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Abstract

Employment growth in household and small enterprises in Indian manufacturing in 2000s is analysed in the context of inclusive growth. Analysis is based on the results of establishment surveys of unorganized manufacturing and registered manufacturing for the years 2000-01, 2005-06 and 2010-11.The employment share of household enterprises was found to have declined across industries and across states of India with the exception of Gujarat and Delhi. Employment growth in small enterprises defined as those with less than 50 workers in the non-household segment was observed to be positive but insufficient to compensate for the decline of household employment. The employment share of small enterprises was not found to have improved during the years 2001 to 2011 in the States with higher per capita NSDP. This calls for policy initiatives that encourage new entry and growth of employment in existing small enterprises

Keywords: Employment Inclusive Growth Small Enterprises Manufacturing

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Introduction

What will be the role of small enterprises in an economy pursuing inclusive growth? How have small enterprises performed in the recent past as sources of employment in India? Have they been able to fulfil their compensatory role in an era of structural change and policy reform? These are the three key questions addressed in this paper[1]. Participation in productive economic activity is the key feature of inclusive growth. Inclusive growth or the notion of inclusiveness in the economic growth process is often too broadly defined. It suggests that outcomes of growth should result in poverty reduction, improved schooling, and access to higher education, skills, health, sanitation and greater employment for the disadvantaged groups among a host of other societal benefits. These are desirable pro-poor objectives of social welfare spending of the government programmes. The effects of growth is indirect in the sense that growth generates larger tax revenue to finance social welfare spending that in turn makes growth inclusive. Alternatively, one could consider growth that directly benefits large majority of the population as inclusive growth. Growth that improved wage employment opportunities qualifies as the best instance of inclusive growth. When do people feel excluded or not partaking in the economic change happening around them? The answer is when they do not have jobs or expect to get job opportunities in the near future. In this sense, absence of job opportunities would be the first indicator of non-inclusive growth in an economy. The concept of inclusive growth suggests existence of opportunities for productive participation in economic activity. Inclusive growth involves among other things creation of

economic conditions that are conducive to employment opportunities for those already in the labour force as well as for those entering the labour force. In this perspective lack of inclusiveness refers to absence of compensatory mechanisms for potential job seekers due to policy shocks or structural change.

Structural transformation is the hall mark of development that changes the proportion of workers employed in agriculture, industry and services. This process is evidently uneven with some sectors outpacing others and composition within sectors could change. For example, household industries could lose out to modern factory based industries as per capita incomes rise and demand changes in favour modern industries. In modern industries, linkage between small and large enterprises could weaken due to technological obsolescence of small enterprises who have failed to upgrade themselves to meet the quality specification of their buyers. Small enterprises are more vulnerable to import competition due to trade liberalization and could suffer job losses in import substitute industries. Aggregate volume of employment in the economy need not fall as growth sectors could bring about compensatory changes offsetting the adverse effects of structural or policy regime change. The challenge of economic policy is to ensure the desired compensatory changes take place in the economy. Population and work force projections by the World Bank based on United Nations data indicate that India needs to create 10 million new jobs annually for the next 10 years to absorb the additions to the working age population (age group 15-59).This estimate is true even if one argues that not every one joining the working age will be seeking jobs as many of them would be in educational institutions. The severity of the problem can be underlined by noting that we have created only 2.5 million jobs per year during the last 7 years[2].

Manufacturing sector in India has long been characterized as dualistic with relatively large volume of employment in both small enterprises and large enterprises. Employment share of medium enterprises was found to be small giving rise to the phenomenon of missing

middle. This has been the subject of many studies (Majumdar and Sarkar, 2013). Our focus in the present chapter is different and investigates the employment performance of small enterprises in the decade of 2000s. Specifically we look at employment changes in household enterprises and small enterprises in non-household employment across industries and across States in India in the years of significant economic growth. India's real GDP grew at an average annual growth rate of 7.3 per cent during 2000-2010.Employment growth was only 1.5 per cent per annum during the same period[3].

The role of small enterprises is crucial in this context as provider of jobs to large number of entrants to the workforce in the next decade. Small enterprises in both manufacturing and services sector will have their importance in any strategy of inclusive growth. In our analysis the focus is on manufacturing for the simple reason that manufacturing sector is relatively unskilled labour intensive and has the potential to absorb less educated workers. In manufacturing the share of workers with graduate education and above was just 14 per cent among male urban workers in 2009-10 compared to 27 per cent in services (Ramaswamy and Agrawal 2012). In this context a preliminary analysis of changes in manufacturing employment by type of enterprise in the last decade is attempted here. Industry-wise and state-wise analysis of employment change in small enterprises is carried out to highlight the diversity of change and policy challenges. How does one define a small enterprise? The definitions of small enterprises differ across developed and developing countries (ADB 2009). Most widely used definitions of enterprise size are based on the number of workers employed. Following this we may define enterprises with less than 5 workers as microenterprises, those with 5-49 as small-scale enterprises, those with 50 to 199 as medium enterprises and those with 200 or more workers as large enterprises. In India for policy purposes enterprises size is defined using the value of investment in plant and machinery that has under gone changes overtime to adjust for inflation. The average

employment size of enterprises in the category small enterprises (share in total number of enterprises 25 per cent) in the Fourth All-India Census of Registered Micro, Small and Medium Enterprises (2006-07) is reported to be 30 workers.

Role of Small Enterprises in Employment, Job Creation and Poverty

One way to gauge the importance of small enterprises is to look at international evidence. Does the importance of small enterprises measured by their share in total manufacturing employment vary with the level of economic development? Is there a relationship between the share of small enterprise sector in total manufacturing employment and the level of per capita GDP (Gross Domestic Product)? Do small enterprises create more jobs than large enterprises? Let us note that in the international literature the comparison is between categories Small and Medium Enterprises (SMEs) and large enterprises. Here two employment size cut-offs, namely, less than 100 workers (SME100) or less than 250 workers (SME250), are widely used. Evidence points out a negative association between SME250 share in employment and GDP per capita. SMEs are relatively more important in low income countries. More critical is the second question on job creation. In the US , an inverse association between net growth rate of jobs (recognize that firms create jobs as well as destroy jobs, so one measures net contribution to job growth) and firm size is reported. This implies small firms contribute disproportionately to new job creation. Net job growth rate is higher in SMEs. Studies of enterprise size and employment did not take into account the age of the firm in their analysis. We know that young firms (start-ups) start with workforces which are relatively small and tend to grow faster. It follows that the inverse relationship between firm size and employment growth is attributable to the fact that new firms are classified in small employment size classes. In other words, analysis must take into account age of the firm in their analysis of job creation and firm size. This is pointed out by Haltiwanger, Jarmin, and Miranda (2010) in their study of U.S. business establishment level

panel data for the period 1976 to 2005. Their study suggests that (1) start-ups and surviving young businesses are critical for job creation and contribute disproportionately to net growth of jobs, and (2) there is no systematic relationship between firm size and growth after controlling for firm age.

This raises the question whether these results are applicable in the context of developing countries like India where there are market imperfections, particularly access to capital markets, and other institutional obstacles to firm growth. Ayyagari, Demirguc-Kunt and Maksimovic (2011) studied a sample of 47,745 firms in 99 developing countries. The data is based on World Bank Enterprise Surveys, surveyed in the period 2006-2010[4]. The mean share of firms with 5-250 employees in the sample of countries is found to be 66.38 per cent. In other words, SMEs are big contributors to employment in all countries. Further, they find that small and old firms (specifically, firms that are over 10 years old and with 5-99 employees) have the largest proportional share of total employment compared to other size-age groupings. This set of firms is also found to generate the most (up to 85 per cent in the median income country) of new jobs across countries in the sample. Small firms (5-100 employees) and the young firms (<=2 years) are found to have the highest employment growth rates. Small firms (5-100 and 101-250 employees) are found to have higher employment growth rate even after controlling for age of the firm. Employment growth of small firms cannot be attributed to sizes of new firms alone but includes firms of all ages. In brief, SMEs in developing countries employ a large share of workers and create most jobs in manufacturing. In contrast to US evidence that shows small mature firms have net job losses they find in developing countries small mature firms have the largest share of job creation. However, their research suggests that SME contribution to productivity growth is uncertain[5]. They have also reported a negative correlation between SME250 share in employment and GDP per capita that is consistent with the earlier empirical literature.

In the context of inclusive growth debate one could ask whether SMEs exert a significant impact on growth, poverty alleviation and income inequality. Beck et al (2005) attempts to investigate this question using cross-country data from the 1990s. The pointed question is whether employment share of SME250 exerts an independent effect on poverty that is independent of average per capita income growth in a country. Their econometric regressions relate SME250 share in a sample of 45 countries to the following indicators: (1) per capita GDP growth rate over the period 1990-2000 (2) the growth rate of the income of the poorest quintile of the population during the 1990s, (2) the growth rate in the Gini coefficient a measure of income inequality (3) the growth rate in the percentage of the population living on less than a dollar a day, and (4) the growth rate in the "poverty gap," which is a weighted average of the fraction of the population living on less than a dollar a day and how far below one dollar day incomes fall. A significant positive association is found between SME250 share and growth rate of per capita GDP suggesting that countries with higher share of SMEs tend to grow faster. Higher SME share is a characteristic of successful growth performance[6].But this result is affected by the problem of reverse causality undermining the argument that it is a causal relationship. Higher per capita growth rate may encourage faster entry of SMEs. SMEs are not found to impact the poor significantly differently from the effect of growth in average per capita income. It is important to note that based on their econometric results they *could not reject the null hypothesis that SMEs do not reduce poverty*. More research with better data is required to understand the relationship between changes in the share of SMEs, economic growth and poverty reduction.

Evolution of Size Structure and Compensatory mechanism

Imagine that total employment in manufacturing sector of a country is distributed among household enterprises (cottage shops with 1-4 workers), small factories (5-99 workers) and large factories (more than 100 workers). The sum of the employment shares of

three categories sum up to 100 per cent. Ask how the shares of each of the three segments change as per capita GDP rises in a country. This exercise was done by Anderson (1982) and others (see Snodgrass and Biggs, 1996) to understand the evolution of size structure over time with economic development and capture structural transformation within manufacturing. In this stylized phases of transformation manufacturing is initially dominated by household enterprises (Phase 1) and then by small-scale factories (Phase 2) and finally by large factories. The broad pattern is that as GDP per capita rises over time household enterprises are displaced first by small factories and later by large factories. Several factors like market size expansion and specialization, transportation costs, changing demand structure play their role in this process of change. Apparently, none of the three phases are distinct and considerable overlap exists between phases of transition as GDP per capita rises. Rates of transition from household to non-household (factory-based) manufacturing differ between countries. It is pointed out that advanced countries competitive displacement took 100 years but in Taiwan the share of cottage workshops fell by 90 per cent in just 20 years (Snodgross and Bigs, 1996).

Important insight to understand in this stylization is that compensatory mechanism at work. The decline in the employment share of cottage workshops with economic growth is compensated first by employment growth in small mechanized factories and then in large factories. Do we observe a similar process taking place? Is the employment generated in small enterprises strong enough to compensate for the loss of jobs in household enterprises in the 2000s? We shall turn to available data to understand some recent changes in employment by enterprise size[7].

Data and Definitions:

Our analysis is based on the following data sources:(1) National Sample Survey Organisation's (NSSO) surveys of unorganized sector manufacturing in 2000-01 (56th round)

2005-06 (62nd round) (2) NSSO survey on unincorporated non-agricultural enterprises (excluding construction) in 2010-11(67th round). We have considered only the manufacturing enterprises in the 67th round to maintain comparability with earlier surveys. The definitions used in these surveys are listed in BOX 1.The source for employment data on registered manufacturing is the Annual Survey of Industries (ASI) published by the Labour Bureau, Shimla, which provides detailed state-wise and industry-wise data on employment size-classes based on employment schedules of the ASI.

BOX-1

Household-Enterprises (HH Enterprises): HH enterprises include artisans working at home, artisans with workshops and industrial home-work paid for in wages or by piece rate under the subcontracting or 'putting out system' that include shoemakers, carpenters, handloom-workers, embroidery workers, tailors, food processing, tobacco-beedi making, handi-crafts etc.

Small-Scale Factories and Workshops: Mechanization of crop-processing (rice, corn etc.), light engineering like farm implements; power-looms and garment factories, footwear and furniture manufacturers that emerge to displace HH enterprises

Large-Factories: With industrialization, urbanization and income growth, decline in transport costs (infrastructure) and expansion of market size, larger factories enjoy economies of scale and scope eventually displacing small-scale factories/establishments. A firm could own multiple establishments or a single establishment

Source: Anderson (1982)

For our analysis in this paper we have defined household enterprises (HH enterprises) and small enterprises (SEs) as follows: We have considered all enterprises under the category of Own Account Enterprises (OAEs) in the NSSO surveys as HH enterprises and this segment is broadly expected to capture the household industry[8]. All non-household enterprises that employ less than 50 workers are considered as SEs. Total employment in SEs is estimated as the sum of employment in establishments as defined in NSSO surveys plus

employment in factories with less than 50 workers in the registered sector and covered in the ASI. Industry-wise and State-wise estimates of employment in SEs are calculated using the above definition of SEs based on data sources listed earlier.

BOX 2

Definitions:

Worker: All persons working within the premises of the enterprise who were in the payroll of the enterprise as also the working owners and unpaid family workers. The worker may serve the enterprise in any capacity - primary or supervisory. He/she may or may not receive wages/salaries in return to his/her work incidental to or connected with the entrepreneurial activity. Salespersons appointed by an enterprise for selling its services and apprentices, paid or unpaid were also treated as workers

Own-account enterprise (OAE): An enterprise, which is run without any hired worker employed on a fairly regular basis, is termed an own account enterprise.

Establishment: An enterprise which is employing at least one hired worker on a fairly regular basis is termed as an establishment. Paid or unpaid apprentices, paid household member/servant/resident worker in an enterprise are considered hired workers. They have been have further been categorised into two parts: non-directory and directory.

Non-directory manufacturing establishment (NDME): An establishment employing less than six workers (household and hired workers taken together) is termed non-directory establishment

Directory manufacturing establishment (DME) is an establishment which has employed six or more workers.

The 67th round (2010-11) of establishment survey does not provide data on NDME and DME separately. Therefor we have merged data on DME and NDEME in the earlier NSSO surveys to estimate employment data on establishments.

Employment Change by Type of Enterprise: 2001-2011

A word about the measure of employment is required here. The establishment surveys of NSSO capture only the usual principal status (UPS) of workers unlike the Employment and Unemployment Surveys (EUS) which measure both principal status as well as subsidiary status of those employed. UPS refers to those who are employed for relatively large part of the 365 days of the reference year. Usual subsidiary status (SS) refers to those who are

employed for at least 30 days during the reference year and captures various types of short term work engagement. Similarly the employment measure of ASI is equivalent to UPS only. We confine ourselves in this paper to estimates of employment change based on establishment surveys of NSSO and the ASI. The good news is that employment in registered factories (formal sector) is growing faster at nearly 5 per cent per annum and has added 3.8 million workers over the period 2001 to 2011 (Table 1). In contrast household enterprises have lost 4.2 million workers during the same period causing a significant slowing down of employment in all enterprises.

Our focus is small enterprises defined as those with less than 50 workers (see below for more on estimation method). Small enterprises have added 2.2 million new workers in the same period. Small enterprises share in total employment shows a modest increase of 4 percentage points over the last decade. In the context of expected additions to workforce the current scenario is not encouraging. We document the features of employment growth in household enterprises and small enterprises across industries and selected states of India below.

Table 1: Manufacturing Employment by Type of Enterprise:2001-2011 (Millions)

					Distribution (%)		
Enterprise Type	2000-01	2005-06	2010-11	Absolute Change 2001-11	2000-01	2005-06	2010-11
Household	25.1	23.7	20.8	-4.2	58.0	54.4	46.5
Establishments	12.0	12.8	14.0	2.0	27.8	29.3	31.4
Factories	6.1	7.1	9.9	3.8	14.2	16.4	22.1
All Enterprises	43.2	43.6	44.8	1.6	100.0	100.0	100.0
Small –Scale Enterprises**	13.5	14.00	15.7	2.2	31.2	32.1	35.1

* Approximated by OAEs
**Enterprises with less than 50 workers in non-household segment
Source: NSSO Enterprise Surveys and ASI Summary Results of respective years

The key findings emerging from our data analysis may be summarised in the following observations termed facts and numbered from one to six.

Fact 1: The employment shares of HH enterprises have declined or remained constant in a majority of 2-digit industry groups in the last decade. Household industry share is found have declined in 11 out of 16 two-digit industry groups. It has remained constant in four industry groups and significantly increased in only one industry group that is Rubber & Plastic products (Table 2)[9].

Fact 2: The employment shares of HH enterprises have declined across states with the exception of Gujarat and Delhi (See Table 3). This is consistent with the reported increase in home-based workers in garment and other industries in Gujarat and Delhi observed by other scholars. We observed an absolute decline in the number of workers in rural areas across the 21 states in the HH enterprises [10] between the years 2001 and 2011. In urban areas of Gujarat a substantial increase in HH workers offset the decline in rural areas. Other states that showed significant gains in HH employment in urban areas are Uttara Pradesh and Tamil Nadu (close to 200,000 workers).

Fact 3: HH enterprises employment shares decline with income per capita of states

The negative relationship between household enterprises share in total employment and the level of state per capita income measured by Net State Domestic Product (NSDP) per person[11] as shown in Figure 1 is broadly consistent with the proposition of evolution of size structures suggested in the literature on evolution of enterprise size structures with economic growth[12]. NSS 2011 survey indicates that 'lack of demand/shrinkage' was the major problem for HH enterprises.

Fact 4: Employment in establishments has slowed down particularly in rural areas. (Table 4)

Establishments are non-household manufacturing units with less than 9 workers. They form a large chunk of the universe of small enterprises with an all India average share of 90 per cent in 2010. In Table 4, the absolute change in the number of workers employed in establishments by state and by rural urban division within states is presented for two periods, namely, 2001-06 and 2006-2011.It reveals the following changes. First, employment in rural establishments has declined in the second half of 2000s in the 21 states. The big losers are the three southern states of Karnataka, Kerala and Tamil Nadu. Rajasthan is the fourth state wherein employment in rural establishments has declined by more than hundred thousand workers. Gujarat is an exception with substantial employment gains in both rural and urban areas in the second half 2000s. Rural establishments in West Bengal have gained but the urban establishments have suffered severe loss of employment. In Uttara Pradesh rural establishments show a recovery after a drastic fall of more than 300,000 workers in the first half of 2000s. In urban areas establishments in Andhra Pradesh and Tamil Nadu have recorded substantial recovery in the second half compensating the loss in employment in the first half of 2000s. Taking the 21 states together one finds that net employment gains in urban establishments far exceeded the gains in rural establishments. This is not surprising given the fact small enterprises in rural areas suffer from locational disadvantages and lack proximity to markets that make them more vulnerable to demand shocks and technological change.

Fact 5: Small enterprises are not improving their relative share in states with higher initial per capita income (Figure 2)[13].

It is possible that the growth rate of small enterprises has declined in states with better economic performance measured in terms of per capita NSDP growth or higher share of manufacturing in total NSDP. We could not find any statistically significant relationship between growth rate of employment in small enterprises and the state level economic performance indicators. However, as shown in Table 5, except in Gujarat the growth rate of employment in small enterprises during 2001-11 is not higher in more industrialized states. On average, one could observe that employment growth rates have improved in the second half of 2000s. Perceptible improvement can be observed in Andhra Pradesh, Gujarat, Himachal Pradesh, Tamil Nadu and Punjab. At the same time employment growth rate declines are significant for example in Karnataka and Kerala. The Determinants of interstate variations in small enterprise employment growth is not well understood and requires more research.

Fact 6: Non-Household employment is concentrated and unevenly distributed (Table 6)

The share of top 4 states, Tamil Nadu, Maharashtra, Gujarat and Uttara Pradesh is 46 per cent in 2010. But more than 60 per cent of the incremental contribution over the period 2001-2011 has come from 4 states namely, Tamil Nadu, Maharashtra, Gujarat and Andhra Pradesh. This suggests increasing inequality in the growth of employment opportunities.

What could be done to boost small enterprises and employment growth?

First, improve conditions for entry into business and transaction costs of doing business for firms. Small enterprises are more likely to face higher costs of entry in terms of getting through the regulatory formalities of setting up the business. Entry Costs are the legal and other related costs of business registration that a start-up must bear before it becomes legally operational. Actual entry costs are evaluated relative to per capita income in a country to get an idea of feasible potential entry (Djankov et al., 2002). The World Bank Doing Business

Reports have drawn repeated attention India's low ranking in terms of their doing business. The latest Doing Business Report 2014 estimates that it takes 40 days and 64 per cent of GDP per capita to start a business in Bengaluru, the so-called software capital of India, in contrast it takes 30 days and 70 per cent of GDP per capita to start a business in Mumbai and both have the same number of procedures for start-ups. These statistics are just indicators of the long road to reform in Indian States. Transaction costs include costs of contract enforcement related to sale and purchase of goods (cheque payment etc.), debt recovery and costs of quality certification of goods for export and domestic sale etc. in the course of doing business. Often small enterprises are not paid in time for the goods supplied by them and are forced to offer credit sale by their customers. In order to enforce credit contracts enterprises will have to incur extra costs in terms of fees for legal consultancy and other court fees. This could work against the expansion plans of small enterprises. Both entry costs and contract enforcement costs are found to be important determinants of SME employment share in cross-country models (Ayyagari et al., 2007).

Second, improve access to electricity and better infrastructure like modes of transport (better roads) that increase the access to domestic markets and sea ports. Establishments in the NSSO survey (2010-11) reported that lack of 'regular supply of electricity' as one of their major problems. Public investment in infrastructure and effective support services (like technology, marketing and labour training services) can result in positive externalities that benefit small enterprises. Investment and growth in agriculture and allied sectors is likely to generate significant number of jobs in small enterprises. Slow growth of agriculture has been the weak spot of Indian economy in the last few years.

Third, Improve access to institutional credit. The ratio of SME credit to GDP in India is just 4.3 per cent very low compared to other competitor countries like Thailand (30.6 per cent), Malaysia (17.4 per cent), Taiwan (24.8 per cent), and China (48 per cent) but similar to

Brazil (3.7 per cent). In other words there is large scope for providing credit support to SMEs in India. Is it worth attempting to penetrate deep into the forest of SMES? Are they really credit constrained? Though these are somewhat unsettled questions in the area of small enterprise finance available evidence suggest the need for greater to support SMEs. A recent study based on data from the World Bank Enterprise Surveys for 116 developing countries find that SMEs (those with less than 100 workers) are more likely to be credit constrained than large firms (Kuntchev et al 2013). Small enterprises were found to be credit constrained in the sense that they sought external credit but they could not get it. In fact, the probability of being credit constrained decreases with firm size. Firms that are credit constrained in reality are more likely to report access to finance as an increasing obstacle. Furthermore, small and medium enterprises finance their working capital and investments mainly through trade credit and informal sources of finance. Credit rationing is known take place even in the area of informal finance adversely affecting small enterprises. The share of small enterprises in total bank credit to industry is estimated to have declined in 2000s relative to the 1990s (Bhattacharya 2013).

The NSSO survey (2010-11) of unincorporated enterprises reveals that 97 per cent manufacturing enterprises had not received any assistance from the government. This percentage is 99 per cent in urban and 98 per cent in rural areas. Only three per cent of manufacturing establishments in rural areas had reported of receiving any assistance from government in the form of 'financial loan'. The corresponding figure in urban areas is only one per cent. In brief access to institutional credit is largely absent and access perhaps confined to registered small enterprises, those registered with some type of government agencies. Lastly note that policies to facilitate entrepreneurship, new entry and growth of small enterprises are more important than tax and other measures that build up the incentive to remain small.

Conclusion

Small enterprises in India will have an important instrumental role in the process of achieving inclusive growth. In this preliminary analysis we found that employment in household enterprises have declined across industry groups and states in India resulting in job loss of 4.2 million in the decade of 2000s.Employment growth in small enterprises defined as those with less than fifty workers in the non-household segment, has been insufficient to offset the decline of household employment. Small enterprises employment share has not improved during the years 2001 to 2011in the states with higher per capita SDP. This calls for policy initiatives that encourage entry of new small enterprises and employment growth in existing small enterprises.

References:

Asian Development Bank (2009), Enterprises in Asia: Fostering Dynamism in SMEs, Special Chapter in Key Indicators for Asia and the Pacific 2009, Manila

Anderson, Dennis (1982), Small Industry in Developing Countries: A Discussion of Issues', World Development, 10(11):913-48

Ayyagari, M., T.Beck, and A.Demirguc-Kunt (2007), 'Small and Medium Enterprises across the Globe', Small Business Economics ,29(4):415–434

Ayyagari.M ., A.Demirguc-Kunt, and V.Maksimovic (2011),' Small vs. Young Firms across the World: Contribution to Employment, Job Creation, and Growth', World Bank Research Working paper No.5631, World Bank, Washington. D.C

Ayyagari.M. , A.Demirguc-Kunt, and V.Maksimovic (2014), 'Who creates jobs in developing countries?', Small Business Economics, 43(1):75–99

Bhattacharya, Achintan (2013)," Credit Retrogression in the Micro and Small Enterprise Sector', Economic and Political Weekly, 48(35):105-114

Beck, T., A. Demirguc-Kunt and R. Levine (2005), SMEs, Growth, and Poverty: Cross-Country Evidence, Journal of Economic Growth 10(3):199–229

Djankov, S., R. La Porta, F. Lopez-de-Silanes and A. Shleifer 2002, 'The Regulation of Entry', Quarterly Journal of Economics, 117(1), 1–37

Haltiwanger, J.C., R.S.Jarmin, and J.Miranda (2010), 'Who creates jobs? Small vs. Large vs. Young, NBER Working Paper No.16300, available at http://www.nber.org/papers/w16300 accessed on 26 May 2014

Kuntchev, V., R.Ramalho, J. Rodriguez-Meza, and J.Yang (2013), What Have We Learned from the Enterprise Surveys Regarding Access to Credit by SMEs?, World Bank Policy Research Working Paper No. 6670. Available at SSRN: http://ssrn.com/abstract=2344038/accessed on May 25, 2014

Mazumdar, D., and S.Sarkar (2013), Manufacturing Enterprise in Asia: Size structure and economic Growth, Routledge and IDRC, London and Newyork

National Sample Survey Organization (2002a). NSS 56th Round (July 2000-June 2001); Report No 477 (56/2.2/1), , Unorganised Manufacturing Sector in India, Key Results, Ministry of Statistics and Programme Implementation. New Delhi, Government of India.

National Sample Survey Organization (2002b). NSS 56th Round (July 2000-June 2001); Report No 478 (56/2.2/2), Unorganised Manufacturing Sector in India: Characteristics of Enterprises ,Ministry of Statistics and Programme Implementation. New Delhi, Government of India.

National Sample Survey Organization (2002c): NSS 56th Round (July 2000-June 2001); Report No. 479 (56/2.2/3), Unorganised Manufacturing Sector in India: Employment, Assets and Borrowings, Ministry of Statistics and Programme Implementation, Government of India

National Sample Survey Organization (2007a): NSS 62nd Round (July 2005-June 2006); Report No. 524(62/2.2/1), Operational Characteristics of Unorganized Manufacturing Enterprises, Ministry of Statistics and Programme Implementation, Government of India

National Sample Survey Organization (2007b): NSS 62nd Round (July 2005-June 2006); Report No. 525(62/2.2/2), Unorganised Manufacturing Sector in India: Employment, Assets and Borrowings, Ministry of Statistics and Programme Implementation, Government of India

National Sample Survey Organization (2012): NSS 67th Round (July 2010 – June 2011); Report No. KI (67/2.34), Key Results of Survey on Unincorporated Non-agricultural Enterprises (Excluding Construction) in India, Ministry of Statistics and Programme Implementation. Government of India

National Sample Survey Organization (2013): NSS 67th Round (July 2010 – June 2011); Report No. 549(67/2.34/2), Economic Characteristics of Unincorporated Non-agricultural Enterprises (Excluding Construction) in India, Ministry of Statistics and Programme Implementation. Government of India

Ramaswamy, K.V. and Tushar Agrawal (2012), 'Services-led Growth, Employment, and Skill and Job Quality: A study of Manufacturing and Service Sectors in Urban India', in S.Mahendra Dev (ed), India Development Report 2012-13, Oxford University Press, New Delhi

Ramaswamy, K.V. (1994),'Small Scale Manufacturing Industries in India: Some Aspects of Size, Growth and Structure ', Economic and Political Weekly, 29(9): M13-M23

Snodgrass, D. and T. Biggs (1996), Industrialization and the Small Firm: Patterns and Policies, International Centre for Economic Growth and HIID, San Francisco

Shaw, Abhishek (2013), 'Employment Trends in India: An Overview of NSSO's 68th Round', Economic and Political Weekly, 48(42):23-25

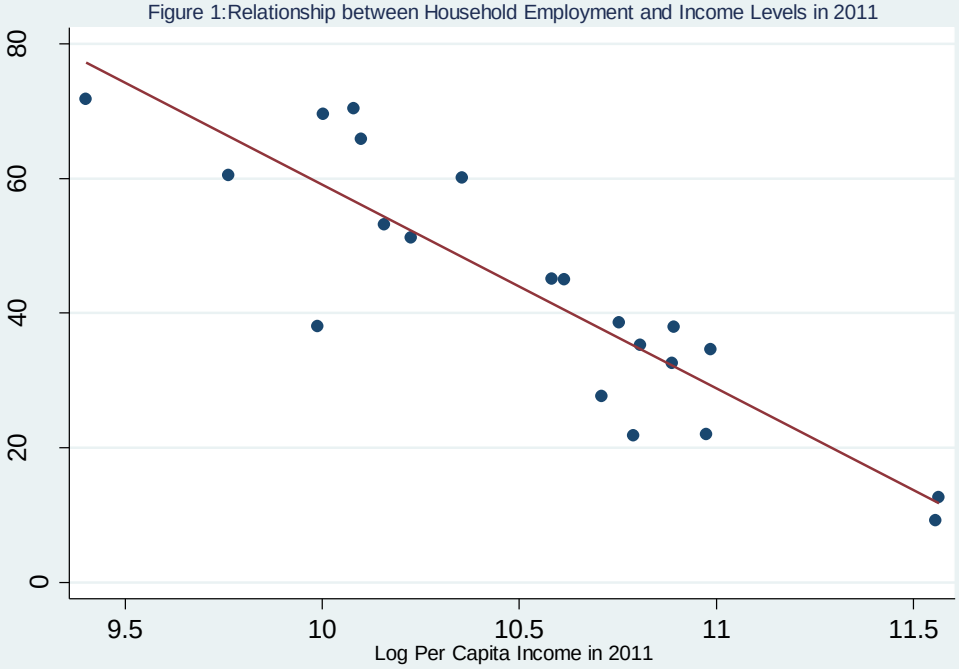
Sundaram, K. (2013), 'Some Recent Trends in Population, Employment and Poverty in India: An Analysis', Indian Economic Review, 48(1):83-128

Table 2: Share of Household Employment by industry:2001-11

Industry *	2000-01 Per cent	2010-11 Per cent	Change Per cent
Cotton ginning, cleaning	10.3	6.8	-3.6
Food & Beverages	53.0	46.2	-6.7
Tobacco products	89.1	84.8	-4.3
Textiles	52.3	53.1	0.8
Wearing Apparel	65.5	62.6	-2.9
Leather products	27.1	25.8	-1.3
Wood & Wood products	86.0	77.1	-8.8
Paper & Paper products	49.9	21.7	-28.2
Printing and recorded media	18.9	19.1	0.2
Coke and Refined petro-products	9.1	1.4	-7.6
Chemical & Chemical products & Pharmaceuticals	40.3	19.2	-21.1
Rubber & Plastic products	11.2	19.5	8.3
Non-metallic Mineral products	44.1	26.9	-17.2
Basic metals	4.6	6.0	1.3
Fabricated metal products	33.0	22.8	-10.2
Other industries including machinery & Transport Equipment	29.7	30.9	1.2
All manufacturing	54.5	46.6	-8.0

*NIC 2004
Source: same as Table 1

Figure 1:Relationship between Household Employment and Income Levels in 2011

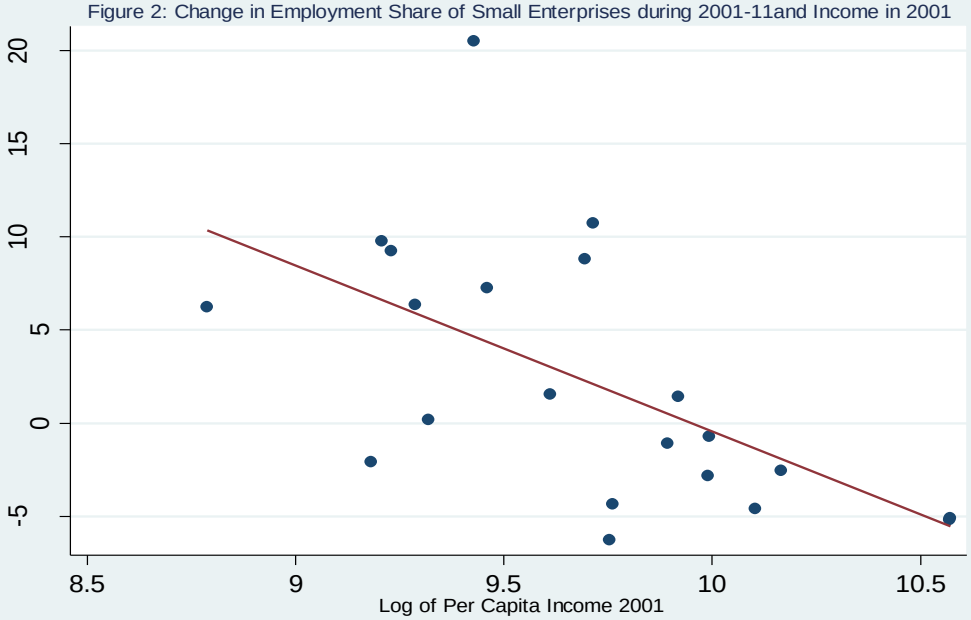


Source: Author Calculations based on NSSO Survey in 2010-11 and CSO

Table 3: Share of Household Employment in Total Manufacturing Employment by State				
State	2010-11	2005-6	2000-01	Change in share 2011-01
Andhra	45.1	53.3	61.5	-16.4
Assam	38.0	63.6	66.4	-28.4
Bihar	71.8	86.9	84.4	-12.6
Chhattisgarh	53.1	69.4	73.1	-20.0
Delhi	12.6	4.9	10.1	2.4
Goa	9.2	15.2	43.6	-34.5
Gujarat	38.0	33.5	31.7	6.3
Haryana	22.0	27.5	34.2	-12.2
Himachal	38.6	60.3	59.4	-20.8
Jharkhand	65.8	79.0	79.1	-13.3
Karnataka	44.9	44.8	53.8	-8.8
Kerala	35.2	40.1	38.4	-3.2
Madhya	69.6	75.4	71.3	-1.7
Maharashtra	34.6	32.7	40.2	-5.6
Odisha	70.3	86.1	89.6	-19.3
Punjab	27.6	33.0	34.5	-6.9
Rajasthan	51.1	52.4	66.2	-15.0
Tamil	32.5	39.3	43.9	-11.4
Uttaranchal	21.8	39.9	64.9	-43.1
Uttar	60.4	64.7	61.9	-1.5
West	60.1	67.3	70.6	-10.5
Above 21 States	46.5	54.4	57.8	-11.3
Source: NSSO Enterprise Surveys of respective years				

Table 4: Change in Absolute Employment in Establishments by State: Rural versus Urban Areas				
State	2011 over 2006		2006 over 2001	
	Rural Areas	Urban Areas	Rural Areas	Urban Areas
Andhra	53338	247551	155688	-21772
Assam	53107	-5634	42482	11576
Bihar	11012	-5647	-43153	-7392
Chhattisgarh	26050	-14560	-6677	4274
Delhi	-1919	212532	-2101	-387069
Goa	-3053	-2525	-5232	116
Gujarat	113021	498184	727	164557
Haryana	40694	-79776	35678	72307
Himachal	4798	3824	-7069	1680
Jharkhand	35606	-23343	-4253	28190
Karnataka	-310581	753	93299	27590
Kerala	-211667	12215	88102	70940
Madhya	2403	114	41136	-16667
Maharashtra	-8464	32985	-17052	233878
Odisha	42241	-15348	26339	21571
Punjab	36088	102822	-58315	-45994
Rajasthan	-103308	28818	142007	83681
Tamil	-199583	443394	257061	-173855
Uttaranchal	-394	17415	11918	-3033
Uttara Pradesh	174175	-27168	-364429	99553
West Bengal	175745	1834	108735	-384
Above 21 States	-70691	1428440	494891	163747
Source: Authors' Estimates based on NSSO Surveys of 2000-01, 2005-06 and 2010-11 respectively				

Figure 2: Change in Employment Share of Small Enterprises during 2001-11and Income in 2001



Source: Author Calculations based on NSS Surveys and CSO Data

Table-5: Growth of Employment in Small enterprises by State (Per cent)				
State	2001-06	2006-11	2001-11	Manufacturing share in NSDP-2001
Andhra	2.6	5.4	4.0	9.5
Assam	8.1	5.4	6.7	5.7
Bihar	-5.9	1.4	-2.3	5.4
Chhattisgarh	-0.5	4.0	1.7	11.2
Delhi	-11.8	7.6	-2.6	9.3
Goa	-4.7	-5.8	-5.2	29.3
Gujarat	2.8	9.4	6.0	24.2
Haryana	6.7	-2.2	2.2	17.9
Himachal Pradesh	-1.7	7.7	2.9	10.2
Jharkhand	4.2	2.6	3.4	13.8
Karnataka	2.7	-7.5	-2.5	11.2
Kerala	4.9	-5.5	-0.5	8.9
Madhya Pradesh	1.1	0.6	0.9	10.6
Maharashtra	2.0	0.8	1.4	17.0
Odisha	5.3	3.3	4.3	7.6
Punjab	-4.1	7.5	1.5	13.4
Rajasthan	11.0	-2.1	4.3	10.5
Tamil	0.3	3.6	1.9	17.8
Uttaranchal	2.9	8.5	5.7	10.3
Uttara Pradesh	-3.0	1.9	-0.6	11.1
West Bengal	1.4	2.3	1.9	8.7
Above 21 States	0.8	2.4	1.6	12.6
All India	0.8	2.3	1.6	12.5
Source: NSSO Enterprise Surveys of respective years and EPWRF data base available at http://www.epwrfits.in				
* Average annual compound Growth Rate				

Table 6: Distribution of Non-Household Employment by State		
	2000-01	2010-11
Andhra	8.62	9.51
Assam	1.09	1.46
Bihar	1.33	0.99
Chhattisgarh	0.83	0.95
Delhi	4.97	3.01
Goa	0.25	0.21
Gujarat	7.69	10.90
Haryana	2.31	2.92
Himachal	0.41	0.70
Jharkhand	1.21	1.04
Karnataka	6.09	4.87
Kerala	4.52	3.53
Madhya	2.59	2.25
Maharashtra	12.49	12.08
Odisha	1.31	1.85
Punjab	3.69	3.80
Rajasthan	2.46	3.18
Tamil	13.50	14.39
Uttaranchal	0.48	1.33
Uttar Pradesh	12.17	9.67
West Bengal	10.25	9.21
Above 21 States	98.27	97.85
All India	100	100
Source: Authors' estimates based on results of NSSO establishment surveys and ASI of respective years		

[1] In this paper small enterprises and small-scale enterprises are used interchangeably. In the Indian official policy documents the term small-scale industry is widely used.

[2] This estimate is based on a comparison of Employment and Unemployment Survey (EUS) estimates of total employment based on usual principal status (UPS) of workers in 2004-04 and 2011-12 respectively. See Shaw (2013) for details

[3] For a detailed discussion of recent trends in population, employment and poverty in India see Sundaram (2013)

[4] Also see Ayyagari, Demirguc-Kunt and Maksimovic (2014)

[5] Their study excludes enterprises with less than 5 workers and is based like many other studies only surviving firms. They consider only SMEs in the formal sector and ignore the informal sector

[6] The reverse does not necessarily hold. High SME share does not cause higher per capita GDP growth rate. See the discussion in Beck et al (2005). Studies based on cross-section of countries are subject to well-known limitation that countries cannot be viewed as having drawn from the same population. But the study controls for many inter country differences.

[7] For an earlier analysis of the structural changes in small-scale industry in India see Ramaswamy (1994)

[8] This method of estimating household industry workers should be regarded largely as preliminary. It is subject to revision as establishment data from the population census or the economic census is not yet available. The available workforce data from the Census of India indicates a very much lower number of household industry workers in both 2001 and 2011. We have not attempted to reconcile Census data (main and marginal workers) and NSSO enterprise numbers as the definition of worker is not the same. Our estimates of Household industry employment could be under estimating the number of workers operating within household premises often called home-based workers. This is because nearly 24 percent of establishments are found to operate within household premises in the enterprises surveys. We have not estimated the number workers in those enterprises. At the same time we should note that only 82 percent of rural OAEs and 77 percent of urban OAEs are found to work within household premises. We have taken all workers under OAES as household workers mitigating the extent of under estimation. The magnitude of home-based workers in different sectors of the Indian economy is still largely unclear with lot of scope for more research

[9] We have not investigated the industry specific reasons for this result

[10] Not reported here to save space

[11] Data on NSDP per capita is taken from EPWRF data base available at http://www.epwrfits.in

[12] Line shown in Figure 1 is the fitted plot obtained by regressing the share of household enterprises in total employment on the log of per capita NSDP in 2011

[13] Line shown in Figure 2 is the fitted plot obtained by regressing change in employment shares of small enterprises during 2001-11 on the log of per capita NSDP in 2001