagapattinam 19, Theni 25, Thiruvarur 20, Pudukkottai 22, Karur 14, Dharmapuri 05, Kanniyakumari 30 (These 11 districts account for about 14 percentages of enterprises.)

We then chose sub-sectors within manufacturing based on their contribution to the state's domestic product SDP. The sectors that were identified to have contributed substantially are food and food products. Based on extended discussions with academics and key stakeholders, we selected 9 districts, 4 from high concentrated districts, 3 from medium and 2 from low category. It was also decided that a full enterprise level survey for construction and trade (wholesale + retail) is not possible. Therefore, a different approach to these three sectors and a different sampling design for the remaining 7 sectors has been adopted. We decided that we will cover around 50 enterprises – 20 for construction, 20 for retail trade and 10 for wholesale trade in addition to conducting detailed interviews with key members of trade associations and conducting focus group discussions with stakeholders in the respective sectors.

As for manufacturing sectors, the total number of enterprises to be covered should be distributed according to: 50 percent from high enterprise concentrated districts, 35 percent from medium concentrated districts and rest 15 percent from low concentrated districts.

For sampling we ensured the following:

3.1 All sectors should be covered in all the sampled districts.
3.2 At least three enterprises in each sector in each district should be covered.
3.3 We should aim at covering around 10percent of the total sampled enterprises as unorganized enterprises.
3.4 All size classes to be covered (minimum 5 workers should be there in an enterprise).
3.5 Focus Group Discussion for each sector with various stakeholders should be held.

Once we selected districts, we established the universe at district level from district level sources (district industrial centre, employees register programme of employment exchanges and inspectorate of factories). From this universe, enterprises were chosen to construct the sample to cover all size classes for this study.

Profile of Sample Firms

Tables 3.1 to 3.4 essentially provide an overview of the profile of the firms surveyed. While Table 3.1 gives an idea about the spread of sample firms across districts with different levels of industrialization and across rural and urban areas, Table 3.2 provides information on the ownership characteristics of the enterprises studied. As can be expected, most of the firms are proprietary or partnership firms in manufacturing and retail, whereas in construction, it is entirely proprietary. In manufacturing, 12 percent of the firms are domestic private limited firms and in the wholesale/retail trade sector, there is just one private limited firm.

Table 3.1: Distribution of Sample Enterprises

Sector	Enterprise concentration			
	High	Medium	Low	Total
Manufacturing				
Rural	56	40	20	116
Urban	133	56	27	216
Total	189	96	47	332
Construction				
Rural		1	0	1
Urban		3	1	4
Total		4	1	5
Retail				
Rural	0	6	0	6
Urban	7	22	6	35
Total	7	28	6	41

Source: Field Survey conducted in the year 2012[1]

[1] All the tables in this report are generated based on the field survey conducted in the year 2012. Hence the source is not repeated.

Table 3.2: Type of Establishments in Our Sample

Type of ownership	Manufacturing		Construction		Retail	
	Number	Share of firms (percent)	Number	Share of firms (percent)	Number	Share of firms (percent)
Proprietary	236	71.08	5	100	39	95.12
Partnership	46	13.86	0	0	1	2.44
Cooperative	8	2.41	0	0	0	0.00
Indian private limited company	42	12.65	0	0	1	2.44
Foreign private limited company	0	0.00	0	0	0	0.00
Indian government/ PSUs company	0	0.00	0	0	0	0.00
Foreign government/ PSUs company	0	0.00	0	0	0	0.00
Non profitable	0	0.00	0	0	0	0.00
All	332	100.00	5	100	41	100.00

In terms of registration (Table 3.3), only 10 percent of the firms report non-registration under any category in manufacturing and retail trade. The proportion of unregistered firms is much higher for construction at 33 percent and 50 percent for computer related services sector.

Table 3.3: Extent of Registration among Sample Firms

Sector	Registered		
	Yes	No	Total
Manufacturing			
Textile	44	7	51
Garments	44	4	48
Food	62	11	73
Manufacture-Engg. related	26	5	31
Leather	32	0	32
Automobile	41	4	45
Computer	34	1	35
Chemical	16	1	17
Construction			
Construction	3	2	5
Retail			
Computer	5	5	10
Wholesale trade	6	1	7
Retail trade	21	3	24

In terms of distribution of the sample firms by employment (in Table 3.4 we find that, overall, the distribution is towards the firms employing less than 25 workers (60%), then 28 percent employing 25-99 workers and the remaining employing more than 100 workers. Except textiles, food and auto sector, most firms in other sectors have less than 100 employees. The leather industry is dominated by the middle segment, whereas auto sector and textiles sector also have a sizeable share among the small firms. Garments, chemicals and food sector too have a good share of small firms.

Table 3.4: Distribution of Enterprise by Size

Sector	Size			
	Large (>100)	**Medium (25-99)**	**Small (<25)**	**Total**
Manufacturing				
Textile	16	16	19	51
Garments	3	12	33	48
Food	14	17	42	73
Manufacture - Engg related	1	12	18	31
Leather	0	22	10	32
Automobile	8	7	30	45
Computer	0	2	33	35
Chemical	0	5	12	17
All	42	93	197	332
Construction				
Construction	0	4	1	5
All	0	4	1	5
Retail				
Computer	0	0	10	10
Wholesale Trade	0	1	6	7
Retail Trade	2	3	19	24
All	2	4	35	41

Having discussed the profile of our sample firms in the next section, we proceed to map the changes in employment trends emerging out of our field survey.

CHAPTER IV

Labour Demand: Trends and Determinants

The following set of tables provides information on patterns of labour demand and changes over time. In manufacturing we find that a larger proportion of firms report a decrease in demand for all categories of labour – non-managerial un-skilled, non-managerial skilled and managerial labour as compared to the share of firms reporting no change or reporting increases (Table 4.1). However, within this, a larger share of manufacturing firms report a large decrease in non-managerial un-skilled labour as compared to the skilled labour, possibly indicating a skill bias over time.

Table 4.1: Employment Trends by Skills

Share of Firms (percent)	Large Decrease		Small Decrease		No Change		Small Increase		Large Increase	
	N	Percent	N	Percent	N	percent	N	percent	N	Per cent
Manufacturing										
Non-Manag. skilled	47	14.33	121	36.89	58	17.68	84	25.61	18	5.49
Non-Manag. un-skilled	64	20.32	81	25.71	55	17.46	105	33.33	10	3.17
Managerial	11	3.85	70	24.48	102	35.66	97	33.92	6	2.10
Construction										
Non-Manag. skilled	0	0.00	5	100.00	0	0.00	0	0.00	0	0.00
Non-Manag. un-skilled	0	0.00	4	80.00	0	0.00	1	20.00	0	0.00
Managerial	0	0.00	0	0.00	0	0.00	3	100.00	0	0.00
Retail										
Regular	3	7.89	6	15.79	13	34.21	16	42.11	0	0.00
Contract	2	22.22	3	33.33	2	22.22	2	22.22	0	0.00
Female	2	8.33	5	20.83	5	20.83	12	50.00	0	0.00

Table 4.2: Employment Trends by Type of Employment and Gender

Share of Firms (percent)	Large Decrease		Small Decrease		No Change		Small Increase		Large Increase	
	N	percent	N	percent	N	percent	N	percent	N	percent
Manufacturing										
Regular	33	11.66	105	37.10	61	21.55	79	27.92	5	1.77
Contract	12	11.65	45	43.69	22	21.36	21	20.39	3	2.91
Female	25	10.29	79	32.51	56	23.05	75	30.86	8	3.29
Construction										
Regular	0	0.00	4	80.00	0	0.00	1	20.00	0	0.00
Contract	0	0.00	2	50.00	0	0.00	2	50.00	0	0.00

Female	1	20.00	2	40.00	2	40.00	0	0.00	0	0.00
Retail										
Regular	3	7.89	6	15.79	13	34.21	16	42.11	0	0.00
Contract	2	22.22	3	33.33	2	22.22	2	22.22	0	0.00
Female	2	8.33	5	20.83	5	20.83	12	50.00	0	0.00

In the case of construction, decreases are reported for non-managerial category, whereas a slight increase is reported for managerial category. In the case of retail, 50 percent of the firms report an increase in managerial staff and more than 42 percent report a small increase in the use of non-managerial skilled labour. A corresponding share of firms reporting a slight decrease in the use of un-skilled labour can also be observed.

Looking at the changes in demand across gender and across employment categories, we find that in manufacturing, once again, a larger share of firms report a decrease across all categories – use of female labour, regular labour and contractual labour (Table 4.2). Interestingly, over 55 percent of the firms report a decline in the contractual labour as compared to just 23 percent reporting any increases in this category. Further, more than 34 percent of the respondent firms also report an increase in the use of female labour. This trend, as interviews with key informants reveal, is definitely true of textiles, garments and the food sectors. In the case of construction, an interesting observation is the decline in female labour. The entry of male migrant labour in large numbers can be an explanation for this phenomenon in addition to technical changes.

In the case of retail, an increase in the use of female labour is reported along with the decrease in the use of contract labour. Proportionately, more than 425 of firms report a slight increase in the use of regular workers.

Table 4.3 provides an overview of labour demand across skill types and firm sizes. In the case of large firms in manufacturing, we find that the share of firms reporting decreases across all skill types and job types is much lower as compared to the medium and smaller firms. In fact, almost equal number of firms report the increases in non-managerial skilled and un-skilled (slightly more for skilled labour), regular and contractual employment as compared to the firms reporting decreases in these categories. In the case of managerial labour, however, a larger share of firms reports an increase in the use. Again, in the case of female labour, more firms report an increase in the use of female labour as compared to firms reporting a decrease in the use of women employees.

Table 4.3: Change in Employment for 2005-2010 by Type of Jobs

Type	Large			Medium			Small		
	Inc	NC	Dec	Inc	NC	Dec	Inc	NC	Dec
Manufacturing									
Non managerial skilled labour	14	12	16	14	21	56	74	25	96
Non-marginal un-skilled labour	15	8	18	20	22	48	80	25	79
Managerial/professional jobs	15	19	4	17	30	36	71	53	41
Regular employment	16	9	17	14	17	58	54	35	63
Contractual employment	7	7	2	7	4	30	10	11	25
Female employment	17	8	12	13	24	35	53	24	57
Any other	0	0	0	0	0	1	0	0	0
Construction									
Non-managerial skilled labour	0	0	0	0	0	4	0	0	1
Non-marginal un-skilled labour	0	0	0	0	0	4	1	0	0
Managerial/professional jobs	0	0	0	2	0	0	1	0	0
Regular employment	0	0	0	0	0	4	1	0	0
Contractual employment	0	0	0	2	0	2	0	0	0
Female employment	0	0	0	0	2	2	0	0	1
Any other	0	0	0	0	0	0	0	0	0
Retail									
Non-managerial skilled labour	1	0	1	1	0	2	17	15	3
Non-marginal un-skilled labour	1	0	1	1	0	2	13	13	6
Managerial/professional jobs	1	0	1	1	0	2	15	8	3
Regular employment	1	0	0	2	0	1	13	13	8
Contractual employment	0	0	0	0	0	1	2	2	4
Female employment	1	0	0	1	0	2	10	5	5
Any other	0	0	0	0	0	0	0	0	0

In the case of medium firms, as we can see, on the whole, a larger proportion of firms report a decline across all categories as compared to the firms reporting increases. In the case of smaller firms, however, the patterns change. An equal number of firms reports increases and decreases in demand for un-skilled non-managerial labour, whereas a slightly larger share of firms reports a decrease in the demand for skilled labour. This is also different from the large firm experience where there is a greater demand for skilled labour over time. However, like the large firms, in small firms too, a larger number of firms report an increase in demand for managerial/professional employees over this time period. Similarly, in terms of female employment the share of firms reporting increases and decreases is more or less equal just as larger firms.

Interestingly, in the case of retail, unlike manufacturing, we find that, on the whole, there is an increase in demand for labour across all categories. Since most firms are small, the overall

pattern holds good for size classes as well. This demand for labour in the retail and wholesale sector may also be indicative of the relatively higher labour intensity of this sector vis-a-vis manufacturing.

As per the survey, the reasons for increasing trends in different types of jobs in the manufacturing sector are listed below (Table 4.4). The Central Government policy has been the primary reason for increasing employment in the non-managerial skilled labour. This is followed by State Government policy, which according to 22 respondents, significantly influences employment. Seventeen out of the 77 persons surveyed are of the opinion that availability of such labour or managers at lower wages influences the employability of such forms of labour. The other factor qualifying as significant influences on the trends in this form of employment is the increase in training in the sector.

Table 4.4: Reasons for Increasing Trends in Different Type of Jobs (2005-2010)

		Main Reasons				
		1	**2**	**3**	**4**	**5**
Manufacturing	**Emp. in non-managerial skilled labour Reason**	Central Govt policy (30)	StateGovt policy (22)	Availability of such labour/ manager at lower wages/ salary (17)	Increase in training in the sector (6)	Availability of such labour/ manager at lower wages / salary (2)
	Emp. in non-man. un-skilled labour Reason	Non availability of such labour/manager at lower wages/salary (47)	State Govt policy (18)	Availability of such labour/manager at lower wages/salary (13)	Availability of such labour/manager at lower wages/salary (6)	Availability of such labour/manager at lower wages/ salary (2)
	Emp in manag/professional jobs Reason	Increase demand due to increase in production requiring skilled labour (17)	Non availability of such labour/manager at lower wages/salary (10	Availability of such labour/manager at lower wages / salary (10)	Availability of such labour/manager at lower wages/salary (8)	Increased mechanizaiton (2)
	Regular employment Reason	Central Govt policy (22)	Increased mechanizaiton (10)	Availability of such labour/manager at lower wages/salary (7)	Increased mechanizaiton (3)	Availability of such labour/ manager at lower wages / salary (1)
	Contractural employment Reason	Increased mechanizaiton (17)	State Govt policy (15)	Non availability of such labour/manager at lower wages/salary (4)	Availability of such labour/manager at lower wages/salary (3)	Decreased demand due to decrease in production requiring skilled labour (1)

	Female employment Reason	Central Govt policy (15)	StateGovt policy (11)	Availability of such labour / manager at lower wages / salary (4)	Increase demand due to increase in production requiring skilled labour (3)	Non availability of such labour/ manager at lower wages/ salary (2)
	Another Reason	Availability of such labour/manager at lower wages/salary (1)	Outflow of labour/professionals to other states (5)			
Construction	**Emp in non-man. skilled labour Reason**	Availability of such labour/manager at lower wages/salary, Central & State Govt Policy (1)	Central & State Govt policy (1)			
	Emp in non-man. un-skilled labour Reason	Non availability of such labour/ manager at lower wages/ salary, Central & State Govt Policy (1)	Central & State Govt policy (1)			
	Emp. in manag/professional jobs Reason	Increase demand due to increase in production requiring skilled labour, Central Govt Policy (1)	State Govt policy (1)			
	Regular employment Reason	Increased mechanizaiton, Central & State Govt Policy (1)	Central & State Govt policy (1)			
	Contractural employment Reason	Increased rural - urban migration, Central & State Govt Policy (1)	Central & State Govt policy (1)			
	Female employment Reason	Central & State Govt policy (1)	Central & State Govt policy (1)			
Retail	**Emp in non-man. skilled labour Reason**	Availability of such labour / manager at lower wages / salary (4)	Increased mechanizaiton (3)	Availability and Non Availability of such labour / manager at lower wages / salary (2)	Availability of such labour / manager at lower wages / salary, Decreased demand due to decrease in production requiring skilled labour (1)	

	Emp in non-man. un-skilled labour	Non availability	Increase in training	Decreased	Non availability	
	Reason	of such labour / manager at lower wages / salary (6)	in the sector and Inflow of labour / professionals to other states (2)	demand due to decrease in production requiring skilled labour 2)	of such labour / manager at lower wages / salary, Increase in training in the sector and Increased rural - urban migration (1)	
	Emp. in manag/professional jobs Reason	Increase demand due to increase in production requiring skilled labour (5)	Availability of such labour / manager at lower wages / salary (3)	Increased mechanizaiton (2)	Availability of such labour / manager at lower wages / salary (2)	
	Regular employment Reason	Increased mechanizaiton (4)	Inflow of labour / professionals to other states, Central Govt Policy (3)	Increased mechanizaiton (2)	Increase in training in the sector (1)	
	Contractural employment Reason	Increased mechanizaiton 5	Inflow of labour / professionals to other states (2)	Availability of such labour / manager at lower wages / salary (1)		
	Female employment Reason	Increased mechanizaiton (3)	Inflow of labour / professionals to other states (2)	Availability of such labour / manager at lower wages / salary, Increased mechanizaiton (1)		

As for employment in non-managerial un-skilled labour, non-availability of such forms of labour at lower wages is the primary reason for the trends in employment, according to those surveyed. Following this, the State Government policies have been rated as the second most important reason by 18 of the respondents. Even availability of such labour or managers at lower wages or salaries has been considered as an important influence on the trends in such jobs. It is possible in this case, that the NREGA is the central government scheme that the employers cite as the reason for the low availability of un-skilled labour at low wages.

In contrast to the above statements, increased demand due to increase in production requiring skilled labour is the most important reason for the varying trends in the case of employment with regard to managerial and professional jobs. Of the 47 responding to this question, 10 each are of the opinion that availability and non-availability of such labour/manager at lower wages/salary

could be the reasons for the trends in such a type of job. Increased mechanization has also qualified as a reason for the same. Twenty-two of the 43 surveyed with regard to reasons for emerging trends in the jobs under regular employment considered Central Government policies as the primary influencing factor. Increased mechanization and availability of such forms of labour at low wages are the other important reasons.

Contractual employment has seen distinct trends due to increased mechanization according to 17 respondents, while another 15 are of the opinion that this is largely due to the State Government policies. Non-availability of such labour due to low wages/salary is another major contributor to the observed trends according to four persons, while the rest believe that the availability of such forms of labour and decreased demand due to decrease in production requiring skilled labour are the reasons for the same.

Trends in female employment have come about largely due to Central and State Government policies, according to 15 and 11 respondents respectively. Also, availability and non-availability of such labour/manager at lower wage/salary and increased demand due to increase in production requiring skilled labour, are important reasons for the same.

In the construction sector, increasing trends in the employment of non-managerial skilled labour have been attributed to the availability of such labour at lower wages, according to those surveyed. However, in the case of employment in non-managerial un-skilled labour, it is the non-availability of such labour at lower wages. Central and State Government policies have also been deemed as significant influences on the trends in the above two forms of employment. As for employment in managerial or professional jobs, increased demand due to increase in production requiring skilled labour is the major influence on trends in this form of employment. However, in the case of regular and contractual employment, increased mechanization and rural-urban migration have brought about significant changes respectively. Overall, the respondents believe that the Central and the State Government policies are the primary cause of increasing trends in all forms of employment, particularly female employment.

In the retail sector, increasing trends in jobs pertaining to regular, contractual and female employment have been attributed to the increased mechanization and inflow of labour/professionals to other states by a majority of the respondents. As for employment in non-managerial skilled and un-skilled labour, and in managerial/professional jobs, primary reasons for varying trends are the availability and non-availability of such labour at lower wages.

A majority of the firms in the manufacturing sector reporting a decrease have pointed out that this is due to the non-availability of labour/manager at lower wages/salary (Table 4.5). Also, another 106 firms reported a decrease due to Central government policies.

Table 4.5: Reasons for Decrease/Increase in Production

Sl. No.	Reasons	Manufacturing		Construction		Retail	
		No of firms reporting for Decrease	No of firms reporting for Increase	No of firms reporting for Decrease	No of firms reporting for Increase	No of firms reporting for Decrease	No of firms reporting for Increase
1	Availability of such labour/ manager at lower wages / salary	98	69	1	0	8	10
2	Non availability of such labour / manager at lower wages / salary	120	74	0	1	12	8
3	Increase demand due to increase in production requiring skilled labour	67	51	0	1	6	7
4	Decreased demand due to decrease in production requiring skilled labour	32	42	0	0	6	6
5	Increase in training in the sector	47	47	0	0	7	4
6	Lack of training in the sector	26	13	0	0	0	1
7	Increased mechanizaiton	62	48	0	1	5	20
8	Decreased mechanization	15	18	0	0	1	1
9	Expansion of this sector in terms of production	18	12	0	0	3	0
10	Contraction of this sector in terms of production	24	15	0	0	3	3
11	Stagnation of this sector in terms of production	21	23	0	0	2	0
12	Increased rural-urban migration	27	8	0	0	2	1
13	Decreased rural-urban migration	21	24	0	0	5	3
14	Outflow of labour/ professionals to other states	5	5	0	0	8	0
15	Inflow of labour/ professionals to other states	6	11	0	0	7	5
16	Central Govt. policy	106	20	6	3	2	6
17	State Govt. policy	89	11	6	3	0	0
18	Central labour laws	10	3	0	0	0	3
19	State labour laws	3	2	0	0	0	0
20	Any other	24	2	0	0	0	0

It was interesting to note that a majority of the firms reporting an increase have also considered the non-availability of such labour/manager at lower wages/salary as the most important reason, followed by the availability of the same. However, in both the cases, the level of training, mechanization or production seem to have a played an insignificant role in the firms. The least influential in both seems to be State labour laws. In contrast, a majority of the firms in the construction sector reporting a decrease and those reporting an increase consider Central and State Government policy as the primary reasons for their respective states. Other reasons, which contributed to the increase and decrease, include the availability of such labour at lower wages and shifts in demand due to increase in production requiring skilled labour.

In the retail sector, non-availability of such labour/manager at lower wages emerged as the principal reason for the firms reporting a decrease, while those reporting an increase attributed it to the increased mechanization, with 20 respondents thinking so. In this sector, apart from the changes in production, variations in inflow and outflow of labour and expansion in the sector have also contributed to the firm's progress. Having mapped the broad changes in employment and factors responsible, in the next section, we focus specifically on how changes in growth of output, product market and input sourcing have contributed to the changes in employment patterns.

CHAPTER V

Sectoral Trends and Effects on Employment Change

Given the diverse nature of firms in the sample in terms of their activities and size, we find that an average value of output and exports per firm does not indicate any gains or erosion of efficiency or growth of firms over time (Table 5.1). This is partly because of the poor quality of the data maintained by firms which are basically small in size. However, it is interesting to note that on an average, the value of outsourced products was around 36 percent of the total production in 2010-11. This is especially high in the case of garments where it crosses more than 60percent. We find that industries like food products have the lowest percentage share of outsourced products. Data on exports point to a number of discrepancies in reporting. This could partly be due to the fact that some of the firms procure final products and are only engaged in exporting activities. However, we do observe that firms do tend to report a higher level of participation in the export market as compared to what we would expect at the all-India level.

Table 5.1: Average Value of Output

Manufacturing	**2010-11**	**2009-10**	**2008-09**
Total value produced	49952276	1228534	1568750
Total value outsourced product	18216360	2597722	1650000
Total value of production exported	22095938	3135938	3625000

In terms of the value of output, we find that 38percent of firms reported less than 1 lakh for the year 2010-11, 22 percent in the 1-10 lakhs, 10 percent in the 10-50 lakhs and 305 in the above 50 lakhs category (Table 5.2). This distribution of firms holds good for the 2 previous years as well. Thus, we find that while a large proportion of the firms are small in terms of output, there are also a substantial number of the relatively bigger ones. This corroborates some of the recent evidences at the all-India level in terms of the absence of medium sized firms in the manufacturing sector.

Table 5.2: Average Value of Output by Sector

Manufacturing Sector	2010-11			2009-10			2008-09		
	Total Value Produced	Total Value Out-sourced Product	Total Value of Production	Total Value Produced	Total Value Out-sourced Product	Total Value of Produc-tion Exported	Total Value Produced	Total Value Out-sourced Product	Total Value of Produc-tion Exported
Textile	11626171	2778211	.	8133175	4889311		11037588	11100275	
Garments	712845.83	437965	.	631293.8			1142979		
Food	109399402	200167.6	1000000	11971753	50182.5		15043847		
Manufac-ture - Engg related	12447964	3450093	7000000	5227679	4160101	800000	16073526	7500003	
Leather	1189055.6	1200323	1276923	943936.3	4403857	1921429	720120	2455160	4210000
Automobile	87566007	43966.17	500000	63381964	52211.67	600000	68397529	79630.11	700000
Computer									
Chemical	1500000			23033333			20500000		

In the manufacturing sector, a majority of the respondents believe that foreign competition of the product has contributed to a growth in the manufacturing sector in the period 2000-05 (Table 5.3). However, this reduces drastically in the next 5-year period. Overall, 83 respondents believe this has contributed to the increasing trends in the manufacturing sector.

Table 5.3: Factors contributing to Growth in Manufacturing Sector in the Period 2000-10

Manufacturing													
Sectoral Trends													
	2000-05					2005-10					percent Change		
	LD	SD	NC	SI	LI	LD	SD	NC	SI	LI	D	NC	I
Foreign competition of the product	9	48	26	40	10	16	23	31	37	37	39	24	83
Domestic competition of the product	9	49	50	136	8	19	23	39	80	120	45	49	190
Number of units of enterprises	10	33	45	177	13	23	31	56	59	141	63	51	199
Capital intensity of production	11	31	15	85	6	17	33	38	31	46	62	15	89
Domestic investment	8	35	22	123	5	13	30	23	59	90	50	29	138
Foreign direct investment	6	25	43	72	6	16	14	39	38	62	34	39	99
Any major change in global economic condition	8	22	32	13	8	16	5	41	18	7	27	28	35
Exports	5	1	19	64	2	15	38	3	1	16	60	22	39

		7						3	8				
Import of raw materials from other states	8	7	28	91	6	7	42	31	23	52	51	27	34
Import of raw materials from other countries	4	8	22	26	5	5	8	23	20	23	15	15	49
Import of intermediate goods from other states	9	10	19	67	4	3	12	34	25	49	26	21	78
Import of intermediate goods from other countries	5	8	9	15	6	5	10	18	7	13	15	11	28
Outsourcing production	6	6	13	56	5	7	19	34	18	19	43	21	35
Existence of trade associations	1	17	35	32	2	2	6	48	26	16	21	37	41
NREGA	0	30	10	12	1	21	9	5	7	12	10	4	40
Existence of trade unions	3	15	26	33	0	2	2	37	30	14	16	30	40
Wages of skilled / unskilled labour	3	34	20	107	2	2	11	25	79	65	28	46	109
Salary of professional / managers	3	43	25	75	1	3	11	32	66	53	16	47	103
Any other	0	1	9	7	0	0	1	9	2	5	5	11	1

Note: LD - Large Decrease, SD - Small Decrease, NC - No Change, SI - Small Increase, LI – Large Increase, D – Decrease, I – Increase

Table 5.4: Sectoral Trends in Construction

Construction													
Sectoral Trends													
	2000-05					**2005-10**					**percent Change**		
	LD	SD	NC	SI	LI	LD	SD	NC	SI	LI	D	NC	I
Foreign competition of the product	0	0	2	0	0	0	0	2	0	0	0	2	0
Domestic competition of the product	0	2	0	2	0	0	0	0	2	2	0	0	4
Number of units of enterprises	0	2	0	3	0	0	0	0	2	3	0	0	5
Capital intensity of production	0	2	0	3	0	0	0	0	2	3	0	0	5
Domestic investment	0	0	1	3	0	0	0	1	0	3	0	1	3
Foreign direct investment	0	0	1	0	0	0	0	1	0	0	0	1	0
Any major change in global economic condition	0	2	0	0	0	0	0	0	2	0	0	0	2
Exports	0	0	0	0	0	0	0	0	0	0	0	0	0
Import of raw materials from other states	0	0	1	0	0	0	0	1	0	0	0	1	0
Import of raw materials from other countries	0	0	1	0	0	0	0	1	0	0	0	1	0

Import of intermediate goods from other states	0	2	0	3	0	0	0	0	2	3	0	0	5
Import of intermediate goods from other countries	0	2	0	3	0	0	0	0	2	3	0	0	5
Outsourcing production	0	2	0	3	0	0	0	0	2	3	0	0	5
Existence of trade associations	0	2	0	0	0	0	0	0	2	0	0	0	2
NREGA	0	0	2	0	0	0	0	2	0	0	0	2	0
Existence of trade unions	0	2	0	0	0	0	0	0	2	0	0	0	2
Wages of skilled / unskilled labour	0	2	0	0	0	0	0	0	2	0	0	0	2
Salary of professional / managers	0	2	0	0	0	0	0	0	2	0	0	0	2
Any other	0	0	0	0	0	0	0	0	0	0	0	0	0

Note: LD - Large Decrease, SD - Small Decrease, NC - No Change, SI - Small Increase, LI – Large Increase, D – Decrease, I – Increase

Table 5.5: Sectoral trends in Retail

Retail													
Sectoral Trends													
	2000-05					**2005-10**					**Percent Change**		
	LD	SD	NC	SI	LI	LD	SD	NC	SI	LI	D	NC	I
Foreign competition of the product	1	14	0	2	0	2	0	0	9	6	2	0	15
Domestic competition of the product	0	14	2	7	0	0	4	0	17	6	0	6	21
Number of units of enterprises	0	12	2	17	2	2	2	0	18	16	4	2	32
Capital intensity of production	1	11	0	20	0	1	0	2	14	19	1	2	33
Domestic investment	3	10	2	3	0	1	3	2	9	3	1	2	15
Foreign direct investment	1	12	3	0	1	0	1	2	13	1	1	1	15
Any major change in globaleconomic condition	1	9	1	10	2	2	2	2	12	9	4	3	20
Exports	0	5	1	6	0	0	1	1	10	4	1	2	13
Import of raw materials from other states	0	1	1	0	0	0	0	1	1	0	0	1	1
Import of raw materials from other countries	0	5	2	4	0	0	7	2	2	0	4	5	2
Import of intermediate goods from other states	0	0	6	1	0	0	0	5	2	0	0	6	1
Import of intermediate goods from other countries	0	1	6	2	0	0	0	5	4	0	0	7	2
Outsourcing production	0	9	2	2	0	0	0	2	13	3	0	2	16
Existence of trade associations	0	15	2	9	0	0	0	0	22	8	0	4	26
NREGA	0	14	2	4	0	0	0	0	18	5	0	1	22
Existence of trade unions	0	0	0	0	0	0	0	0	0	0	0	0	0
Wages of skilled/unskilled labour	0	0	0	0	0	0	0	0	0	0	0	0	0
Salary of professional / managers	0	0	0	0	0	0	0	0	0	0	0	0	0
Any other	0	0	0	0	0	0	0	0	0	0	0	0	0

Note: LD - Large Decrease, SD - Small Decrease, NC - No Change, SI - Small Increase, LI – Large Increase, D – Decrease, I – Increase

Surprisingly, over 190 respondents believe that domestic competition of the product has brought about increasing trends in this sector over 2000-2010. However, domestic competition and the number of units have contributed to a small increase in the first 5-year period and a large increase in the next period, according to a large number of respondents. Another significant contributor to the sectoral trends is domestic investment, which has reported a small increase in 2000-05 and a large increase in the next period of study, according to a significant majority of the persons surveyed.

Similarly, the wages of skilled/un-skilled labour has contributed to an overall increase in this sector, as per the findings, despite registering a fall in the number of respondents who are of the opinion that this factor has contributed to an increase from one 5-year period to the other.

In the construction segment, various factors like the number of units of enterprises and the capital intensity in production have contributed to an overall increase in the changes in this segment, according to the findings from the survey. Another important observation is the positive influence of the import of intermediate goods from other states (Table 5.4).

In the retail segment, the capital intensity of production is shown to have the largest influence amongst all the parameters under consideration, with almost 33 respondents of the opinion that this had led to an increase in sectoral trends in this segment (Table 5.5). Also, the existence of trade associations has had a positive impact on the trends in this sector over a period of 10 years with almost 26 respondents believing so.

Table 5.6: Effect on Employment of Change – Manufacturing

Manufacturing																					
Effect on employment of change																					
Trends	Demand for Regular Employment	Demand for Contractual Employm ent	Demand for Skilled Labour	Demand for Unskilled Labour	Demand for Managers/Professionals	Demand for Women Workers	Rural to Urban Migration	Urban to Rural Migration	Migration to Other states	Migration from Other states	Any Other	Demand for Regular Employment	Demand for Contractual Employment	Demand for Skilled Labour	Demand for Unskilled Labour	Demand for Managers/Professionals	Demand for Women Workers	Rural to Urban Migration	Urban to Rural Migration	Migration to Other statess	Migration from Other states	Any Other
Foreign competition of the product	44	15	29	9	12	2	9	2	2	7	14	13	16	7	7	14	3	6	10	8	5	0
Domestic competition of the product	41	32	30	13	12	4	9	5	5	2	8	10	8	8	8	9	7	11	6	6	2	1
Number of units of enterprises	29	20	40	18	13	4	9	5	7	9	7	22	20	15	3	9	2	2	6	4	6	2
Capital intensity of production	14	15	19	16	23	5	8	7	4	6	10	22	17	7	8	7	5	7	6	5	3	3
Domestic investment	17	22	18	10	18	12	11	9	7	9	9	24	17	9	8	8	5	5	4	6	8	0
Foreign direct investment	22	13	18	8	14	9	13	1	13	4	2	7	10	7	7	7	5	6	3	5	1	0
Any major change in global economic condition	16	20	13	8	9	6	8	4	5	6	3	9	4	1	5	4	5	8	6	4	2	2

Exports	12	11	11	3	6	5	3	3	4	7	4	23	14	17	5	2	3	3	2	18	3	11
Import of raw materials from other states	8	7	10	9	6	5	4	4	7	5	1	16	4	6	1	4	2	3	4	3	4	17
Import of raw materials from other countries	5	4	7	2	6	1	5	4	1	1	3	6	7	1	1	1	1	2	3	4	1	0
Import of intermediate goods from other states	4	1	0	1	2	1	4	0	2	3	1	7	2	7	3	1	0	1	0	4	4	0
Import of intermediate goods from other countries	3	1	3	1	3	3	4	0	1	1	3	7	3	6	0	3	2	0	0	1	0	0
Outsourcing production	2	3	4	2	1	1	0	1	1	1	2	5	3	9	2	3	2	0	0	2	0	12
Existence of trade associations	4	3	1	1	0	3	0	1	0	0	2	6	5	5	6	9	5	2	0	2	2	1
NREGA	5	2	4	3	0	3	1	1	0	0	4	14	4	16	17	6	20	2	1	3	0	1
Existence of trade unions	5	4	3	0	0	0	0	1	1	1	4	3	2	0	1	1	3	0	2	4	0	3
Wages of skilled / unskilled labour	19	18	22	3	2	2	2	1	0	0	7	5	2	1	1	1	1	0	1	3	0	4
Salary of professional / managers	17	16	17	0	6	1	4	1	0	0	6	3	2	1	0	2	1	0	1	0	4	3
Any other	1	0	1	0	1	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0

Table 5.7: Effect on Employment of Change – Construction

Construction																					
Effect on employment of change																					
Trends	Demand for Regular Employment	Demand for Contractual Employment	Demand for Skilled Labour	Demand for Unskilled Labour	Demand for Managers/Professionals	Demand for Women Workers	Rural to Urban Migration	Urban to Rural Migration	Migration to Other states	Migration from Other states	Any Other	Demand for Regular Employment	Demand for Contractual Employment	Demand for Skilled Labour	Demand for Unskilled Labour	Demand for Managers/Professionals	Demand for Women Workers	Rural to Urban Migration	Urban to Rural Migration	Migration to Others states	Migration from Other state	Any Other
Foreign competition of the product	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Domestic competition of the product	2	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Number of units of enterprises	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Capital intensity of production	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Domestic investment	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Foreign direct investment	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Any major change in global economic condition	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exports	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Import of raw materials from	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

other states																						
Import of raw materials from other countries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Import of intermediate goods from other states	1	2	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Import of intermediate goods from other countries	1	2	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0
Outsourcing production	1	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
Existence of trade associations	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
NREGA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existence of trade unions	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Wages of skilled / unskilled labour	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Salary of professional / managers	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Any other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 5.8: Effect on Employment of Change – Retail

Retail																						
Effect on employment change																						
Trends	Demand for Regular Employment	Demand for Contractual Employment	Demand for Skilled Labour	Demand for Unskilled Labour	Demand for Managers/Professionals	Demand for Women Workers	Rural to Urban Migration	Urban to Rural Migration	Migration to Other states	Migration from Other states	Any Other	Demand for Regular Employment	Demand for Contractual Employment	Demand for Skilled Labour	Demand for Unskilled Labour	Demand for Managers/Professionals	Demand for Women Workers	Rural to Urban Migration	Urban to Rural Migration	Migration to Other Sstates	Migration from Other statess	Any Other
Foreign competition of the product	3	2	3	1	1	2	2	2	1	0	2	1	4	1	2	2	0	2	2	1	0	0
Domestic competition of the product	6	4	4	1	2	1	1	0	1	0	4	1	2	0	2	1	1	1	1	0	0	3
Number of units of enterprises	6	5	3	2	2	1	0	0	1	0	9	1	1	1	0	1	1	3	1	1	1	0
Capital intensity of production	2	1	8	1	1	2	1	1	0	0	2	0	3	3	0	2	1	0	2	1	2	0
Domestic investment	3	2	6	0	4	2	1	2	0	0	1	2	0	2	2	0	0	0	0	0	1	0
Foreign direct investment	2	0	3	0	0	2	3	2	0	0	3	0	0	0	0	0	0	1	2	0	0	0
Any major change in globaleconomic condition	2	1	2	1	0	0	0	1	0	0	1	3	2	0	0	0	0	0	1	1	0	0
Exports	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
Import of raw materials from other states	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0

Import of raw materials from other countries	0	0	0	0	0	0	0	0	0	0	0	5	0	3	1	1	1	0	0	0	0	1
Import of intermediate goods from other states	0	0	0	0	0	0	0	0	0	0	0	1	2	1	0	1	0	0	0	0	0	0
Import of intermediate goods from other countries	0	0	0	0	0	0	0	0	0	0	2	0	0	3	0	1	0	0	0	0	0	0
Outsourcing production	1	0	2	0	1	1	0	0	0	0	5	1	0	1	2	3	0	0	0	0	0	0
Existence of trade associations	1	0	2	0	1	1	0	0	0	0	5	0	0	0	0	1	0	0	0	0	0	1
NREGA	1	0	1	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	1
Existence of trade unions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wages of skilled / un-skilled labour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salary of professional / managers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Any other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

In the manufacturing sector as Tables 5.6 to5.8 reveal, foreign competition of the product has largely affected the demand for regular employment, with 44 respondents reporting such an opinion. In the case of the demand for contractual employment, it is domestic competition of the product that has resulted in several trends in the segment. The number of units of enterprises largely influences the demand for skilled and un-skilled labour. As for regular employment, domestic competition and capital intensity of production significantly influence the demand for regular employment. This seems to suggest that capital intensive production also has a skill bias which in turn creates incentives for skilled employment. This of course may not be true for all the sectors and there are likely to be variations across sectors.

In the retail segment, it is observed that the number of units of enterprises has a significant influence on different forms of employment, regular and contractual in particular. As for skilled labour, the capital intensity of production can affect the change in the employment patterns. According to a majority of the sample, domestic investment determines the demand for managers/professionals.

Table 5.9: Employment Details – Manufacturing

	Type of labour	2010-11	2009-10	2008-09
Manufacturing	Casual	3739	3198	2938
	Contractual	531	481	199
	Regular	13846	12773	7910
	Adhoc	0	0	0
Construction	Casual	97	99	9
	Contractual	0	0	0
	Regular	80	77	100
	Adhoc	0	0	0
Retail	Casual	121	119	48
	Contractual	150	155	190
	Regular	676	661	464
	Adhoc	0	0	0

:

In the manufacturing sector, employment of casual labour has increased by 27.26 percent from 2008-09 till 2010-11 (Table 5.9). As for contractual labour, it has registered an increase of 166percent over the same time period. Regular form of labour has risen by 75.04 percent from 2008.

In the construction sector, casual labour has increased over the three years whereas the number working as regular employees declined. In the retail sector, employment in terms of casual labour has more than doubled between 2008-09 and 2010-11. Regular employment has also registered an increase from 464 to 676.

Overall, manufacturing sector has experienced a rise in all forms of employment. While casual labour has more than doubled in both the construction and retail sector, regular employment has fallen in the former and increased in the latter.

Table 5.10: Proportion of Enterprises having Total Value of Output Produced In-house

Value in Manufacturing Sector	2010-11	2009-10	2008-09
< 1 Llakh	56	53	28
1-10 Llakhs	33	24	16
10-50 Lakhs	15	12	8
> 50 Llakhs	44	31	16

Table 5.11: Proportion of Enterprises Performing Outsourcing of Output

Value in Manufacturing Sector	2010-11	2009-10	2008-09
< 1 Llakh	37	32	13
1-10 Llakhs	8	8	6
10-50 Llakhs	6	6	5
> 50 Lalkhs	3	3	3

In terms of outsourcing, we find a very interesting picture (Table 5.11). Close to 70 percent of the firms outsourced production of less than Rs. 1 lakh. When we consider the last three years, we neither find evidence to support the increasing of outsourcing activities nor a decrease. In terms of value of exports, we find that majority of the firms accrued incomes between 1 and 10 lakhs from exports in 2010-11 (Table 5.12). In 2008-09, we find that more firms had incomes between 10-50 lakhs. This shows that the fluctuation in the global economy seems to have some impact on the revenues of the exporting firms.

Table 5.12: Proportion of Enterprises having Total Value of Production Exported

Value in Manufacturing Sector	2010-11	2009-10	2008-09
< 1 Llakh	0	0	0
1-10 Llakhs	10	4	1
10-50 Llakhs	5	5	4
> 50 Llakhs	1	0	1

Analyzing employment for contractual production (Table 5.13), we find that bulk of the firms reported less than 10 workers for engaging in these types of activities. Further, it was evident that the existing workers, both skilled and un-skilled, are the ones predominantly used in contractual production. This indicates that contractual production does not seem to impact in terms of generation of additional demand for labour. In terms of contractual work, we find that very few firms are engaged in carrying out international contracts (Table 5.14). Bulk of

the firms was carrying out contractual work for other firms within the state. We also find a conspicuous absence of contractual agreements for the production with the firms from rest of India other than in leather.

Table 5.13: Employment for Contract Production (aggregate, percent of firms), Sector-wise

Employment in manufacturing Ssector	< 10	10-50	50-100	>100
Regular skilled	9	5		
Regular un-skilled	13	1		
Contract skilled	1	2		
Contract un-skilled	1			
Existing skilled	13	11		
Existing un-skilled	19	3		
Existing contract skilled	2	1		
Existing Contract un-skilled	3			

Table 5.14: Total Number of Units undertaking Work on Contract by Sector

Manufacturing Sector	International	State	Rest of India	Total
Textile	2	4	0	6
Garments	1	5	0	6
Food	2	3	0	5
Manufacture - Engg related	2	6	3	11
Leather	1	4	4	9
Automobile	2	2	0	4
Computer	0	1	0	1
Chemical	0	0	0	0
Construction	0	0	0	0
Wholesale trade	0	0	0	0
Retail trade	0	0	0	0
Total	10	25	7	42

Analysing the contractual production further, we note that on an average, it took six months to complete international contracts but longer time for contracts within the state (Table 5.15). We also find that more regular skilled workers were employed for executing contractual orders procured from within the state than the regular un-skilled workers. This holds true in the case of international contracts as well. For executing international contracts, firms hire skilled workers on contract more than the un-skilled workers. This points to the availability of skilled labour as a key competitive factor enabling the firms to access such contracts.

Table 5.15: Total Number of Units undertaking Work on Contract

Manufacturing Sector	International	State	Rest of India
Type of contract	10	25	7
Time taken to complete the contract	6	168	8
Regular skilled	40	82	.
Regular un-skilled	15	28	.
Contract skilled	30	2	.
Contract un-skilled	0	1	.
Existing skilled	19	190	65
Existing un-skilled	36	105	13
Existing contract skilled	0	5	31
Existing contract un-skilled	0	5	6

An analysis of the reasons for importing raw material shows that there is a considerable variation across industries (Tables 5.16 to 5.18). While the predominant reason in 2005 was non-availability in the later period, we find that cost competitiveness and higher quality are reported as the important reasons. This is especially true in the case of textiles, garments and auto sector. In the case of computer related activities, it is the high quality of outsourced products that mattered for most of the firms. In the case of importing from other states, we find that non-availability is a major factor for both the time periods. This is true especially for the industries like leather and food products. While the availability of high quantities mattered most for the firms importing from the same states in the case of auto sector firms and leather in 2010, it was non-availability which was the predominant factor for textiles.

Table 5.16: Reasons for Importing Raw material – Manufacturing

	Sector	Textile	Garments	Food	Manufactur-Engg. related	Leather	Auto mobile	Computer	Chemical
Outside India Reasons for importing in 2005	Non-availability	4	0	2	5	2	0	1	0
	Cost competitive	1	0	0	0	0	3	0	0
	High quality of outside products	1	3	1	0	0	1	3	0
	High uantity of outside products	0	0	0	0	0	2	1	0
	Better design of outside products	0	0	0	0	0	0	1	0
	Any other	0	0	0	0	0	0	0	0
	Na	45	45	70	26	30	39	29	17
Outside India Reasons for importing in 2010	Non-availability	3	0	2	5	2	1	1	0
	Cost competitive	2	0	0	0	0	2	0	0
	High quality of outside products	1	3	1	0	0	1	4	0
	High quantity of outside products	1	0	0	0	0	2	1	0

	Better design of outside products	0	0	0	0	0	0	1	0
	Any other	0	0	0	0	0	0	0	0
	Na	44	45	70	26	30	39	28	17
Other States Reasons for importing in 2005	Non- availability	13	0	7	3	12	4	0	0
	Cost competitive	1	5	1	3	0	4	1	1
	High quality of outside products	4	1	0	1	2	2	1	0
	High quantity of outside products	0	0	0	0	4	0	0	0
	Better design of outside products	0	0	0	0	0	1	3	0
	Any other	0	0	0	0	0	0	0	0
	Na	33	42	65	24	14	34	30	16
Other States Reasons for importing in 2010	Non- availability	5	1	7	6	12	3	4	1
	Cost competitive	4	3	1	2	1	5	1	0
	High quality of outside products	4	1	0	1	1	2	1	0
	High ouantity of otside products	0	0	0	0	4	0	0	0
	Better design ofoutside products	0	0	1	0	0	1	3	0
	Any other	0	0	0	0	0	0	0	0
	Na	38	43	64	22	14	34	26	16
Same State Reasons for importing in 2005	Non- availability	3	0	3	4	6	1	0	0
	Cost competitive	1	0	0	0	3	0	0	0
	High quality of outside products	1	1	0	0	0	0	0	0
	High quantity of outside products	1	0	1	3	0	0	0	0
	Better design of outside products	0	0	0	0	0	0	0	0
	Any other	1	0	0	1	0	0	0	0
	Na	44	47	69	23	23	44	35	17
Same State Reasons for importing in 2010	Non- availability	0	0	2	3	6	1	0	0
	Cost competitive	5	0	1	0	1	1	0	0
	High quality of outside products	1	1	0	0	0	0	0	0
	High quantity of outside products	0	0	1	3	2	0	0	0
	Better design of outside products	0	0	0	0	0	0	0	0
	Any other	1	0	0	1	0	0	0	0
	Na	44	47	69	24	23	43	35	17

Table 5.17: Reasons for importing Raw Material – Construction

	Sector	**Construction**
Outside India Reasons for importing in 2005	Non availability	0
	Cost competitive	0
	High quality of outside products	0
	High quantity of outside products	0
	Better design of outside products	0
	Any other	0
	Na	5
Outside India Reasons for importing in 2010	Non- availability	0
	Cost competitive	0
	High quality of outside products	0
	High quantity of outside products	0
	Better design of outside products	0
	Any other	0
	Na	5
Other States Reasons for importing in 2005	Non- availability	0
	Cost competitive	1
	High Quality of Outside Products	0
	High Quantity of Outside Products	0
	Better Design of Outside Products	0
	Any other	0
	Na	4
Other States Reasons for mporting in 2010	Non- availability	0
	Cost competitive	1
	High Quality of Outside Products	0
	High Quantity of Outside Products	0
	Better Design of Outside Products	0
	Any other	0
	Na	4
Same State Reasons for importing in 2005	Non- availability	2
	Cost competitive	0
	High Quality of Outside Products	0
	High Quantity of Outside Products	0

	Better Design of Outside Products	0
	Any other	0
	NA	3
Same State Reasons for importing in 2010	Non- availability	2
	Cost competitive	0
	High Quality of Outside Products	0
	High Quantity of Outside Products	0
	Better Design of Outside Products	0
	Any ather	0
	Na	3

Table 5.18: Reasons for Importing Raw material – Retail

	Sector	**Computer**	**Wholesale Trade**	**Retail Trade**
Outside India Reasons for importing in 2005	Non -availability	0	0	3
	Cost competitive	0	1	0
	High quality of outside products	0	0	3
	High quantity of outside products	0	0	0
	Better design of outside products	0	0	0
	Any other	0	0	0
	Na	10	6	18
Outside India Reasons for importing in 2010	Non -availability	0	0	3
	Cost competitive	0	1	0
	High quality of outside products	0	0	3
	High quantity of outside products	0	0	0
	Better design of outside products	0	0	0
	Any other	0	0	0
	Na	10	6	18
Other States Reasons for importing in 2005	Non-availability	0	0	0
	Cost competitive	2	0	0
	High quality of outside products	0	1	0
	High quantity of outside products	1	0	2
	Better design of outside products	0	0	0
	Any other	0	0	0
	Na	7	6	22
Other States Reasons for importing in 2010	Non-availability	0	0	0
	Cost competitive	3	1	2
	High Quality of Outside Products	0	0	0
	High Quantity of Outside Products	0	0	0
	Better Design of Outside Products	0	0	0
	Any other	0	0	0

	Na	7	6	22
Same State Reasons for importing in 2005	Non-availability	0	3	6
	Cost competitive	0	1	0
	High Quality of Outside Products	0	0	0
	High Quantity of Outside Products	0	0	2
	Better Design of Outside Products	0	0	0
	Any other	0	0	0
	Na	10	3	16
Same State Reasons for importing in 2010	Non-availability	0	1	6
	Cost competitive	0	3	0
	High Quality of Outside Products	0	0	0
	High Quantity of Outside Products	0	0	2
	Better Design of Outside Products	0	0	0
	Any ather	0	0	0
	Na	10	3	16

In the case of retail, the issue of non-availability mattered the most for importing from other states, while high quality of outside products was a major consideration for importing from outside the country. In terms of changes in sourcing of inputs, we do not find much of variations over the last three years.

In terms of the nature of the products imported, across both the time periods, we find that, machinery, computer related components and bearings accounted for a major of inputs imported from outside the country. In terms of inputs imported from outside the state, we find that cotton, salted leather, steel and computer equipment are the major items. Cloth, cotton, machines, chemicals like iodine, and plastics are the major items outsourced from within the state. Our discussions with the firms' representatives reveal that there has not been any major change in terms of the items outsourced and the outsourcing destination.

CHAPTER VI

Spread of Social Security Provisioning, Trade Union Activity and Impact

In terms of firms providing social security benefits, we find that 80 percent of the firms in construction, 75 percent in retail and 45 percent in manufacturing do not provide any benefits (Table 6.1). Clearly, manufacturing firms fare better in this regard as compared to the other two sectors. Further, the proportion of the firms providing these benefits is higher as compared to the all-India figures. Within manufacturing, we find that close to 60 percent of firms in auto sector, more than 50 percent in leather and 48 percent in food and textile industries provided social security benefits. Garments with more than 52 percent, chemicals with 65 percent and computers with 64 percent are industries which offered least social security benefits for workers. For nearly 30 percent of the firms in garments, no information was available with regard to the provision of these benefits.

Table 6.1: Firms offering Social Security

	Percent of firms offering Social Security			
	Yes	**No**	**NA**	**Total**
Manufacturing	144	149	39	332
	43.37	44.88	11.75	100
Construction	1	4	0	5
	20.00	80.00	0.00	100
Retail	8	31	2	41
	19.51	75.61	4.88	100
Total	153	184	41	378
	40.48	48.68	10.85	100

Table 6.2: Availability of Social Security Benefits

	Sector	**Social Security Benefit**							
		Yes		**No**		**NA**		**Total**	
		N	**percent**	**N**	**Percent**	**N**	**percent**	**N**	**percent**
Manufacturing	Textile	24	47.1	19	37.3	8	15.7	51	100
	Garments	10	20.8	25	52.1	13	27.1	48	100
	Food	35	47.9	32	43.8	6	8.2	73	100
	Manufacture – Engg related	19	61.3	10	32.3	2	6.5	31	100
	Leather	17	53.1	11	34.4	4	12.5	32	100
	Automobile	24	53.3	18	40.0	3	6.7	45	100
	Computer	11	31.4	23	65.7	1	2.9	35	100
	Chemical	4	23.5	11	64.7	2	11.8	17	100
Construction	Construction	1	20.0	4	80.0	0	0.0	5	100
Retail	Computer	0	0.0	10	100.0	0	0.0	10	100
	Wholesale trade	3	42.9	4	57.1	0	0.0	7	100
	Retail trade	5	20.8	17	70.8	2	8.3	24	100

Table 6.3: Percentage of Firms offering Social Security

		Social Security Benefit					
		Yes		No		NA	
		Number	percent	Number	percent	Number	percent
Manufacturing	Textile	24	47.06	19	37.25	8	15.69
	Garments	10	20.83	25	52.08	13	27.08
	Food	35	47.95	32	43.84	6	8.22
	Manufacture – Engg. related	19	61.29	10	32.26	2	6.45
	Leather	17	53.13	11	34.38	4	12.50
	Automobile	24	53.33	18	40.00	3	6.67
	Computer	11	31.43	23	65.71	1	2.86
	Chemical	4	23.53	11	64.71	2	11.76
Construction	Construction	1	20.00	4	80.00	0	0.00
Retail	Computer	0	0.00	10	100.00	0	0.00
	Wholesale trade	3	42.86	4	57.14	0	0.00
	Retail trade	5	20.83	17	70.83	2	8.33

With regard to social security, as Table 6.3 shows, more than 50 per cent of the firms in the case of garments, computer-related work, and chemicals do not provide any social security. The proportion is even higher in the case of chemicals and computer-related work at about 65 percent. And as is to be expected, 80 percent of the firms in construction and 71 percent in retail trade do not provide any social security.

Even in the case of textiles and food processing, only 47 percent firms provide for social security, whereas in the case of garments, it is much less at 20 percent. Even in the case of automobile and leather sectors, only 50-60 percent of the firms report to provide any degree of social security. Clearly, there is an absence of social protection provided by more than 50 percent of the firms, with the levels going up to much higher proportions in some of the sectors.

Table 6.4: Type of Social Security

Benefit	Manufacturing		Construction		Retail	
	Govt.	Company	Govt.	Company	Govt.	Company
Compensation due to accident	2	112	0	1	0	9
Provident fund – Government	2	159	0	0	0	6
Medical leave – Government	2	66	0	0	0	7
Family pension – Company	0	7	0	0	0	2
Health insurance – Government	4	43	0	1	0	2
Old age pension – Company	0	16	0	0	0	0
Life insurance – Government	2	54	0	0	0	1
Gratuity – Government	2	53	0	0	0	4
Any Other – Government	2	66	0	0	0	1

With regard to the types of social security (Table 6.4), it appears that the range is quite limited even within the manufacturing sector. Within that, only compensation due to accident is primarily or solely provided by the firms in which employees are working. Even then only 114 firms provide this benefit; 161 firms provided provident fund whereas only 47 had any health insurance and another 56 life insurance. Gratuity was available in 55 firms. Even medical leave is provided only in 68 enterprises. In the case of retail, employees are entitled to accident compensation in most of the firms, whereas provident fund and gratuity was offered in fewer firms. Medical leave was an entitlement in 7 of the 9 firms who had responded.

An examination on the presence of trade unions within the sector and establishments showed that 67 percent of manufacturing firms did not have any presence of trade unions (Table 6.5). All the firms in construction and 95 percent of the firms in retail reported the absence of trade union activities in their firm and sector. Thus, on the whole, we find that 70 percent of the firms surveyed did not have trade unions. On a closer industry-wise examination, we find that 53 percent of establishments in leather industry reported the presence of trade unions in their firms, while nearly 40 percent of the firms in garments and computers had trade unions in the sector but not in the establishments surveyed. An industry-wise analysis corroborates the earlier picture of relative lack of trade union activities in the state.

Table 6.5: Presence of Trade Union by Sector

	Presence of Trade Union				
	In the Sector	**In your Establishment**	**No Presence**	**NA**	**Total**
Manufacturing	67	31	222	12	332
	20.2	9.3	66.9	3.6	100
Construction	0	0	5	0	5
	0.0	0.0	100.0	0.0	100
Retail	1	0	39	1	41
	2.4	0.0	95.1	2.4	100
Total	68	31	266	13	378
	18.0	8.2	70.4	3.4	100

Table 6.6: Presence of Trade Unions

	Sector	Presence of Trade Union									
		In the Sector		In your Establishment		No Presence		NA		Total	
		N	%	N	%	N	%	N	%	N	%
Manufac-turing	Textile	5	9.8	3	5.9	38	74.5	5	9.8	51	100
	Garments	18	37.5	1	2.1	29	60.4	0	0.0	48	100
	Food	14	19.2	6	8.2	53	72.6	0	0.0	73	100
	Manufacture – Engg. related	1	3.2	1	3.2	27	87.1	2	6.5	31	100
	Leather	8	25.0	17	53.1	6	18.8	1	3.1	32	100
	Automobile	7	15.6	2	4.4	33	73.3	3	6.7	45	100
	Computer	13	37.1	1	2.9	21	60.0	0	0.0	35	100
	Chemical	1	5.9	0	0.0	15	88.2	1	5.9	17	100
Construction	Construction	0	0.0	0	0.0	5	100.0	0	0.0	5	100
Retail	Computer	0	0.0	0	0.0	10	100.0	0	0.0	10	100
	Wholesale trade	0	0.0	0	0.0	7	100.0	0	0.0	7	100
	Retail trade	1	4.2	0	0.0	22	91.7	1	4.2	24	100

In terms of trade union presence across firm size, an expected observation is the near absence of trade unions in the small firms (Table 6.6). While 26 percent of the small firms acknowledge the presence of unions in the sector, only a meager 2 percent of the firms report a presence in their establishments. A quarter of the medium sized firms had trade unions in their enterprises which surprisingly is much higher as compared to only 7 percent of the large firms having trade unions in their establishments. Given the near absence of trade unions across construction and retail sectors, the size-wise distribution in these sectors does not matter. As can be expected, the trade union presence in the firms studied is negligible. The surprising exception is the leather sector where 53 percent of the firms reported trade union presence in their enterprises. A slightly higher percentage of respondents acknowledge the presence of trade union in the sector as a whole. Again, the leather sector is an exception where the presence of trade unions is reported only by 25 percent of the respondents. The low trade union presence in the automobile sector is primarily due to the larger share of respondents occupying the tier 2 and 3 rings of the supply chain. Textiles, which has been a home to a strong trade union presence has obviously witnessed a decline over time. This trend of low and declining role of trade union activity in the manufacturing sector is partly corroborated by Sundar's study (2010) which points to a similar trend in the strength of labour organisations in the state.

Table 6.7: Presence of Trade Union by Size of Enterprise

Size of enterprise	Number of establishments having trade union in their enterprise				
	In the Sector	In your Establishment	No Presence	NA	Total
Manufacturing					
Large	4	3	33	2	42
Medium	10	24	55	4	93
Small	53	4	134	6	197
Construction					
Large	0	0	0	0	0
Medium	0	0	4	0	4
Small	0	0	1	0	1
Retail					
Large	1	0	1	0	2
Medium	0	0	4	0	4
Small	0	0	34	1	35

Given the low levels of trade union presence across the board, it is not surprising to note that a majority of the firms does not report any impact on the availability of labour, productivity, implementation of social security benefits and employment (Table 6.7). Interestingly, 53 percent of firms reported an increase in wages and labour productivity as an outcome of trade union activities. This appears to indicate that the trade unions are associated with positive increases in both the wages and labour productivity, and hence not in any way detrimental to the competitiveness of the firms. In fact, only 6 percent of the firms report a negative relationship between the growth prospects of the sector and the trade union presence. Thirty three 33 percent of the firms report an increase in the implementation of social security benefits due to trade union presence and 34 percent felt that even with this low level of trade union activities, there has been a positive impact on sector's growth. We do not find any striking differences in response to the impact of trade union activity on various factors across size classes (Table 6.8). The observations made for the overall impact hold good across the size classes.

Table 6.8: Effect of Presence of Trade Unions

	Manufacturing			Construction			Retail		
	Increased	No Effect	Decrea-sed	Incre-ased	No Effect	Decre-ased	Incre-ased	No Effect	Decrea-sed
Demand for skilled labour	44	64	10	0	0	0	0	0	1
Demand for un-skilled labour	14	88	13	0	0	0	0	0	1
Wages	62	50	4	0	0	0	0	1	0
Implementation of basic social benefits	37	68	7	0	0	0	1	0	0
Labour productivity	58	49	2	0	0	0	1	0	0
Employment growth	44	64	5	0	0	0	0	0	0
Sector's growth as a whole	37	65	6	0	0	0	0	0	0
Other problems	0	14	1	0	0	0	0	0	0

Tables 6.9 and 6.10 clearly show that trade unions do not have a detrimental role in the domain of labour productivity or the sector's growth as a whole. Only in the case of wage increase, 62 firms have acknowledged the role of trade unions in positively affecting the wage increases. Interestingly, though the mechanisms are not clear, 44 respondents have cited trade unions as contributors to employment growth. Of course, it is also possible that the responses have to be read along with the low presence of trade unions. But the fact that trade unions have not hindered the growth process goes against the often-cited argument for flexibilisation and deregulation of labour markets. Only 23 firms cite trade unions as leading to decrease in demand for labour, whereas more than 100 respondents do not think so.

Table 6.9: Impact of trade union on different factors

Number of establishments reporting impact of trade union on different factors					
Factors	**Sharply Decrease**	**Slightly Decrease**	**No Effect**	**Slightly Increase**	**Sharply Increase**
Manufacturing					
Demand for skilled labour	5	5	64	37	7
Demand for unskilled labour	4	9	88	12	2
Wages	1	3	50	53	9
Implementation of basic social benefits	1	6	68	33	4
Labour productivity	0	2	49	51	7
Employment growth	3	2	64	41	3
Sector's growth as a whole	3	3	65	31	6
Other problems/ facilities pl mention	1	0	14	0	0
Construction					
Demand for skilled labour	0	0	0	0	0
Demand for un-skilled labour	0	0	0	0	0
Wages	0	0	0	0	0
Implementation of basic social benefits	0	0	0	0	0
Labour productivity	0	0	0	0	0
Employment growth	0	0	0	0	0
Sector's growth as a whole	0	0	0	0	0
Other problems/ facilities pl mention	0	0	0	0	0
Retail					
Demand for skilled labour	0	1	0	0	0
Demand for un-skilled labour	0	1	0	0	0
Wages	0	0	1	0	0
Implementation of basic social benefits	0	0	0	1	0
Labour productivity	0	0	0	1	0
Employment growth	0	0	0	0	0
Sector's growth as a whole	0	0	0	0	0
Other problems/ facilities pl mention	0	0	0	0	0

Table 6.10: Impact of Trade Union on different Factors by Size of Establishment

Number of establishments reporting impact of trade union on different factors by size of establishments										
Factor		Manufacturing			Construction			Retail		
		Size			Size			Size		
		Large	Medium	Small	Large	Medium	Small	Large	Medium	Small
Demand for skilled labour	Sharply Decrease	2	3	0	0	0	0	0	0	0
	Slightly Decrease	0	1	4	0	0	0	1	0	0
	No Effect	10	29	25	0	0	0	0	0	0
	Slightly Increase	2	4	31	0	0	0	0	0	0
	Sharply Increase	1	1	5	0	0	0	0	0	0
Demand for un-skilled labour	Sharply Decrease	3	0	1	0	0	0	0	0	0
	Slightly Decrease	0	4	5	0	0	0	1	0	0
	No Effect	12	33	43	0	0	0	0	0	0
	Slightly Increase	1	1	10	0	0	0	0	0	0
	Sharply Increase	0	0	2	0	0	0	0	0	0
Wages	Sharply Decrease	0	1	0	0	0	0	0	0	0
	Slightly Decrease	1	1	1	0	0	0	0	0	0
	No Effect	6	14	30	0	0	0	1	0	0
	Slightly Increase	7	20	26	0	0	0	0	0	0
	Sharply Increase	2	2	5	0	0	0	0	0	0
Implemen-tation of basic social benefits	Sharply Decrease	0	0	1	0	0	0	0	0	0
	Slightly Decrease	0	1	5	0	0	0	0	0	0
	No Effect	8	14	46	0	0	0	0	0	0
	Slightly Increase	5	22	6	0	0	0	1	0	0
	Sharply Increase	0	1	3	0	0	0	0	0	0
Labour productivity	Sharply Decrease	0	0	0	0	0	0	0	0	0
	Slightly Decrease	0	1	1	0	0	0	0	0	0
	No Effect	3	10	36	0	0	0	0	0	0
	Slightly Increase	7	21	23	0	0	0	1	0	0
	Sharply Increase	1	5	1	0	0	0	0	0	0
Employment growth	Sharply Decrease	2	1	0	0	0	0	0	0	0
	Slightly Decrease	0	0	2	0	0	0	0	0	0
	No Effect	7	27	30	0	0	0	0	0	0
	Slightly Increase	4	9	28	0	0	0	0	0	0
	Sharply Increase	0	0	3	0	0	0	0	0	0
Sector's growth as a whole	Sharply Decrease	2	1	0	0	0	0	0	0	0
	Slightly Decrease	0	1	2	0	0	0	0	0	0
	No Effect	7	26	32	0	0	0	0	0	0
	Slightly Increase	4	8	19	0	0	0	0	0	0
	Sharply Increase	0	0	6	0	0	0	0	0	0
Other problems/ facilities pl mention	Sharply Decrease	0	0	1	0	0	0	0	0	0
	Slightly Decrease	0	0	0	0	0	0	0	0	0
	No Effect	1	3	10	0	0	0	0	0	0
	Slightly Increase	0	0	0	0	0	0	0	0	0
	Sharply Increase	0	0	0	0	0	0	0	0	0

Labour Laws and their Impacts

It is clear that the laws including labour laws do not seem to have much of an impact on demand for regular labour (Table 6.11). In fact, only 13 firms report a sharp decrease in demand for regular labour and another 33 acknowledge a slight decrease in demand due to labour laws.

Table 6.11: Effect of Different Factors on Demand for Regular Labour

Factors	**Effect**				
	1	2	3	4	5
Labour laws	14	33	18	59	10
Safety aws	12	27	28	41	6
Environmental measures	9	24	25	55	10
Social protection acts	13	13	20	25	7
Wages act	15	17	19	56	6
Taxation policy	14	28	25	16	5
Custom duties	5	9	24	14	7
Financial regulations	5	7	48	4	3
NREGA	15	35	6	27	2
Land acquisitionpolicy	6	5	21	3	0
Trade regulations	0	4	9	40	2
Export/mport estrictions	1	5	15	32	1
Any other (please specify)	1	0	1	1	0
Retail					
Labour laws	1	5	3	0	0
Safety laws	1	2	1	3	0
Environmental measures	1	1	0	3	2
Social protection acts	0	2	2	2	1
Wages act	2	1	0	2	1
Taxation policy	0	0	1	0	4
Custom duties	0	2	0	0	1
Financial regulations	0	0	0	0	1
NREGA	0	2	0	0	0
Land Acquisition Policy	0	0	0	0	0
Trade Regulations	0	0	0	0	0
Export/Import Restrictions	0	0	0	0	0
Any other (please specify)	0	0	0	0	0

Note: 1. Sharply decreases, 2. Slightly decreases, 3, No effect, 4. Slightly increases, 5. Sharply increases

It also appears that many of the respondents in the smaller firms were not aware of the impact of various laws on labour demand and the data have to be treated with some caution. An example is the majority of respondents reporting a reduction in demand for regular labour due to National Rural Employment Guarantee Act (NREGA). While NREGA can effect a change in labour supply, it is not clear how it can reduce demand.

However, in the case of retail, 6 out of 9 respondents report a role for labour laws in reducing demand.

In the case of demand for contractual labour (see Table 6.11), respondents are equally divided between the role of labour laws. Almost equal numbers report increases and decreases on account of labour laws. The role of NREGA is once again prominent.

Labour Supply Issues: Perceptions and Impacts

Across the two-time periods 2000-05, and 2005-10, there appears to be a growing difficulty in accessing both skilled and un-skilled labour in equal measure. This difficulty is attributed mainly to the short supply of labour force. While in 2000-05, firms perceived rising wage rates of non-managerial skilled and un-skilled labour as a problem, in the subsequent period, their perception has changed. But rising wage rates of non-managerial skilled labour seem to be a more important factor in the more recent period. Rising salaries of managerial professionals is another factor that is significant in the recent period. To sum up, there appears to be a greater shortage of skilled non-managerial and managerial workers in the recent years as compared to the shortage of un-skilled labour (Table 6.12).

Table 6.12: Number of Establishments reporting of facing Difficulty in Labour Force

Indicators of Labour Force	Level of Difficulty in 2000-05					Level of Difficulty in 2005-10				
	1	2	3	4	5	1	2	3	4	5
Manufacturing										
Short supply of skilled labour force	10	59	68	155	14	60	54	83	109	16
Short supply of un-skilled labour force	19	27	84	153	19	43	49	91	107	24
Rising wage rate of non managerial, skilled labour	16	32	84	162	14	46	46	72	145	13
Rising wage rate of non managerial, un-skilled labour	14	29	76	147	14	32	34	74	134	19
Rising salary of managerial/ professional	24	13	70	137	9	35	20	63	127	14
Out- migration	10	7	36	45	8	10	8	30	57	5
In-migration	6	6	32	40	0	6	10	25	42	3
Lack of training in this sector	3	9	34	57	2	8	5	33	58	7
Any other	1	0	0	0	1	0	1	0	1	0
Construction										
Short supply of skilled labour force	0	0	2	3	0	0	2	3	0	0
Short supply of un-skilled labour force	0	0	2	3	0	0	2	3	0	0
Rising wage rate of non-	0	0	2	3	0	1	2	0	2	0

managerial, skilled labour										
Rising wage rate of non managerial, un-skilled labour	0	0	2	3	0	1	2	0	2	0
Rising salary of managerial/ professional	0	0	2	3	0	1	2	0	2	0
Out-migration	0	0	0	0	0	0	0	0	0	0
In-migration	0	0	0	0	0	0	0	0	0	0
Lack of training in this sector	0	0	0	0	0	0	0	0	0	0
Any other	0	0	0	0	0	0	0	0	0	0
Retail										
Short supply of skilled labour force	5	4	2	15	0	3	4	4	20	2
Short supply of unskilled labour force	5	2	3	16	0	2	5	4	16	2
Rising wage rate of non managerial, skilled labour	2	2	14	11	1	4	1	13	18	1
Rising wage rate of non managerial, unskilled labour	2	6	11	9	1	5	3	11	13	0
Rising salary of managerial/ professional	1	4	14	8	0	4	0	14	10	2
Out- migration	0	2	1	2	0	2	1	0	1	1
In -migration	0	0	1	0	0	1	0	0	0	0
Lack of training in this sector	0	0	1	3	0	0	0	1	3	0
Any other	0	0	0	0	0	0	0	0	0	0

Note: 1 - Very Problematic, 2 - Somewhat Problematic, 3 - Problematic, 4 - Easy, 5 - Very Easy

Table 6.13: Manufacturing – Skilled and Unskilled Labour Force

	1	**2**	**3**	**4**	**5**
Manufacturing					
Short supply of skilled labour force	22	68	71	89	27
Short supply of unskilled labour force	35	71	59	89	22
Rising wage rate of non managerial, skilled labour	27	47	99	83	22
Rising wage rate of non managerial, un-skilled labour	13	43	97	80	19
Rising salary of managerial/professional	18	26	78	82	18
Out-migration	5	7	25	40	7
In-migration	3	9	23	28	2
Lack of training in this sector	4	10	40	31	5
Any other	0	1	0	1	0

Table 6.14: Construction – Skilled and Unskilled Labour Force

Short supply of skilled labour force	0	5	0	0	0
Short supply of unskilled labour force	0	5	0	0	0
Rising wage rate of non managerial, skilled labour	0	2	0	1	2
Rising wage rate of non managerial, un-skilled labour	0	2	0	1	2
Rising salary of managerial/professional	0	2	0	0	3
Out-migration	0	0	0	0	0
In-migration	0	0	0	0	0
Lack of training in this sector	0	0	0	0	0
Any other	0	0	0	0	0

Table 6.15: Retail – Skilled and Unskilled Labour Force

Short supply of skilled labour force	1	9	16	3	2
Short supply of unskilled labour force	1	9	13	3	1
Rising wage rate of non managerial, skilled labour	3	9	17	7	0
Rising wage rate of non managerial, unskilled labour	1	14	13	1	2
Rising salary of managerial/ professional	0	9	9	7	4
Out migration	2	1	0	1	1
In Migration	0	1	0	0	0
Lack of training in this sector	0	1	3	0	0
Any other	0	0	0	0	0

Note: 1 - Very Low Effect, 2 - Low Effect, 3 - No Effect, 4 - Strong Effect, 5 - Very Strong Effect

Regarding the issues related to labour, the short supply of skilled labour was more pronounced in manufacturing sector with more than 20 percent of the firms surveyed reporting it as a serious problem in 2010 as compared to 2005 (Table 6.13) ; while in the case of construction the problem seems to persist in both the time-periods (Table 6.14). Interestingly, retail trade did not perceive it as a serious problem during the entire period (Table 6.15). We also find more or less the same trend with regard to un-skilled labour across the sectors. Both the manufacturing and construction sectors also perceived rising wages especially of non-managerial workers as a matter of concern in 2010. However, on the whole, we do not find rising wages as a matter of grave concern across sectors. A closer examination also reveals that rising wages of non-managerial skilled workers is a matter of concern only in construction sector. Emoluments of managerial professionals were considered as a bigger problem in 2005 than in 2010 in the manufacturing sector. Firms also reported that short supply of skilled labour did not have much of a negative effect in manufacturing in 2010. Perhaps this could be due to the factor that substitution is taking place in the manufacturing sector. Out-migration was perceived as a problem in both the construction and manufacturing but not in retail. Surprisingly, lack of training was not considered as a serious issue in manufacturing, perhaps due to the large number of small firms in the survey. Thus, while in-migration had a strong effect on the activities of firms in manufacturing, lack of training did

not pose any serious problem in 2010. On the whole, we find that, while there exist problems with regard to the availability of labour, migration was cushioning these effects to minimize the shortages in workforce.

With regard to the migration issues, both in-migration and out-migration are perceived as a problematic issue in the first period but in-migration is seen as a lesser problem in the second period. Lack of training in the sector continues to be a problem in both the periods. Thus, on the whole, it can be inferred that short supply of labour force is perceived as a problem within manufacturing sector even in an era of higher rates of migration.

With regard to retail, an issue of concern for both the time-periods is the rising salary of managerial professionals. The short supply of labour force is perceived as a problem which could be dealt with more easily in the second period than in the first period.

Moving on from perceptions to actual effects of labour issues, we find that supply of labour seems to have a strong effect on the manufacturing activities (Table 6.16). It is also interesting to note that between 35-40 percent of the firms reported that rising wage rates of non-managerial workers, both skilled and un-skilled, did not translate into any significant effect on operations of firms. 55 percent of the firms reported that out-migration had a strong effect on the operations of firms, while 46 percent reported that in-migration too had a strong effect. Another important observation that needs to be made is that more than 50percent of the firms report an impact due to lack of training with 40 percent reporting a strong impact on this account. The relevance of the recent initiatives to improve skill supplies through training by the Central and State Governments is clearly borne out by these observations.

Table 6.16: Indicators for Labour Force

Indicators for Labour Force						
	Low Effect			**High Effect**		
	Size of Establishment			**Size of Establishment**		
	Large	**Medium**	**Small**	**Large**	**Medium**	**Small**
Short supply of skilled labour force	4	36	50	19	26	71
Short supply of un-skilled labour force	5	38	63	21	25	65
Rising wage rate of non managerial, skilled labour	1	29	44	11	27	67
Rising wage rate of non managerial, un-skilled labour	1	23	32	6	28	65
Rising salary of managerial/ professional	1	17	26	10	27	63
Out- migration	0	4	8	4	9	34
In- migration	0	4	8	1	6	23
Lack of training in this sector	2	5	7	3	9	24
Any other	0	0	1	0	1	0
Construction						
Short supply of skilled labour force	0	4	1	0	0	0
Short supply of un-skilled labour force	0	4	1	0	0	0
Rising wage rate of non managerial, skilled labour	0	2	0	0	2	1

Rising wage rate of non managerial, un-skilled labour	0	2	0	0	2	1
Rising salary of managerial/ professional	0	2	0	0	2	1
Out- migration	0	0	0	0	0	0
In –migration	0	0	0	0	0	0
Lack of training in this sector	0	0	0	0	0	0
Any other	0	0	0	0	0	0
Retail						
Short supply of skilled labour force	2	1	7	0	1	4
Short supply of un-skilled labour force	1	1	8	0	1	3
Rising wage rate of non managerial, skilled labour	1	2	9	1	1	5
Rising wage rate of non managerial, unskilled labour	2	2	11	0	1	2
Rising salary of managerial/ professional	0	2	7	2	0	9
Out –migration	1	1	1	0	0	2
In –migration	0	0	1	0	0	0
Lack of training in this sector	0	0	1	0	0	0
Any other	0	0	0	0	0	0

The case of retail trade presents an interesting scenario. Neither the supply of labour force nor the rising wage rates seem to affect the operations of firms. Even more interesting is the fact that rising wages of non-managerial un-skilled labour seem to have low effect on retail firms. It therefore appears that demand factors appear to be of greater significance than supply issues, particularly of labour in terms of the operations of retail firms.

Looking at the effects across size class of firms, we find that the number of small firms reporting short supply of skilled labour force having a strong effect is higher than firms reporting a lower effect. But in the case of medium firms, number of firms reporting low effect is higher. In the case of large firms, we find that a higher proportion of firms report a high effect due to the supply of labour force.

Difficulties posed by Political Factors and Impacts on Growth

Political factors in terms of stability and changes in policy regimes, tax administration and the time to administer along with the issues of permits which constitute an integral part of general business environment seems to have changed from 2005-2010 for the manufacturing sector (Table 6.18). Contrary to much of the expectations, the number of firms reporting difficulties arising out of government instability and policy regime has increased in 2010 than in 2005. Equally important has been the issues related to taxation and corruption with more firms finding it difficult or very problematic in 2010. The issues of dealing with permits and absence of documentation which indicate transparency in governance did not seem to reveal any marked improvement over time.

Table 6.17: Number of Establishments reporting of facing Difficulty in Political Factors

Indicators for political factors	Level of difficulty in 2005					Level of difficulty in 2010				
	1	2	3	4	5	1	2	3	4	5
Manufacturing										
Government instability	4	30	57	99	8	26	19	55	102	11
Change in policy regime	13	20	66	98	6	25	12	60	114	5
Corruption	16	16	63	85	6	24	15	68	91	4
Multiple taxes	13	13	72	82	10	22	28	53	89	9
Tax administration	16	8	60	96	7	22	20	52	97	7
Time taken due to government administration	6	26	47	95	12	9	25	45	106	13
Dealing with permits	19	5	40	87	6	20	7	40	94	5
Absence of standard documentation	19	7	40	87	4	18	6	43	97	5
Construction										
Government instability	0	0	2	0	0	0	0	2	0	0
Change in policy regime	0	0	0	0	0	0	0	0	0	0
Corruption	0	0	0	0	0	0	0	0	0	0
Multiple taxes	0	0	2	0	0	0	0	2	0	0
Tax administration	0	0	2	0	0	0	0	2	0	0
Time taken due to government administration	0	0	2	0	0	0	0	2	0	0
Dealing with permits	0	0	1	0	0	0	0	1	0	0
Absence of standard documentation	0	0	2	0	0	0	0	2	0	0
Retail										
Government instability	0	0	0	0	0	0	0	0	0	0
Change in policy regime	0	0	9	0	16	6	5	2	3	9
Corruption	3	3	6	9	1	1	7	10	1	2
Multiple taxes	5	0	6	6	1	3	9	6	0	0
Tax administration	0	3	8	8	1	3	7	8	2	0
Time taken due to government administration	4	1	6	1	1	2	7	3	1	2
Dealing with permits	1	3	6	7	0	1	9	6	1	0
Absence of standard documentation	1	4	5	6	2	4	5	7	0	2

Note: 1-Very problematic, 2-Somewhat problematic, 3- Problematic, 4- Easy, 5- Very easy

Coming to the effects of these issues on growth, we find that in manufacturing, the time taken due to government administration dealing with permits and issues in tax administration had strong effect. Ironically, the question of multiple taxes appears to have low effect on growth.

In the case of retail and wholesale trade, we find that firms could deal easily with problems arising out of changes in policy regime in the earlier period but found it more difficult in the latter period. The issue of corruption is also more pronounced in the second period. In terms of its effects on growth, we find that the majority of firms reported very low effect due to government instability and very little effect due to taxation and tax administration on growth.

Deciphering the effects on firms that were facing difficulty due to political factors, we find that the majority of firms reported a strong effect on growth due to difficulties arising out of corruption, time taken due to government administration dealing with permits and tax

administration, in the case of manufacturing. However, in the case of retail, change in policy regime and dealing with permits had strong effects on growth.

For the firms which faced no difficulties due to political factors, bulk of them reported no effect on growth as expected. However, corruption and absence of standard documentation had strong effect on the growth of manufacturing firms. It can also be noted that while a small fraction of firms which faced difficulties reported very low effect on growth due to the policy environment, a large fraction of them reported no effect on growth. Thus, it can be seen that the changes in policy environment induced by the changes in political regimes on the whole does not seem to have much of an impact on growth of manufacturing firms. However, our discussions with firms' representatives reveal that time delays due to permits and absence of standard documentation provided avenues for corruption which imposed higher transaction costs for firms (Tables 6.19 & 6.20).

Table 6.18: Number of Establishments facing Difficultyin Political Factors and their Effects on Growth

Indicators for political factors	Effects on Growth				
	1	**2**	**3**	**4**	**5**
Manufacturing					
Government instability	11	29	22	13	4
Change in policy regime	12	34	11	16	5
Corruption	11	33	15	21	2
Multiple taxes	9	34	14	19	5
Tax administration	12	28	14	17	6
Time taken due to government administration	6	12	14	25	5
Dealing with permits	2	7	13	17	15
Absence of standard documentation	5	14	8	15	13
Construction					
Government instability	0	2	0	0	0
Change in policy regime	0	0	0	0	0
Corruption	0	0	0	0	0
Multiple taxes	0	2	0	0	0
Tax administration	0	2	0	0	0
Time taken due to government administration	0	2	0	0	0
Dealing with permits	0	1	0	0	0
Absence of standard documentation	0	2	0	0	0
Retail					
Government instability	0	0	0	0	0
Change in policy regime	0	1	2	4	1
Corruption	2	1	7	2	0
Multiple taxes	0	2	7	4	2
Tax administration	1	2	7	1	0
Time taken due to government administration	2	0	5	1	1
Dealing with permits	1	1	3	6	1
Absence of standard documentation	0	1	4	2	0

Note: 1- Very low effect, 2- low effect, 3-no effect, 4- strong effect, 5- very strong effect

Table 6.19: Number of Establishments facing No Difficulty in Political Factors and their Effects on Growth

Indicators for political factors	Effects on Growth				
	1	**2**	**3**	**4**	**5**
Manufacturing					
Government instability	3	4	66	20	3
Change in policy regime	3	2	66	23	1
Corruption	2	4	50	22	2
Multiple taxes	2	4	48	20	3
Tax administration	1	4	50	21	4
Time taken due to government administration	2	2	60	21	5
Dealing with permits	0	0	49	22	2
Absence of standard documentation	0	1	53	22	2
Construction					
Government instability	0	0	0	0	0
Change in policy regime	0	0	0	0	0
Corruption	0	0	0	0	0
Multiple taxes	0	0	0	0	0
Tax administration	0	0	0	0	0
Time taken due to government administration	0	0	0	0	0
Dealing with permits	0	0	0	0	0
Absence of standard documentation	0	0	0	0	0
Retail					
Government instability	0	0	0	0	0
Change in policy regime	0	1	4	4	2
Corruption	0	2	1	0	0
Multiple taxes	0	0	0	0	0
Tax administration	0	1	1	0	0
Time taken due to government administration	2	0	1	0	0
Dealing with permits	1	0	0	0	0
Absence of standard documentation	0	0	0	0	0

Note: 1- Very low effect, 2- low effect, 3-no effect, 4- strong effect, 5- very strong effect

An analysis of problems faced by firms across size reveals that large firms find it easy to deal with issues arising out of government instability and changes in policy regime, while they find it problematic to deal with the issues of multiple taxes and tax administration (Table 6.21). Medium enterprises also reported the problems related to multiple taxes and tax administration more difficult to deal with than issues arising out of the absence of standard documentation and dealing with permits. However, small firms found it problematic to deal with the changes in policy regime and government instability and issues related to government administration and permits were found easier to tackle.

Table 6.20: Number of Establishments Reporting Facing Difficulty in Political Factors by Size of Enterprise

Indicators for political factors	Level of Difficulty					
	Problematic			Easy		
	Large	Medium	Small	Large	Medium	Small
Manufacturing						
Government instability	5	34	61	23	34	56
Change in policy regime	5	32	60	24	33	62
Corruption	7	32	68	19	29	47
Multiple taxes	12	34	57	15	23	60
Tax administration	12	29	53	18	27	59
Time taken due to government administration	7	25	47	26	30	63
Dealing with permits	3	21	43	17	26	56
Absence of standard documentation	7	21	39	22	28	52
Construction						
Government instability	0	2	0	0	0	0
Change in policy regime	0	0	0	0	0	0
Corruption	0	0	0	0	0	0
Multiple taxes	0	2	0	0	0	0
Tax administration	0	2	0	0	0	0
Time taken due to government administration	0	2	0	0	0	0
Dealing with permits	0	1	0	0	0	0
Absence of standard documentation	0	2	0	0	0	0
Retail						
Government instability	0	0	0	0	0	0
Change in policy regime	0	1	12	2	1	9
Corruption	2	1	15	0	1	2
Multiple taxes	2	2	14	0	0	0
Tax administration	2	2	14	0	0	2
Time taken due to government administration	0	2	10	2	0	1
Dealing with permits	2	2	12	0	0	1
Absence of standard documentation	2	1	13	0	1	1

In the case of retail, small firms find it difficult to deal with issues arising out of corruption and tax administration.

Table 6.21: Number of Establishments reporting facing Difficulty in Political Factors and their Effects on Growth by Size of Enterprise

Indicators for political factors	Effect on Growth					
	Low Effect			High Effect		
	Large	Medium	Small	Large	Medium	Small
Manufacturing						
Government instability	3	22	23	2	10	39
Change in policy regime	4	25	24	1	15	43
Corruption	6	24	20	2	11	45
Multiple taxes	10	24	18	2	11	43
Tax administration	10	22	14	2	13	48
Time taken due to government administration	4	4	15	2	24	44
Dealing with permits	1	4	4	2	26	42
Absence of standard documentation	5	7	8	1	24	40
Construction						
Government instability	0	2	0	0	0	0
Change in policy regime	0	0	0	0	0	0
Corruption	0	0	0	0	0	0
Multiple taxes	0	2	0	0	0	0
Tax administration	0	2	0	0	0	0
Time taken due to government administration	0	2	0	0	0	0
Dealing with permits	0	1	0	0	0	0
Absence of standard documentation	0	2	0	0	0	0
Retail						
Government instability	2	2	21	0	0	0
Change in policy regime	0	0	2	2	2	7
Corruption	2	1	2	0	0	2
Multiple taxes	1	0	1	1	0	6
Tax administration	1	1	2	0	0	1
Time taken due to government administration	1	1	2	0	0	4
Dealing with permits	0	1	2	2	0	5
Absence of standard documentation	0	0	1	0	0	2

In terms of the effect of political factors on growth across firm size, we find that the proportion of small firms stating a high effect is relatively higher as compared to the large and medium firms (Table 6.22). Within small firms also, issues related to taxes and tax administration seems to have a high effect as compared to other factors. In the case of large firms, number of firms reporting low effect on growth due to the tax regimes is surprisingly higher. We also find that medium firms had low effect on growth due to issues related to policy regimes, corruption and tax regimes. Dealing with permits and delays due to government administration seems to matter in growth.

In the case of retail trade too, the proportion of small firms reporting higher effect on growth due to political factors is higher than the medium and large firms.

A larger number of respondents reports slight increases in labour productivity due to labour laws, safety laws and wages act than those reporting a negative relationship (Table 6.23). However, in the case of NREGA and social protection Acts, a larger number of respondents report a slight decrease in productivity due to implementation of these measures.

Table 6.22: Effect of Different Factors on Labour Productivity

Factors	Effect				
	1	2	3	4	5
Manufacturing					
Labour laws	15	15	37	43	11
Safety laws	20	11	41	36	3
Environmental measures	14	33	32	24	11
Social protection acts	15	18	21	18	7
Wages act	9	20	35	38	8
Taxation policy	13	30	26	11	6
Custom duties	10	10	24	11	2
Financial regulations	7	5	41	7	6
NREGA	3	24	24	7	3
Land acquisition policy	4	6	19	5	0
Trade regulations	0	1	24	29	1
Export/import restrictions	2	2	28	20	2
Any other (please specify)	0	0	2	0	0
Retail					
Labour laws	1	1	3	2	0
Safety laws	1	1	0	3	2
Environmental measures	2	0	1	1	3
Social protection acts	2	3	1	1	0
Wages act	1	0	0	4	1
Taxation policy	0	2	2	0	1
Custom duties	1	1	0	1	0
Financial regulations	0	0	1	0	0
NREGA	0	0	0	0	0
Land acquisition policy	0	0	0	0	0
Trade regulations	0	0	0	0	0
Export/import restrictions	0	0	0	0	0
Any other (please specify)	0	0	0	0	0

Note: 1. Sharply decreases, 2. Slightly decreases, 3. No effect, 4. Slightly increases, 5. Sharply increases

Again, on the factors that affect the growth of the sector, few respondents find labour laws or even social security acts to be negatively affecting the growth of the sector (Table 6.24). NREGA however is listed by nearly 80 percent of the respondents to sharply or slightly decrease the growth prospects of the sector. Interestingly, environmental laws are also cited by a substantial number of respondents to reduce the prospects in the manufacturing sector. In the case of retail sector, social security acts are listed by all respondents to affect the sector negatively.

Table 6.23: Effect of Different Factors on Sector's Growth

Factors	Effect				
	1	**2**	**3**	**4**	**5**
Manufacturing					
Labour laws	16	23	16	60	8
Safety laws	18	23	31	31	10
Environmental measures	20	39	26	34	4
Social protection acts	16	18	27	12	5
Wages act	13	17	32	44	4
Taxation policy	12	23	21	28	4
Custom duties	7	4	28	12	5
Financial regulations	3	1	48	8	5
NREGA	11	48	6	6	3
Land acquisition policy	5	5	20	4	2
Trade regulations	3	5	18	26	3
Export/import restrictions	2	4	16	32	2
Any other (please specify)	1	1	1	0	1
Retail					
Labour laws	2	1	0	2	2
Safety laws	0	2	2	1	1
Environmental measures	1	0	2	3	1
Social protection acts	1	6	0	0	0
Wages act	1	1	1	1	2
Taxation policy	3	0	0	2	0
Custom duties	2	1	0	0	0
Financial regulations	1	0	0	0	0
NREGA	0	0	0	0	0
Land acquisition policy	0	0	0	0	0
Trade regulations	0	0	0	0	0
Export/import restrictions	0	0	0	0	0
Any other (please specify)	0	0	0	0	0

Note: 1. Sharply decreases, 2. Slightly decreases, 3. No effect, 4. Slightly increases, 5. Sharply increases

CHAPTER VII

Recent Investments, Future Plans for Expansion and Diversification, and Factors affecting them

With regard to the investment by manufacturing firms we find that a large proportion has invested in considerable amounts in the last three years. In fact, for the most recent year, we find that more than 40 percent of the reporting firms have invested more than Rs. 50 lakhs (Table 7.1). In the previous years we find that close to 30 percent of the firms have invested only less than 10 lakhs. This points to the fact that capital constraints do not seem to hinder expansion plans of the firms surveyed. Importantly, these trends in conjecture with the trends in employment growth indicate the increase in capital intensity in manufacturing. With regard to retail trade we find that the number of firms investing more than 10 lakhs during the last two years remains more or less the same. Overall, we find that firms have invested in anticipation of growth in their respective sectors.

Table 7.1: Investment Details according to Proportion of Enterprises

	2010-11	2009-10	2008-09
Manufacturing			
Less then 1 lakh	18	19	15
1-10 lakhs	85	56	48
10-50 lakhs	59	44	30
More than 50 lakhs	139	75	60
Construction			
Less then 1lakh	0	0	0
1-10 lakhs	1	0	0
10-50 lakhs	1	1	1
More than 50 lakhs	1	0	0
Retail			
Less then 1 lakh	0	0	1
1-10 lakhs	14	10	9
10-50 lakhs	12	8	7
More than 50lakhs	10	5	3

In terms of firm size, a closer examination of investments reveal that, interestingly, the small firms account for a higher proportion of large investments (>50 lakhs). It should also be noted that the number of small firms investing less than 10 lakhs is also higher as compared to the medium and large firms. This trend can be seen as a continuation of the previous two years where small firms have made investments up to 10 lakhs. The investment details of medium firms reveal that there has been a consistent trend in investments pointing to an effort to expand production and perhaps reap benefits of economies of scale. Majority of firms in the retail sector which made investments seem to be smaller in size and making investments of less than 50 lakhs (Table 7.2). Thus, concerns over tapering off of investments in recent years do not seem to be evident in the case of Tamil Nadu.

Table 7.2: Investment Details by Size

	2010-11			2009-10			2008-09		
	Large	**Medium**	**Small**	**Large**	**Medium**	**Small**	**Large**	**Medium**	**Small**
Manufacturing									
Less then 1 Lakh	0	4	14	0	5	14	0	4	11
1-10 Lakhs	5	19	61	1	14	41	2	8	38
10-50 Lakhs	3	18	38	2	9	33	1	7	22
More than 50 Lakhs	29	43	67	11	23	41	10	14	36
Construction									
Less then 1 Lakh	0	0	0	0	0	0	0	0	0
1-10 Lakhs	0	1	0	0	0	0	0	0	0
10-50 Lakhs	0	0	1	0	0	1	0	0	1
More than 50 Lakhs	0	1	0	0	0	0	0	0	0
Retail									
Less then 1 Lakh	0	0	0	0	0	0	0	1	0
1-10 Lakhs	0	1	13	0	1	9	0	0	9
10-50 Lakhs	0	0	12	0	0	8	0	0	7
More than 50 Lakhs	2	1	7	2	1	2	2	0	1

Examining investment details by sectors (Table 7.3), we find that majority of firms in capital intensive industries like automobiles and chemicals have invested more than 50 lakhs, while industries like garments and leather recognized as more labour intensive sectors witnessed majority of firms making smaller investments, i.e. less than 50 lakhs. The case of food presents an interesting case. Here, we find a missing middle with a large number of firms investing less than 10 lakhs and another cohort of firms investing more than 50 lakhs. Human capital intensive industries like computer show that a majority of firms made investments less than 50 lakhs, which confirm the general tendencies observed in the sector.

Table 7.3: Investment Details by Sector

Sector	**Investment 2010-11**				**Investment 2009-10**				**Investment 2008-09**			
	Less than 1 Lakh	**1-10 Lakhs**	**10-50 Lakhs**	**More than 50 Lakhs**	**Less than 1 Lakh**	**1-10 Lakhs**	**10-50 Lakhs**	**More than 50 Lakhs**	**Less than 1 Lakh**	**1-10 Lakhs**	**10-50 Lakhs**	**More than 50 Lakhs**
Manufacturing												
Textile	3	9	7	28	3	8	5	15	3	5	2	13
Garments	2	20	4	14	2	12	5	8	3	12	4	7
Food	9	19	7	31	9	5	4	11	7	3	2	7
Manufacture-Engg. related	4	8	3	14	5	6	2	7	2	6	3	3
Leather	0	7	13	9	0	8	9	7	0	6	4	3
Automobile	0	8	7	25	0	6	5	13	0	7	4	13
Computer	0	13	15	5	0	11	13	4	0	9	11	4
Chemical	0	1	3	13	0	0	1	10	0	0	0	10

Construction												
Construction	0	1	1	1	0	0	1	0	0	0	1	0
Retail												
Computer	0	3	6	1	0	0	2	0	0	0	2	0
Wholesale trade	0	1	2	3	0	1	2	2	1	0	2	1
Retail trade	0	10	4	6	0	9	4	3	0	9	3	2

In the case of retail trade, it can be seen that 50 percent of the firms have investments less than 10 lakhs, while the remaining 50 percent have investments above 10 lakhs. The same trend holds good across all the three years for which data have been collected.

In terms of investment plans in other sectors for the next three years (Tables 7.4 & 7.5), we observe that there are hardly any firms expressing interest or intention in all manufacturing sectors, retail and construction. This in turn points to a tendency towards consolidating on the existing activities by firms rather than diversify into related areas. A possible explanation could be the fact that firms would have already invested in the existing production units leading to less available resources for diversification plans. In fact, even the large firms are not planning to invest in other sectors.

Table 7.4: Number of Establishments by Future Investment Plan by Sector

Sectors	**Planning to invest in some other sector in next 3 years**		
	Yes	**No**	**NA**
Manufacturing			
Textile	3	48	0
Garments	1	47	0
Food	1	69	3
Manufacture - Engg. related	1	29	1
Leather	2	29	1
Automobile	1	43	1
Computer	2	33	0
Chemical	0	17	0
Construction			
Construction	0	5	0
Retail			
Computer	0	10	0
Wholesale trade	0	7	0
Retail trade	3	20	1

Table 7.5: Number of Establishments by Future Investment Plan by Size of Establishments

Size	Planning to invest in some other sector in next 3 years		
	Yes	**No**	**NA**
Manufacturing			
Large	1	39	2
Medium	4	87	2
Small	6	189	2
Construction			
Large	0	0	0
Medium	0	4	0
Small	0	1	0
Retail			
Large	1	1	0
Medium	1	3	0
Small	1	33	1

The evidence related to future investment plans is corroborated by the fact that majority of the manufacturing firms are not planning to open a branch in some other states in the next three years (Table 7.6). Viewed from a slightly different angle, it points to the embedded nature of production especially among small firms within the state.

Table 7.6: Number of Establishments Planning to Open a Sister Concern/Branch in Some Other State in the Next 3 Years

	Sister concern			
	Yes	**No**	**NA**	**Total**
Manufacturing	2	294	36	332
Construction	0	5	0	5
Retail	0	37	4	41
Total	2	336	40	378

Across sectors and across sub-sectors within manufacturing, we find that except one leather and one computer-related firm, none of the other firms have plans for opening a branch in any other state ((Tables 7.7-7.10) Interestingly, in both the cases, the firms with plans to move to other states are small firms.

Table 7.7: Number of Establishments Planning to Open a Sister Concern/Branch in Some Other States by Sector

Sector	Planning to open a sister concern/branch in some other state in the next 3 years		
	Yes	No	NA
Textile	0	46	5
Garments	0	41	7
Food	0	67	6
Manufacture - Engg. Related	0	29	2
Leather	1	29	2
Automobile	0	36	9
Computer	1	29	5
Chemical	0	17	0
Construction			
Construction	0	5	0
Retail			
Computer	0	10	0
Wholesale trade	0	6	1
Retail trade	0	21	3

Table 7.8: Number of Establishments Planning to Open a Sister Concern/Branch in Some Other States by Size of Establishments

Size	Planning to open a sister concern/branch in some other state in the next 3 years		
	Yes	No	NA
Manufacturing			
Large	0	40	2
Medium	0	81	12
Small	2	173	22
Construction			
Large	0	0	0
Medium	0	4	0
Small	0	1	0
Retail			
Large	0	1	1
Medium	0	4	0
Small	0	32	3

Table 7.9: Number of Establishments Planning to Open a Sister Concern/Branch in this State by Sector

Sector	Planning to open a sister concern/branch in this state in the next 3 years		
	Yes	No	NA
Manufacturing			
Textile	0	46	5
Garments	0	41	7
Food	0	67	6
Manufacture-Engg. Related	0	29	2
Leather	1	29	2
Automobile	0	36	9
Computer	0	30	5
Chemical	0	17	0
Construction	0	5	0
Retail			
Computer	0	10	0
Wholesale trade	0	6	1
Retail trade	1	20	3

Table 7.10: Number of Establishments Planning to Open a Sister Concern/Branch in this State by Size of Establishments

Size	Planning to open a sister concern/branch in this state in next 3 years		
	Yes	No	NA
Manufacturing			
Large	0	40	2
Medium	0	81	12
Small	1	174	22
Construction			
Large	0	0	0
Medium	0	4	0
Small	0	1	0
Retail			
Large	0	1	1
Medium	0	4	0
Small	1	31	3

In terms of firms with plans to open another establishment within the state, again except one firm in the leather sector, none of the sample firms has a plan. This firm is again a small firm. Read along with the fact that many of them have made considerable investments in the last few years, it appears to confirm the earlier observation that firms are working towards

consolidation within the sector and location rather than grow through moving into newer markets.

Firms were asked to rank the factors that they consider to be the most important for investing on other sectors or other states (Table 7.11). As the table reveals, access to finance, government's support in terms of policies and physical infrastructure are ranked the most important by the largest number of firms who have responded to this question. Interestingly, except for two firms, neither the cost of labour nor the quality of labour figured as the most important factor in the case of manufacturing sector.

Table 7.11: Importance of Factor while Planning to Invest in Other Sector/State

	Factor	**Manufacturing – No. of establishments gave 1st rank to the factor Rank**	**Construction – No. of establishments gave 1st rank to the factor Rank**	**Retail – No. of establishments gave 1st rank to the factor Rank**
1	Availability of right kind of labour	2	0	2
2	Cost of capital	6	0	2
3	Cost of labour	2	0	4
4	Access to finance	11	0	1
5	Physical infrastructure	6	0	1
6	Government's support in terms of policies	7	0	5
7	Taxes	1	0	1
8	Labour laws related to the sector	2	0	0
9	Other laws related to the sector	1	0	0
10	Any other (please specify)	1	0	0

Things are however a bit different in the case of retail/wholesale firms. While government's support in terms of policies continue to be an important factor for the largest number of retail firms, cost of labour also appears to be a critical factor for a larger section of firms in this sector.

Table 7.12: Interaction with Government and Other External Bodies

	Manufacturing						Construction						Retail					
	2000-05			2005-10			2000-05			2005-10			2000-05			2005-10		
	Satisfied	Neutral	Dissatisfied	Satisfied	Neutral	Dissatisfied	Satisfied	Neutral	Dissatisfied	Satisfied	Neutral	Dissatisfied	Satisfied	Neutral	Dissatisfied	Satisfied	Neutral	Dissatisfied
Loan subsidy for this sector	41	67	102	47	70	113	0	0	1	1	0	0	0	0	16	13	3	0
	19.52	31.90	48.57	20.43	30.43	49.13	0.00	0.00	100.00	100.00	0.00	0.00	0.00	0.00	100.00	81.25	18.75	0.00
Loan subsidy for sector closely related to this sector	48	80	62	51	62	95	0	0	1	1	0	0	12	1	3	4	3	8
	25.26	42.11	32.63	24.52	29.81	45.67	0.00	0.00	100.00	100.00	0.00	0.00	75.00	6.25	18.75	26.67	20.00	53.33
Machinery/Equip.	56	64	70	62	65	77	0	1	0	1	0	0	7	4	6	3	6	6
	29.47	33.68	36.84	30.39	31.86	37.75	0.00	100.00	0.00	100.00	0.00	0.00	41.18	23.53	35.29	20.00	40.00	40.00
Training	20	59	71	27	61	70	0	0	0	0	0	0	4	4	7	4	5	4
	13.33	39.33	47.33	17.09	38.61	44.30	0.00	0.00	0.00	0.00	0.00	0.00	26.67	26.67	46.67	30.77	38.46	30.77
Procurement of raw material from other countries	18	55	65	26	63	58	0	0	0	0	0	0	5	4	6	1	2	6
	13.04	39.86	47.10	17.69	42.86	39.46	0.00	0.00	0.00	0.00	0.00	0.00	33.33	26.67	40.00	11.11	22.22	66.67
Export subsidy/ assistance	14	51	70	15	59	70	0	0	0	0	0	0	2	1	2	2	1	6
	10.37	37.78	51.85	10.42	40.97	48.61	0.00	0.00	0.00	0.00	0.00	0.00	40.00	20.00	40.00	22.22	11.11	66.67
Incentive on generation of employment	17	50	53	29	53	46	0	0	0	0	0	0	1	1	7	0	4	3
	14.17	41.67	44.17	22.66	41.41	35.94	0.00	0.00	0.00	0.00	0.00	0.00	11.11	11.11	77.78	0.00	57.14	42.86
Promotional policies for this sector	15	49	35	13	53	41	0	0	0	0	0	0	0	0	4	0	0	1
	15.15	49.49	35.35	12.15	49.53	38.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	100.00
Tax holiday / concessions	8	47	42	5	46	55	0	0	0	0	0	0	0	0	1	0	0	1
	8.25	48.45	43.30	4.72	43.40	51.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	100.00
Other assistance	0	116	3	2	124	2	0	0	0	0	0	0	0	0	1	0	0	0
	0.00	97.48	2.52	1.56	96.88	1.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00

In the case of manufacturing, nearly 50 percent of the respondents are dissatisfied about the loan subsidies given to them. However, there is not much change over the two time-periods under discussion. The same holds good for satisfaction levels which are however low at close to 20 percent. However, we observe an increase in the share of respondents reporting dissatisfaction with the loan subsidies given to related sectors from 32 to 45 percent. A more important observation however relates to the state support for the availability of machinery/equipment and training of labour. While around 30 percent are satisfied with the support for machinery/equipment, only 13 percent and 17 percent in the two time-periods express satisfaction about the support for training. It is clear that training has been an area where there seems to be a relatively larger neglect by state institutions with more than 45 percent on an average reporting that they are dissatisfied. This was also borne out by the discussions with key informants that we had conducted.

There also appears to be relatively more dissatisfaction among respondents about support for imports of raw materials and export subsidies. A similar perception is reported in the case of incentives for employment generation and other promotional policies. It is therefore evident that there is a clear policy-neglect with regard to quality of training as well as efforts to boost employment generation. Finally, and not surprisingly, few respondents are satisfied with the quantum of tax concessions provided to them by the state.

In the case of construction sector, there is only response from the construction sector, and we observe a shift from dissatisfaction to satisfaction in the case of loan subsidies, and support for machinery/equipment. No responses are reported for other aspects of state support. In the case of retail, we can definitely see a shift in policy support between the two time-periods, particularly with regard to loan subsidies. In fact, while in the earlier period all respondents have reported dissatisfaction, in the second period, 13 have reported to be satisfied and the remaining three are neutral. With regard to other aspects of policy support, we observe a decline in the number of respondents responding. It is possible that they are not quite aware of the support extended. With the limited response, we can draw a few tentative inferences. In the case of machinery and equipment, respondents seem to be more or less equally divided between those satisfied and not satisfied. In terms of training too, fewer report to be unhappy in the second period. The same holds good in the case of promotional policies as well.

Infrastructural issues presented very different picture across firms. First and foremost is the issue of power supply. While close to 20 percent of the firms in manufacturing considered power problems as very serious in 2005, by 2010 more than 65 percent faced serious power problems. When we consider retail trade this increases to a whopping 95 percent. Considering all the sectors we find that close to 70 percent of the firms had power as a major problem affecting their activities. With regard to communications, access to telephone was never perceived as a serious problem across sectors in both the time-periods. This could be partly due the fact that the districts surveyed had fairly good communication network even by early 2000. While the spread to road network, in which Tamil Nadu had made early achievements seems to have slowed down by 2010 as more firms perceived it as a problem in 2010, coupled with this is the fact that transport availability has also not eased by 2010. With regard to technological upgradation more firms considered it as easy in 2010 than in

2005, especially in manufacturing sector. Interesting picture emerges with regard to access to finance; 63 percent of the firms in manufacturing considered it easy to access finance in 2005 and the number remains more or less the same for 2010.

This points to the fact that neither the liquidity crunch set in due to global slowdown nor the attempts for more financial inclusion seems to have an impact on the firms.

Political and institutional issues were considered as more serious in 2010 than in 2005 by most of the firms. Government instability was considered as a more serious issue by manufacturing firms in 2010 than by retail and construction sectors. Manufacturing sector also considered changes in policy as a major hindering factor for their activities. With regard to the issue of corruption, firms in both manufacturing and construction felt that the problem has aggravated in 2010 as compared to 2005, while trade – wholesale and retail – did not rank it high. More than 50 percent of the firms in manufacturing ranked multiple taxation as a problem in 2010, while retail trade ranked it with high severity than other sectors, with 83 percent of firms reporting it as a serious issue. Interestingly, tax administration and time taken by government to grant clearances remained in the same order as important issues in both 2005 and 2010. Firms in manufacturing also regarded that the delays in dealing with permits have not reduced in 2010 as compared to that of 2005, but retail trade viewed it as easier now. The absence of standard documentation and problems posed by local people were not considered as major issues by firms across sectors. Manufacturing firms viewed environment clearances as major problem in 2010 than in 2005. Land acquisition was reported as a serious problem by both manufacturing and construction firms in 2010. Thus, we find that dealing with the government has not eased up for the firms as business licensing and other related clearances still ranked high in the list of issues faced by firms.

CHAPTER VIII

Sectoral Employment Trends and Determinants: Insights from Interviews with Key Stakeholders - Auto Sector

It has been generally observed that the auto sector has globally witnessed large reductions in the workforce. Further, it has also been a site of various changes in the organization of production. Original equipment manufacturers (OEMs) increasingly outsource their component production to tier 1 and tier 2 suppliers. This has implications for technology, work organization and skill requirements for auto component manufacturers, which account for a large share of automobile related production in the state of Tamil Nadu.

In terms of employment absorption, two major changes have taken place. One, inter-departmental transactions and transactions with suppliers have been highly automated through implementation of ERP systems. This has reduced the employment of white collared workers in areas like documentation, inter-departmental communication, data processing and related clerical work. A number of employees who were engaged in the purchase department to liaison with suppliers, answer their queries, follow up on orders placed, ensure payments, etc. have now become redundant.

The second set of job losses have to do with blue-collared workers due to automation in the shop floor. Increasing use of computer, numerically controlled machine tools and work re-organisations due to modular manufacturing have led to reduction in the number of blue-collared workers over time. It is said that the ratio of blue-collared workforce to white-collared workers has come down with time.

Looking at the reasons for this automation, two appear to be the most important. One is the change in the nature of the market with growing competition. Earlier, quality was an "order-winner", i.e. it was good enough to succeed in the market. But now, it is only an "order-qualifier" i.e. it is the minimum requirement to stay in the market. As a result of growing quality consciousness among consumers, quality standards have increased across the board which warrants introduction of automated technologies. For example, the tolerance limit for crank-shaft making is in the order of 30-40 microns, which required high precision machining and can be done only by computer numerically controlled (CNC) machines. This is essential to reduce the noise level in the engines.

Similarly, in the case of welding, if we give it to a manual welder, the parameters of voltage and current are under his control. If we calculate that he can, say, weld 100 parts in an hour under the prescribed parameters to speed up work, he may resort to use of more current which in turn can affect quality.

The deployment of CNC machine tools and robots has also led to a shift in job type from one of an operator to that of a machine tender. Earlier, on the shop floor, the man-machine separation was not possible. A driller for instance has to be attached to both the component to be drilled and the drilling machine. But now, the separation of the man from the machine has been made possible. This means that the same person can be deployed to take care of more

than one machine efficiently as his job veers towards machine attending rather than machine operating.

The other important requirement for current markets is time and speed. We need a steady flow of output with as few bottlenecks as possible. If a skilled painter or a welder does not show up one day, firms need a back-up of at least one or two persons who are equally skilled as we cannot afford to delay. But it is not always easy to find some effective replacements. Robots, on the other hand, do not have Deepavali or Pongal and they can produce consistent output at consistent quality.

The customers are no longer satisfied with few choices. To cater to the needs, make-to-order production is necessary instead of mass production. Here, success depends on speed: speed of accepting market requirements, speed of developing new models, speed of procuring raw materials, speed of production and speed of delivering the products to right place. This requires automation as well as better coordination across departments and production and marketing functions.

Textile Sector

There is a growing perception that the spinning sector has reached a saturation point in the state due to low margins. The reasons are as follows. Probably the most important one has been power shortage. In the last two years, most firms in the state had to rely on alternate and expensive sources of power almost to the extent of 30 to 50 per cent which has shrunk margins to a considerable extent. For mills to break-even, they have to function at a minimum of 85 percent capacity and so they had to work even during power cuts to ensure viability. In addition, the Central Government's arbitrary decision to ban exports of yarn and then again allow exports prevent firms from planning their production schedule properly.

But this also requires availability of a disciplined workforce willing to submit themselves to regular work hours. Male workers stop coming to work as soon as you tell them that they need to come regularly and stay for a fixed number of hours. As soon as they feel that they are being forced to subscribe to certain patterns, they feel that they have lost their freedom. So, most mills work with female labour and often the productivity levels of such mills are better.

Even otherwise, labour force supply has been a problem – NREGA. This has partly been responsible for modernization of the textile mills in addition to the Technology Upgradation Fund TUF scheme. Quality demand from export markets is another major driving factor in the thrust on modernization. This modernization has definitely led to the decline in employment absorption. Material handling which used to be done manually is done in most mills through mechanized conveyor systems.

Following are some of the areas where employment has declined.

In winding: With the installation of auto-corner, what used to take 7-8 workers can now be done by one person.

Again, doffing used to be a manual operation which is now automated (auto-doffing).

Chute feeds reduce the need for labour in material handling.

In weaving too, there has been an increase in labour productivity through faster weaving. Also, due to improved quality of yarn, there are less breakages and less labour required for mending. Cone winding which used to employ women workers has come to be automated in the more modern units.

However, despite automation, productivity levels are very low when compared to countries like Sri Lanka. An important reason is the lack of skills among the workforce. Workers who have completed up to 10^{th} Class are ideal to be trained, but such workers do not prefer to work in the spinning mills and prefer work within towns or cities. Right now, Southern India Mills' Association SIMA is taking steps to address this issue by working on a skill development mission programme.

Garments

The garments sector continues to be one of the most labour intensive sectors in manufacturing. However, in such a sector, there are some tendencies towards reduced employment absorption. To begin with, there has been a large scale shift to automated processes in the processing of garments with attendant reductions in the labour force. Dyeing, which was a manual operation, done in open winch baths, have been automated almost completely, especially in the case of export production. This has reduced the need for labour for unit quantity of fabric being dyed. Similarly, printing too has undergone huge changes in technology and so has embroidery. Even for cutting of cloth, cutting machines are increasingly used, replacing skilled cutting masters. In sewing and trimming, while the operations continue to be labour intensive, new imported machines do the sewing much faster, thereby reducing the workforce requirements in this job.

The new machines are all imported. Access to labour is however cited as a big factor affecting the ability of firms to respond to quick turnaround times.

Leather

This sector is a differentiated segment with large firms, particularly export firms, relying increasingly on automated technologies like use of machines for tanning and processing of leather. Again, most machines are imported, especially from China. Further, with the kicking in of stringent regulations with regard to environmental impact of tanneries, some of the tanneries have been closed down. Firms instead have begun to import leather from state like Rajasthan where the costs are supposed to be lower on account of lower environmental standards. Further, as some of the firms have moved to the high end segment, to meet the better quality requirements, they have also started to use imported leather (from China for e.g.).

Here again, like the garments sector, firms do feel that labour access has turned out to be difficult in recent years.

Infrastructure problems emerged as the most important issue throughout our discussions. Most of the firms' representatives felt that adequate water and power were the major constraints for industry expansion. While power issues were prevalent across all the districts, water was a problem only in certain districts. Most of the small firms were reluctant in expanding. There was no plan in terms of migrating to other states, despite infrastructure bottlenecks. Availability of quality raw material was sighted as a problem by many firms. While smaller firms sighted the problem of input prices as an issue, the medium sized firms sighted labour availability as a problem.

Technology access and availability were considered as barriers for expansion by small and medium firms. In this context, the role of state was welcomed. The mediating role played by Central Leather Research Institute (CLRI) in terms of generating and diffusing new technologies, was welcomed by firms. The big firms relied on CLRI even for market information, especially about global markets. However, the delays in accessing ports and getting the required clearances for exports often hampered export operations.

Wages and labour productivity did not rank high in firms' concerns. Issues of dealing with State government officials with regard to taxes, environmental clearances etc. were accorded high priority. Access to capital to expand sales beyond the boundaries was considered as a barrier for medium sized firms.

Construction

The construction sector has witnessed far reaching organizational and technological changes over the last decade even as a sizeable segment within it continues to rely on older technologies and organization. This is a sector in which a substantial amount of the labour force is increasingly drawn through internal migration. There is a clear segmentation between large scale construction firms like those involved in urban infrastructure projects and large residential complexes, and those firms that are involved in small scale individual housing construction. The latter category, particularly in non-metropolitan locations, continues to rely on traditional technologies except in the case of digging. Organizationally too, labour is recruited informally through contractors and use of casual labour. In this segment, there have not been major changes in employment absorption.

In the large scale segment, there is a degree of formalization of the labour market with many of the larger firms forced to confirm to certain standards of functioning. This is however not to deny the continued presence of a significant share of the labour force recruited through contractors. In terms of technology, there has been a dramatic change, leading to reduction in time and labour. Pre-fabrication, for instance, reduces labour considerably and also the skill levels of the workers. 'Mivan technology' used for constructing walls and columns is once again supposed to reduce labour and time considerably. However, the cost of these technologies is considerable and hence can be afforded only by the bigger firms.

Across the board, there is however a clear recognition of a growing shortage of skilled labour in segments, like masonry, carpentry and plumbing. This shortage, in some cases, has led to an increase in the wage levels of these categories of workers. In terms of response, while

some of the larger firms counter this problem by moving to high end technologies that rely less on such skilled labour, the smaller firms report considerable increases in the cost of production and importantly delays in completion due to lack of timely access to the workforce.

CHAPTER IX

Conclusion

Based on focus group discussions, we list a few important issues pertaining to growth and labour markets across key manufacturing as far as employment absorption is concerned. Construction is the only segment that has witnessed large scale increase in job creation over the last decade.

	Sectors			
Factors affecting employment	**Food products & beverages**	**Textiles**	**Wearing apparel**	**Construction**
Impact of technology on employment	Employment reduction in bigger firms	Employment reduction in material handling, monitoring and mending and high labour productivity	Employment reduction in processing segments only	Reduction in large firms using automated machinery
Outsourcing/subcontracting	N o impact on quantity, only casualisation	Hardly any outsourcing	N o impact on quantity, only casualisation	Casualisation of labour
Skills scenario	Satisfactory at the entry level but poorly trained and poorly paid supervisory and managerial staff in small firms (forming bulk of our sample)	Reduction in skills for entry level workers but more demand for cognitive skills at the supervisory and managerial levels	More demand for skilled tailors in fashion-intensive segment; deskilling due to line production in mass segments; more demand for cognitive skills at the supervisory and managerial levels	Requires skilled operators of the new machines that are slowly diffusing into the construction sector
Constraints and challenges	Informal on the modes of acquisition with poor levels of formal training among workers; lack of awareness of importance of training; lack of incentive at the firm level for investments in skill formation	Improper use of Apprentice Acts to recruit labour on a temporary basis. Absence of a career path within the firm and poor educational levels of lower end workers are major challenges	Absence of firm level incentives to invest in training due to high turnover; poor educational qualifications	High share of migrant workers who are highly mobile and move from one project to another along with the contractor.

Policy implications	Investment in skill formation initiatives at the cluster/sectoral level with (a) recognizable standards of quality of trainees (b) creation of industry relevant syllabi and c) create incentives for firms to recruit labour from this pool of trainees	Investment in skill formation initiatives at the cluster/sectoral level with a) recognizable standards of quality of trainees b) creation of industry relevant syllabi and c) create incentives for firms to recruit labour from this pool of trainees	Investment in skill formation initiatives at the cluster/sectoral level with a) recognizable standards of quality of trainees b) creation of industry relevant syllabi and c) create incentives for firms to recruit labour from this pool of trainees	Create a registry of workers employed in construction sector; Investment in skill formation initiatives at the cluster/sectoral level with a) recognizable standards of quality of trainees b) creation of industry relevant syllabi and c) create incentives for firms to recruit labour from this pool of trainees

From our survey and discussions with firm's representatives the following points emerge as key issues confronting the growth sectors in Tamil Nadu with attendant implications for policy-making.

Increase in nominal wages per se did not affect the firms' operations or profits, but issues regarding availability of workers – both skilled and un-skilled were matters of concern. Shortage of un-skilled workers was more pronounced in textiles and leather and skilled in automobiles and chemicals.

- While some of the effects of out-migration are nullified with in-migration, lack of training was adding to the skill deficits.
- NREGA was seen by a good section of the sample firms as a hindrance to accessing labour.
- Labour laws were not seen as a hindrance to firm expansion by the majority of the sample firms.
- Reduction in employment absorption appears to be an outcome of technological changes in sectors like textiles, automobiles, chemicals and garments. This is in line

with world-wide trends in manufacturing. Given a greater exposure to the global market, it is also possible that firms in Tamil Nadu are accessing frontier technologies to compete and further reinforcing the decline in employment absorption observed.

- Provisioning of social security benefits by firms is not that widespread.

- Access to credit does not seem to be a major factor even for the smaller firms in hindering growth.

- Expectations on the business/industrial environment seems to be slightly on the down side due to the following reasons: (a) the bigger firms expressed anxieties of the possibilities of transmission of global downturn to India, and (b) the small firms were concerned with the increase in input costs.

- Across firms and industries infrastructure bottlenecks emerged as a major issue hindering production activities. Bulk of the firms expressed availability of uninterrupted power as a major issue hampering production.

- Dealing with the state's bureaucracy imposed huge transaction costs on firms, especially in trade and manufacturing as ambiguities with tax administration and tax laws created unfavorable ecosystem for the firms to plan a growth path.

- Stability in government policies were viewed of high importance by the firms, while corruption did not matter much for firms, especially in construction.

- There has been a steady decline in the activities of trade union across the industries.
- Most of the firms did not have any clear investment plans for the next three years.

Bibliography

Ghosh, Jayati (2011), "The Challenge of Ensuring Full Employment in the Twenty-First Century", *Indian Journal of Labour Economics*, Vol. 54, No. 1.

GoI (2005), *Tamil Nadu Development Report*, Planning Commission, Government of India, Academic Foundation, New Delhi.

Goldar, B. N. (2011), "Organised Manufacturing Employment: Continuing the Debate", *Economic & Political Weekly*, Vol. 46, No. 14, 2 April.

GoTN (2003), *Tamil Nadu Human Development Report*, Government of Tamil Nadu, in association with Social Science Press, New Delhi.

Himanshu (2011), "Employment Trends in India: A Re-examination", *Economic & Political Weekly*, Vol. 46, No. 37, 10 September.

Jenkins. R (2004), "Labor Policy and the Second Generation of Economic Reform in India", *India Review*, Vol. 3, No.4, pp. 333-363.

Kannan, K.P. and G. Raveendran (2009), " Growth sans Employment: A Quarter Century of Jobless Growth in India's Organised Manufacturing", *Economic and Political weekly*, Vol. 46, No. 10, pp. 80-91.

Madras Institute of Development Studies (MIDS) (1988), *Tamil Nadu Economy: Performance and Issues*, Oxford and IBH Pub. Co., New Delhi.

Mazumdar, Dipak and Sandip Sarkar (2004), "Reforms and employment elasticity in organized manufacturing", *Economic and Political weekly*, Vol. 39, No. 27, pp. 3017-29.

Mehrotra, S., A. Gandhi, B.K. Sahoo, P. Saha (2012), "Creating Employment in the Twelfth Five-Year Plan", *Economic & Political Weekly*, Vol. XLVII, No. 19, pp. 63-73.

Mehrotra, S., A. Gandhi, B. K. Sahoo (2012), "Organised and Unorganised Employment in the Non-Agricultural Sectors in the 2000s", Ocassional Paper, IAMR, New Delhi.

Nagaraj, K. (2006), Tamil Nadu Economy: Contours of Change – A Secondary Data Exploration, mimeo, Madras Institute of Development Studies, Chennai.

National Commission on Enterprises in Unorganized Sector (NCEUS) (2009), The Challenge of Employment in India: An Informal Economy Perspective.

Ramaswamy, K. V. (2007), "Regional Dimension of Growth and Employment", *Economic & Political Weekly*, 8-14 December, Vol. XLII, No. 49, pp. 47-56.

Rukmani, R. (1996), "Factors Underlying High Dispersal of Towns in Tamil Nadu", *Review of Development and Change*, Vol. 1, No. 1, pp. 113-25, January-June.

Shyam Sundar, K.R. (2009), *The Current State of Industrial Relations in Tamil Nadu*, report prepared for ILO, New Delhi.

Swaminathan, P. (1994), "Where are the Entrepreneurs? What the Data Reveal for Tamil Nadu", *Economic and Political Weekly*, May 28, 1994.

Tewari, M. (2004), "The Challenge of Reform: How India's Textile and Apparel Industry is Facing the Pressures of Liberalization." ,revised version of a policy paper originally prepared for the India Program, *Center for International Development, Harvard University*, Cambridge MA.

INSTITUTE OF APPLIED MANPOWER RESEARCH
City Office: 53, Lodhi Estate, New Delhi-110 003
Phone: +91 (0) 11 24697081; 24697082
Fax: +91 (0) 11 2778 3467
Web: http://iamrindia.gov.in E-mail: DG.IAMR@nic.in

Campus: Sector A-7, Narela Institutional Area, Delhi-110 040
Phone: + 91 (0) 11 27787215/6/7
Fax: +91(0) 11 27783467
Web: http://iamrindia.gov.in E-mail: DG.IAMR@nic.in