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India's Macroeconomic Policy Regime and Challenges of Employment:

Some Reflections on the Manufacturing Sector

The International Center for Development and Decent Work

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Contents

Abstract

On would hardly quibble with the view that eradication of poverty and promotion of decent work depends on sustained and inclusive economic growth, and not simply high rates of growth per se. This of course requires necessary intervention on several fronts, in particular adequate macroeconomic space for national governments while being open to equitable multilateral trading systems. Investments in physical and social infrastructure with due emphasis on rural areas, necessary structural reforms, appropriate fiscal and monetary policies and a climate favourable to micro, small and medium enterprises are among the more important elements in a coordinated macroeconomic policy framework that can take the country in the direction of sustainable and inclusive growth.

It is well-acknowledged that the period since the early 1990s has witnessed a fundamental repositioning of the State versus the Market in the Indian economy. Essentially, the transition has been characterized by a strong push towards a policy reform programme, resulting in a very substantial degree of internal and external economic liberalization. Such a paradigm has been seriously deficient in terms of a whole range of macro-economic interventions required for a growth process which can be inclusive and promote decent work. Sure enough, as per the official figures, the period since the early 1990s clearly shows an acceleration in the trend growth rate compared to the 1980s, but it has been seriously flawed in terms of labour market outcomes. Furthermore, it may not be advisable to see the spurt in growth rates as a decisive transition to a significantly higher growth path.

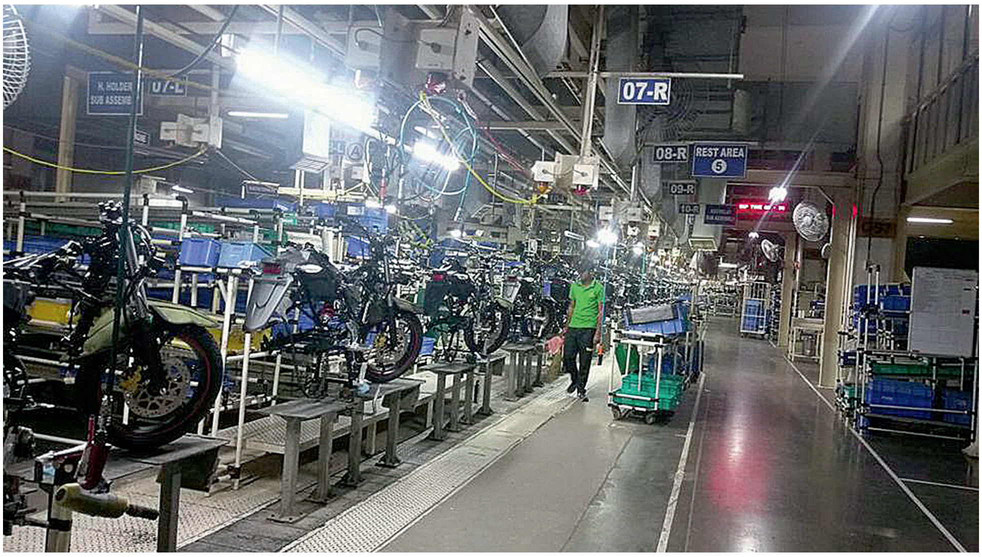
Source: ICDD

Among the most worrisome labour market outcomes is the fact that the pace of employment generation has been completely out of tune with the rate of growth of GDP and there has been a significant fall in the elasticity of employment with respect to output. In other words, the key message that gets reinforced by the employment data for almost three decades now is that the transition to a high growth trajectory has not delivered much on the employment front. Moreover, organized manufacturing and services appear to contribute very little additional employment creation, and the expectation that these would add significantly to the generation of employment opportunities once neo-liberal policies succeeded in delivering growth has hardly materialized. On the contrary, there has been a significant dip in the absolute count of the workers in organized segments of the economy. Much of the small increase in employment has been in the categories of casual and self-employment opportunities, which have extremely adverse distributional and social welfare implications. By now it is well acknowledged that most of the important labour market outcomes have shown little improvement during the reform period. Furthermore, deterioration with respect to employment is also reflected in different dimensions of quality such as growing informalization, high incidence of vulnerable self-employment, etc. This paper draws on the relevant secondary sources, including the major data systems, to underscore the argument that there is hardly any strategy to realize adequate and decent employment in contemporary India.

Keywords: Employment challenges, India's macroeconomic policy regime,
Industrial policies, Make in India.

1 Introduction

It hardly needs any emphasis that sustained and inclusive economic growth and not simply high rates of growth per se is critical for eradicating poverty and promoting decent work in general. This of course requires necessary intervention on several fronts, particularly adequate macroeconomic space for national governments while being open to equitable multilateral trading systems. Investments in physical and social infrastructure with due emphasis on rural areas, necessary structural reforms, appropriate fiscal and monetary policies and a climate favourable to micro, small and medium enterprises are among the more important elements in a coordinated macroeconomic policy framework that can take the country in the direction of sustainable and inclusive growth, which also addresses the issues related to decent employment. In fact, it is important to emphasise that without addressing the concerns related to employment, sustainability of any growth process may not be feasible and, in any case, it is not desirable.



Source: ICDD

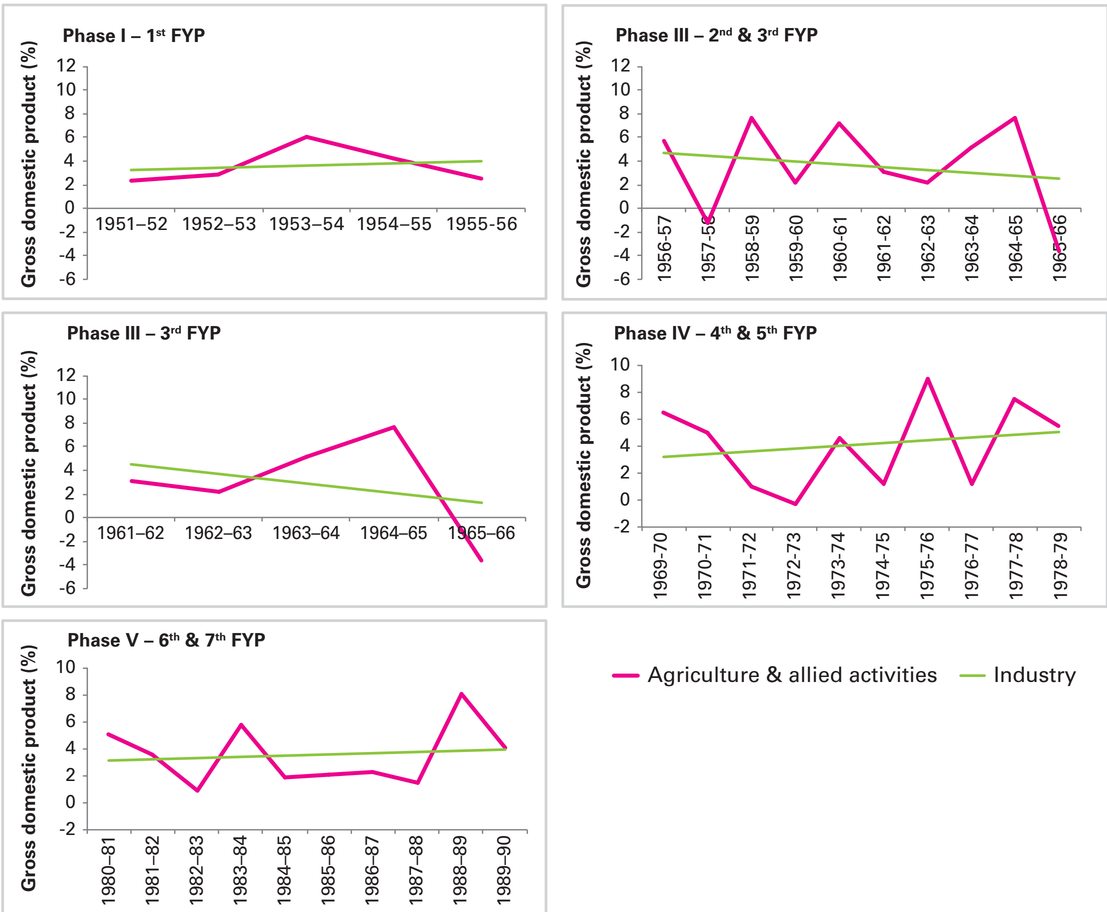
It is well-acknowledged that the period since the early 1990s has witnessed a fundamental repositioning of the state versus the market in the Indian economy. Essentially, the transition has been characterized by a strong push towards a neo-liberal policy regime, resulting in a substantial degree of internal and external economic liberalization. Although the process had begun in the second half of the 1980s, it was in July 1991 that a rapid and sharp shift in the economic policy towards neo-liberalism was officially enunciated, making a transition from a 'mixed economy' policy to a 'market-driven' paradigm. Such a frame work has been seriously deficient in terms of the whole range of macroeconomic interventions required for a growth process which can be inclusive and can promote decent work. As per the official figures, the period since the early 1990s clearly shows an acceleration in the trend growth rate compared to the 1980s, but in terms of labour market the outcomes have been seriously flawed. Furthermore, it may not be advisable to see the spurt in growth rates in some years, since the early 1990s, as a decisive transition to a significantly higher growth path.

This paper is structured as follows: *Section 2* provides a brief overview of the development strategy and economic performance of the Indian economy since independence, with special focus on the recent years. *Section 3* highlights important dimensions and policies related to the manufacturing sector, particularly highlighting the major features of the current non-agricultural employment scenario in India, drawing largely from the Sixth Economic Census and some other large-scale relevant data sources. *Section 4* seeks to examine the challenges before the industrial policy in India to underscore the argument that there is hardly any strategy to realize adequate and decent employment. *Section 5* concludes the paper.

2 A Brief Overview of India's Growth Strategy and Performance since Independence

India has witnessed substantial economic transformation in the last seven decades, with significant differences in the processes at work at the regional and sub-regional levels (**Figure 1**), which are not possible to engage with in our brief remarks here. Rather, the aim of the section is to provide a bird's eye-view of the nature and direction of India's economic development, at a high level of generality, since independence, and the underlying policies accounting for it.

Figure 1: Annual growth rate of GDP at factor cost (2004–05 prices)



Source: Central Statistics Office (CSO).

It may be useful to organize the different phases of the relevant period in a chronological sequence[1]. The underlying rationale of distinguishing between these phases, as listed below, is rooted largely in the shifts in official perceptions regarding the overriding economic issues and problems the country was confronted with and the associated policy thrusts and changes.

I. The preparatory phase in planning for development (from independence to the mid-1950s, **Figure 2**);

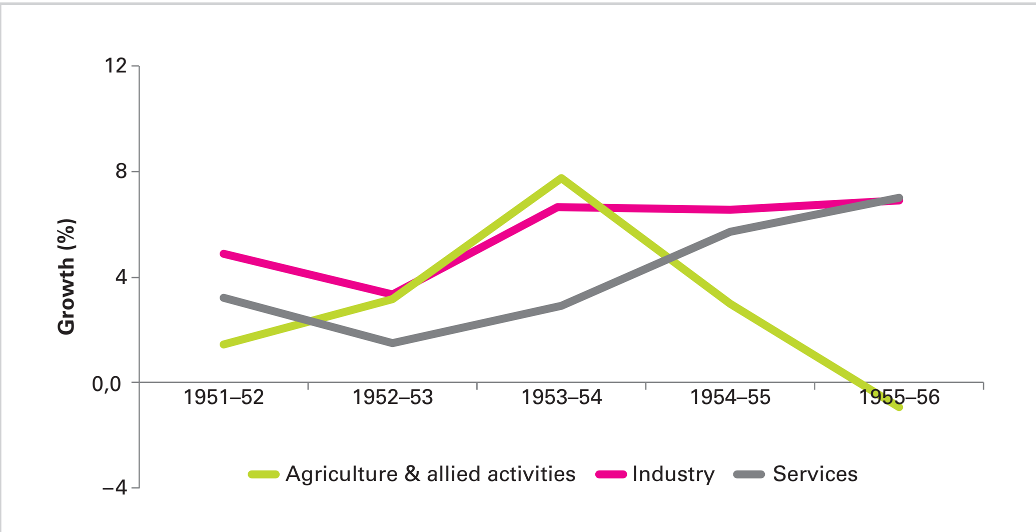
II. The phase of heavy industry-led industrialization (from the mid-1950s to the mid-1960s);

III. The phase of pulling up agriculture (the late 1960s and 1970s);

IV. The phase of pump-priming of aggregate demand (the decade of the 1980s); and

V. The phase of economic liberalization (from July 1991 to the present). The first Five Year Plan (FYP), which emphasized the importance of raising the level of savings in the economy to accelerate the rate of growth, was a sort of a loose affair to put together a set of important projects, particularly in infrastructure and agriculture, and not an analytically rigorous formulation in terms of coordinating investment decisions in different sectors.

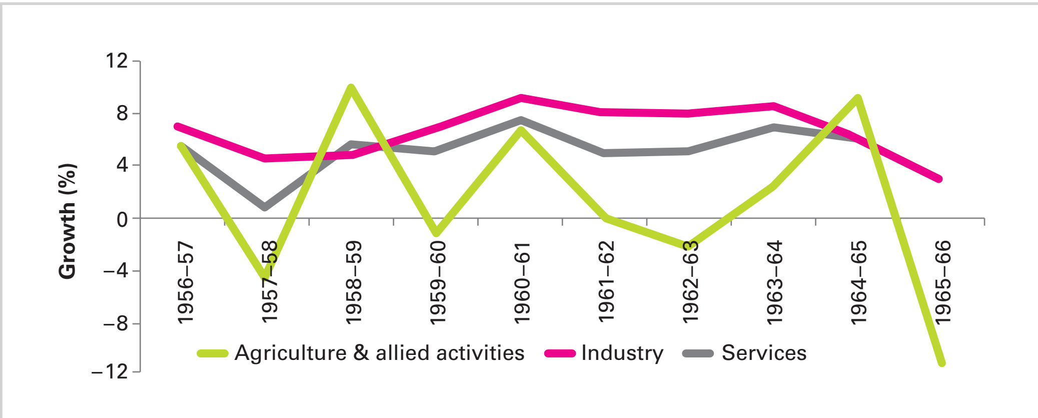
Figure 2: Sectoral growth in the first phase



1 Observers of Indian economy have, of course offered a variety of typology of phases. Obviously it is not possible to go into a detail discussion of this issue here. The most commonly used distinction is: the *dirigiste* era (1947–91) and the *reform* era (i.e., since the early1990s). Some of the recent quantitative literature has tried to think different phases as growth episode (Sen and Kar, 2016).

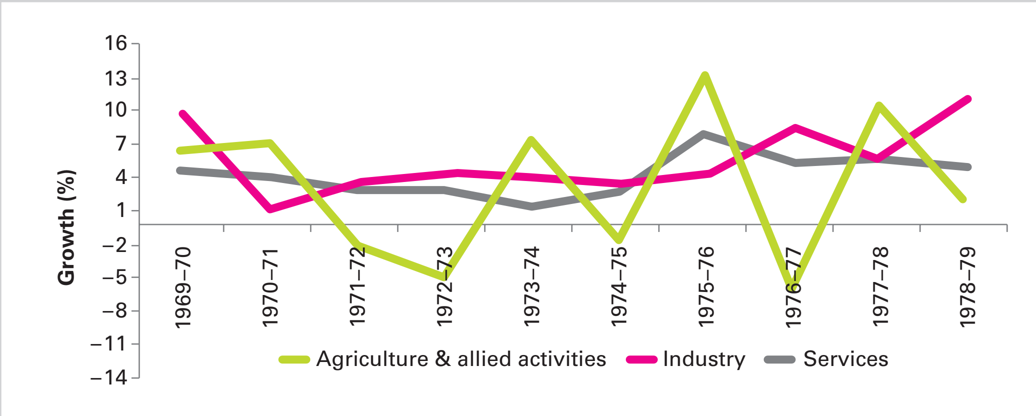
According to most commentators, intellectually the most exciting moment in India's planning strategy comes with the second FYP (i.e., at the beginning of the second phase in terms of the classification suggested at the outset). The central idea underlying this strategy is well conveyed by recalling the following statement from the relevant plan document: 'If industrialisation is to be rapid enough, the country must aim at developing basic industries and industries which make machines to make the machines needed for further development'. Third FYP was largely a continuation of its predecessor.

Figure 3: Sectoral growth in the second phase



By mid-1960s, India's development trajectory came under substantial stress both due to factors intrinsic to the planning process as well as external reasons (in particular two military engagements and terrible monsoon failures of 1965 and 1966). The basic policy wisdom emerging from the economic difficulties that the country confronted at this juncture was to pull up its agriculture. Hence, the fourth FYP launched in 1969, adopted a strategy popularly known as the 'Green Revolution' that marked a shift in development from an emphasis on heavy industry to agricultural development strategy.

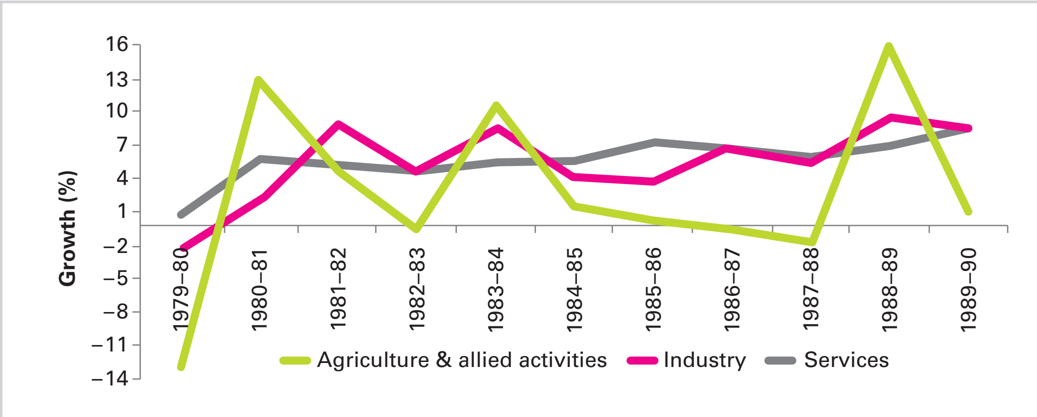
Figure 4: Sectoral growth in the third phase



This, as per the chronological classification suggested at the outset, is the beginning of the third phase. It may be recalled that a number of economic analysts in India had been quite critical of the earlier strategy for not taking up thorough land reforms. As it happens, the 'agriculture-first' strategy, which came into being with the fourth plan and also continued to be the hallmark of the fifth FYP, did not address the issue of land reforms and simply focused on technological modernisation and 'betting on the strong'. A variety of support mechanisms, including credit and price support were devised to this effect. Sure enough, in terms of propping up the agricultural growth rate, the new strategy, in spite of its distributional limitations, delivered good results; so much that the dependence on frequent imports of food became a thing of the past after the mid-1970s, and the government could claim that finally India had become 'self-sufficient' in this regard.

Further, apart from the above-noted aspect of agriculture, it had also dawned on India's policymakers by the late 1960s that the 'trickle-down' mechanism was hardly evident as problems of unemployment and poverty were pervasive and persistent. Consequently, an important response from the policy establishment was to start thinking about the strategies of so-called direct attack on poverty and unemployment, in particular from the fifth FYP (1974–79) onwards, and gradually a variety of programmes got devised and put in place to this end. Such programmes gained substantial significance during the sixth (1980–85) and seventh (1985–90) FYPs and have continued to remain an important feature.

Figure 5: Sectoral growth in the fourth phase



Another notable challenge confronting India's policymakers since the mid-1960s was a significant deceleration in industrial development and overall economic growth rate. Apart from some of the major policy decisions around agriculture as well as poverty alleviation, which, of course, indirectly impacted the industrial and overall growth rate, a significant policy feature from the early 1980s was that of pump-priming the aggregate demand. In terms of the classification suggested at the outset, this made up the fourth phase. However, this strategy ran into serious difficulty soon, due to mounting public debt (both internal and external). Further, the situation was exacerbated due to major changes in the international geo-political context, particularly during the Gulf War of 1990–91. One of the consequences of the changes in domestic as well as international conjuncture for India was a crisis of foreign currency reserves, which was one of the compelling reasons for the country to seek help from World Bank and IMF.

As is well known, help from the Bretton Woods Institutions came with conditionality and thus, compared to the preceding four decades, India embarked on quite a different policy trajectory in its economic journey since July 1991. The period since then, that of so-called economic reforms/liberalization, has been designated as the fifth phase. It is worth emphasizing here that the balance of payments crisis of 1991 was an important input, but certainly by no means the only one in effecting a sharp break from the earlier policy regime. By the late 1960s, a number of economists had already started questioning India's overall development strategy, particularly the wisdom of a state-led development paradigm, as adopted after independence. For instance, the critiques were claiming that the idea of autonomous development was a recipe for backwardness; the public sector, instead of being the flagship of rapid growth, is a drag on society's resources, and so on.

Basically the change in India's macroeconomic strategy since the beginning of the fifth phase was premised on the significant play of market forces in different product and factor markets, including financial markets, coupled with a decreasing role of the state, particularly as producer and promoter but also as regulator of the economy. Without going into the details here, we may note that the policy changes since July 1991 in case of the Indian economy are enough to view it as a case of transition from the state-led or *dirigiste* development paradigm, which characterized the earlier four decades to a liberalization paradigm[2].

Leaving aside the perspectives of the neo-liberal, liberal or the left, which evoked intense debate among economists working on India, there has been little doubt that the outright condemnation of the earlier strategy by the neo-liberals had little merit. The achievements of the earlier strategy, although fell short of expectations, cannot be dismissed completely. On the whole, the performance of the Indian economy during the *dirigiste* and the neo-liberal era continues to be a subject of intense debate[3], especially with respect to adequate and sustainable livelihood options for a large section of the population. In my assessment a central feature of the essential picture that emerges is one of overall worsening in employment and conditions of work even though there has been a significant acceleration in output growth in the non-agricultural sector. As regards the agricultural sector[4], its performance has tended to worsen considerably not only with respect to employment but also output growth. Fundamentally, there has been a change in the pattern of growth where the non-agricultural sector (essentially the services) has shown substantial acceleration in output per worker compared to the agricultural sector, and thus the gap between the two has tended to increase very substantially. Furthermore, employment content of growth process has gone down significantly during the reform era. In particular, rural India which houses more than two-thirds of the working population of our country has been among the worst hit during the period of reforms. According to

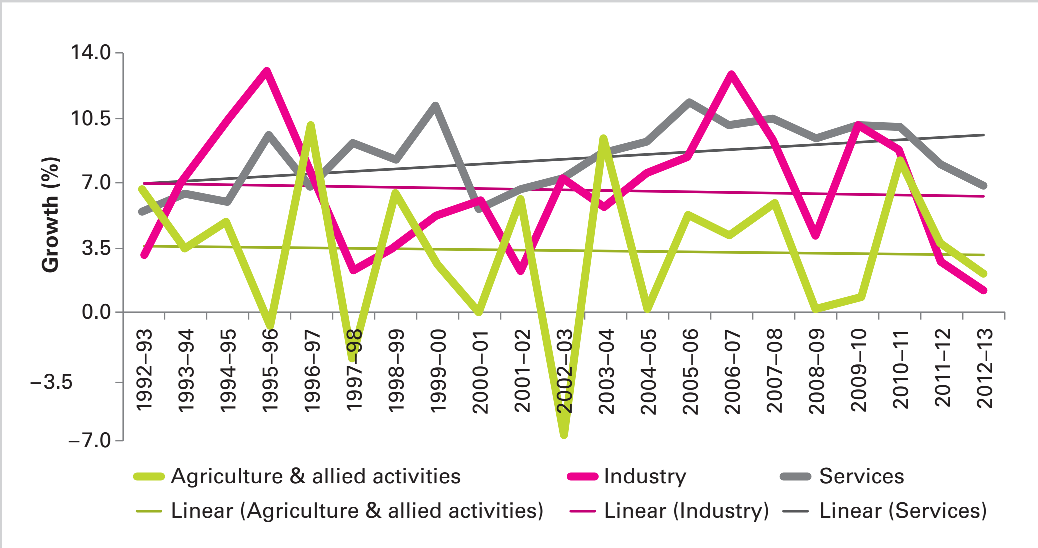
2 As already said, it is not possible to engage with the debates and issues pertaining to the dramatic shift in the country's macroeconomic strategy in the early 1990s. There is a very large literature on this subject; some of the important contributions include Patnaik (1995), Patnaik and Chandrasekhar (1995), Bhagwati (1993), Bhagwati and Srinivasan (2002), Drèze and Sen (1995).

3 Some of the important contributions include: contributions in Byres (ed.) (1994, 2000), Chandrasekhar and Ghosh (2002, 2007a, 2014, 2015), Drèze and Sen (2013), and Patnaik (2006), Sen (2003), Sen and Himanshu (2004), Bhagwati, (1993, 2007), Bhagwati and Panagariya (2013a. & 2013b.), Bardhan (1998), Sen and Kar (2014, 2016).

4 It is symptomatic of the employment crisis in the country that even for relatively lower ranked government job vacancy applications pour in thousands; according to a recent report in *The Hindu* (Ali Mohammad, '23 lakh apply for 268 peon posts in Uttar Pradesh',, *The Hindu*, 17th September, 2015 "Over 2.3 million candidates, including 222 thousands engineers and 255 Ph.D. holders have applied for 368 posts of peon in the State Secretariat, Uttar Pradesh").

the Situation Assessment Survey by National Sample Survey in the 70th Round (2013), the average net receipt from cultivation per household was Rs 3081 only. If we include other sources of income for agricultural households, such as farming of animals, wages and non-farm business, the average monthly income of agriculture households was Rs 6426.

Figure 6: Sectoral growth rates (at 2004–05 prices) since the early 1990s



In terms of the FYP chronology since the beginning of the new macroeconomic policy regime, India has completed five FYPs, i.e., 8th (1992–97), 9th (1997–2002), 10th (2002–07), 11th (2007–2012), and the 12th FYP (2012–17)[5]. The experience of approximately the last two and half decades has been quite mixed; for instance, as already mentioned at the outset, a sustained high GDP growth rate for much of this period is well acknowledged but in terms of the structure of growth as well as its distribution, employment outcomes etc., there have been serious concerns. In fact, these concerns have given us an insight into the basic professed philosophy of the last two plans (11th and 12th), namely, 'inclusive growth' and 'faster, more inclusive and sustainable growth'. These two plans aimed to spread the benefit of growth process 'to the mass of the population'. Further, the 12th FYP aimed to shift substantial population from agricultural to *higher productivity* non-agricultural occupations and to accelerate the growth rate of the manufacturing sector. It also claimed to sharpen the thrust in terms of redefining the role and responsibility of

5 The NDA Government after coming to power decided to do away with the Planning Commission and has replaced it with NITI Aayog; perhaps FYPs have been permanently removed.

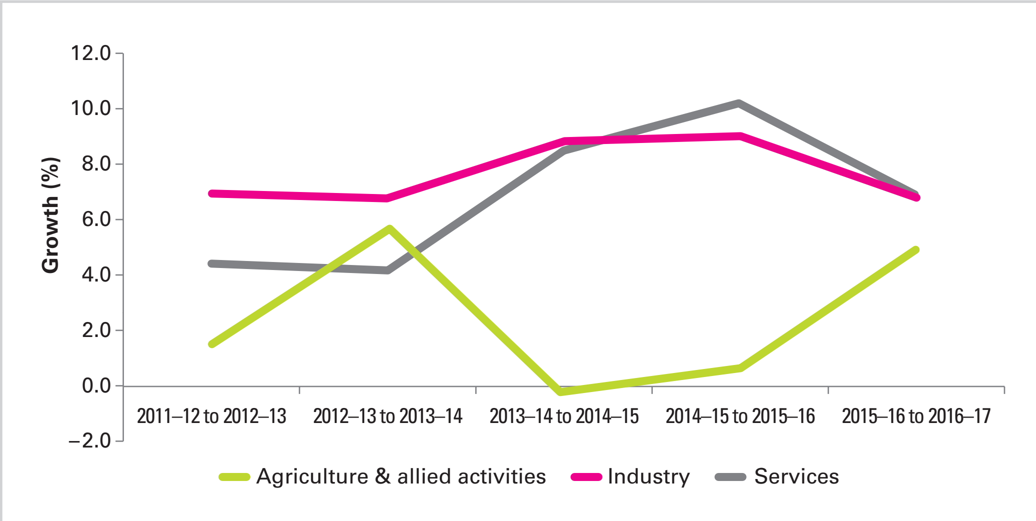
state for delivering social services, like health and education and essential services and where private sector is able to deliver these services, it advocated for reducing the role of the state further. As the documents put it: 'Thus, while the state should withdraw from areas where the private sector is able to deliver well, this does not amount to advocating a reduction in the role of the state: what is needed is a restructuring in the role of the state, reducing its role in some areas but increasing it in others' (12th FYP, 1: xii).

The sectoral composition of the employment and value added has witnessed a major change in the last three decades. Since the employment intensity in the non-agricultural sectors is lower than that of agriculture, employment diversification of the economy has not kept pace with the diversification of the economy in terms of value added. Consequently, although the share of agriculture in GDP went down significantly from 38 % to 16 % over the period (1981–2012), the structure of the workforce was still dominated by agriculture (68 % in 1983 to almost 50 % in 2011–12).

It is also worthwhile to mention here that the current federal Indian government has changed the methodology of calculating GDP, with the 2011–12 prices as the base, and has adopted a 'System of National Accounts' (SNA), 2008 methodology (UNSTAT, 2009) with a new classification system. Also, the data are now representing Gross Value Added (GVA) in each sector instead of gross output. Share of total GVA has changed across different sectors with the adoption of a new methodology. New series has increased the coverage of corporate sector, both in manufacturing and service sector, and has also expanded the coverage of unincorporated manufacturing and service enterprises. Furthermore, this includes service tax as an indicator of growth in respective services[6]. However, the new methodology has been criticized by many economists from different perspectives (Anant, 2015, 2016; Barman, 2016; Nagaraj, 2015, 2016, 2017; Dev, 2017). Even Chief Economic Advisor, Arvind Subramanian, on the event of releasing the Economic Survey 2014–15 (Karnik, 2015), mentioned the numbers of GDP growth by new methodology were 'puzzling', 'baffling', 'mystifying', and 'confusing'. Some economists have cited the problem of comparison among previous series with new series. Some have criticized the new data series. For instance, data series of the Ministry of Corporate Affairs (MCA)-21 have many unfilled observations. Also, the database of quasi government may overestimate the GDP growth figure for some of the sectors. To add more fuel to the fire, there are debates on ground realities relating to credit growth, volume growth, private investment, exports, etc.

6 For further details in the changes in methodology one can see 'Changes in Methodology and Data Sources in the New Series of National Accounts base year 2011–12, MOSPI, June 2015'.

Figure 7: Sectoral growth rates (at 2011–12 prices) since 2011–12



Even if we choose to ignore, the contentious issues regarding the changed methodology, the point worth highlighting is that there is a significant deceleration during the last couple of years, even with the new series (of sector-wise GVA). In fact, the industry and services sectors have logged slowing down of their growth rates since 2014–15. Although there have been frequent loud claims regarding pro-growth measures such as 'Make in India', 'Digital India', 'Smart City Mission', etc., by the current government led by Prime Minister Narendra Modi, most of these are on the same track as the policies of previous Union Progressive Alliance (UPA) Government between 2004–14; at best, the current government can claim further acceleration only in few such initiatives. The big ticket new interventions by the current government appeared to be a mixed bag. For instance, though the 2016 insolvency and bankruptcy code which seeks to address the problem of bad loans and Non-Performing Assets (NPAs) may appear to be promising, its implementation, however, is likely to be a long drawn and complex process. On the other hand there are highly controversial measures such as demonetization and the rolling out of the Goods and Services Tax (GST).

Narendra Modi, issued the fiat through a televised address to the nation on 8 November 2016 at 8:15 p.m., that the currency notes of Rs 500 and Rs 1000 will cease to be legal tenders, thus resulting in summary de-recognition of over 86% of the currency notes under circulation. The basic claim of the government was that it would prove to be a masterstroke in combating corruption and black money, as also in dealing deathblows to the presumed, large stock of counterfeit currency supporting 'anti-national' and 'terrorist' activities. Cheerleaders of the ruling dispensation celebrated the announcement as the most effective policy intervention by any government since independence.

Of course, full throated claims made by the Prime Minister in his demonetization broadcast were greeted with considerable skepticism by sections of the media and several economists, including many who occupied high offices, either in the earlier or current government, such as ex-governor of India's central bank (Reserve Bank of India) Raghuram Rajan and former Chief Economic Advisor during the UPA era, Kaushik Basu. Many other eminent economists and policymakers were completely taken aback by this announcement and argued that this policy misadventure would result in massive dislocation of the Indian economy. They expressed their apprehension that it would inflict huge misery and pain on substantial sections of the population without delivering any of the intended objectives. It did not take long for the horrendous adverse impacts to start unfolding. As with most policy misadventures, the government and its spokespersons kept shifting the goal posts, as regards what were supposed to be the 'intended benefits'. By now there is a substantial literature on the demonetization experiment – the goals, intended objectives and actual outcomes – from different quarters and there is near consensus, explicit or implicit, that this has been an unmitigated disaster (Ghosh, Chandrasekhar and Patnaik 2017).

As regards the GST, this has been for the making for a long time. The ancestry of GST in India's official discourses can be traced to the VAT proposal by Jha committee (1978) and followed by several others. In recent times, a consolidated national GST was proposed by former Finance Minister P. Chidambaram's budget of 2006–07. The current government finally decided to roll it out from 01 July 2017, in the hope that it would boost investment and medium-term economic growth. Although it is too early to assess the impacts of the GST on economy as a whole, the first couple of months have been quite chaotic with significant adverse impact on growth rate as well several sectors of the economy.

Coming back to the standard indicator of economic performance, viz., the rate of growth of GDP, it is quite clear there has been a steady decline in the last six quarters: from 9.2% at the end of the quarter ending March 2016to 7.9%, 7.5%, 7.0%, 6.1%, and now 5.7% at the end of the June quarter in the current fiscal. Recent growth performance of the Indian economy has received flak from the whole spectrum of economists and policy think tanks including many staunch advocates of neo-liberal reforms, as also prominent leaders and economist within the ruling party[7]. Former finance minister (during the first National Democratic Alliance (NDA) government) and prominent member of current ruling party, Yashwant Sinha has expressed his disappointment in a scathing piece, and argues that the current government lacks any coherent economic strategy[8].

Source: Ashwin – Fotolia.com

7 For some recent commentaries, readers may look at pieces by economists such as Ghosh and Chandrasekhar in *Frontline* and *Business Line*, Ranade (2017), Dubey (2017).

8 'Private investment has shrunk as never before in two decades, industrial production has all but collapsed, agriculture is in distress, construction industry, a big employer of the work force, is in the doldrums, the rest of the service sector is also in the slow lane, exports have dwindled, sector after sector of the economy is in distress, demonetisation has proved to be an unmitigated economic disaster, a badly conceived and poorly implemented GST has played havoc with businesses and sunk many of them and countless millions have lost their jobs with hardly any new opportunities coming the way of the new entrants to the labour market. For quarter after quarter, the growth rate of the economy has been declining until it reached the low of 5.7% in the first quarter of the current fiscal, the lowest in three years. The spokespersons of the government say that demonetisation is not responsible for this deceleration. They are right. The deceleration had started much earlier. Demonetisation only added fuel to fire' (Sinha, 'I Need To Speak Up Now', *Indian Express*, 27 September 2017).

Apart from the poor performance in terms of the GDP growth rate, there are serious concerns related to almost every macro indicator, as is evident even from most official reports in the last few months. For reasons of space, it is not possible to examine many of these challenges in a satisfactory manner here. As suggested at the outset the next section of the paper focuses on the manufacturing sector, especially the challenge of employment generation. It is estimated that on an average 10–12 million new job seekers enter the labour market every year which obviously requires a massive upscaling of job generation; the trends regarding employment generation since the early 1990s have been seriously inadequate, to say the least, to meet the requisite demand for jobs. As regards generation of decent job the story is even more dismal. The latest estimates available from the Labour Bureau paint an extremely depressing picture with respect to the pace of job creation in the formal sector. Apart from being nowhere near what would be required to facilitate near full employment, there has been a staggering decline by about 90 % as new jobs have come down from about 1.1 million in 2010 to 0.15 million in 2016[9].

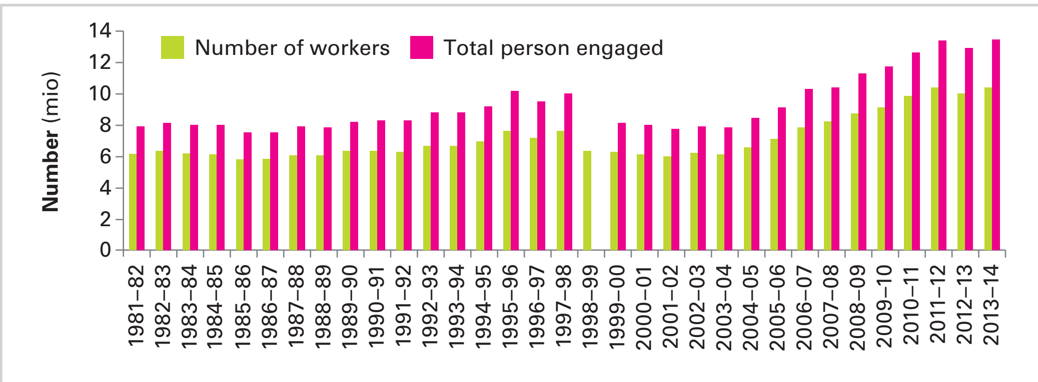
9 Recent report suggests significant job losses across sectors. As per a recent report in The Indian Express, 67 textile units closed down recently impacting over 17,600 workers; Larsen & Turbo has laid off about 14,000 employees during the first two quarters of the fiscal year ending on 31 March 2017. Among the ICT majors, Tata Consultancy Services, Infosys and Tech Mahindra have downsized their workforce by 1414, 1811 and 1713, respectively. As the news report puts it: 'Textile to capital goods, banking to I-T, start-ups to energy, the economy's downward spiral is leaving a trail of job losses across both old and new economy sectors. In the near absence of consolidated employment numbers, disaggregated data collated from across these sectors by The Indian Express points to spreading employment distress in a market where fresh hiring opportunities are increasingly limited' (Saini Anil (2017), 'From textiles to I-T: Wave of job losses hits new and old economy', The Indian Express, Delhi Edition, 3 October 2017)

3 The Manufacturing Sector

The GDP share of the manufacturing sector has been almost stagnant, around 15%–16% since the early 1990s to 2012–13, and the same is true of its share of employment, which increased marginally from 11.2% in 1983 to 12.2% in 2004–05 and 12.6% in 2011–12. In other words, the shift away from agriculture has not led to a significant increase in the share of employment in the manufacturing sector. On the other hand, the GDP share of trade, hotels and transport, storage, and communication increased by almost 10% points between 1981 and 2013. In terms of growth rate also, these activities, along with financing, real estate and business services, increased their share rapidly (**Table 1**).

Further, dividing the overall manufacturing sector into registered and unregistered manufacturing industries, the former which is, in general, characterized by relatively high earnings and better working environment, appears to have played an insignificant role in overall occupational transformation of the labour force in India for over last three or more decades. As per the Annual Survey of Industries (ASI) and Directorate General of Employment and Training (DGET), as reported in the Handbook of Statistics on Indian Economy by the RBI, which provide figures on registered manufacturing sector employment, we get slightly different trends. The figures given by ASI show that registered manufacturing employment rose between the mid-1980s and mid-1990s and declined subsequently for a few years touching a low in 2002–03, before picking up again. There was some increase between early 1980s and the present, but figures available for the recent couple of years show a flattening gain (**Figure 8**).

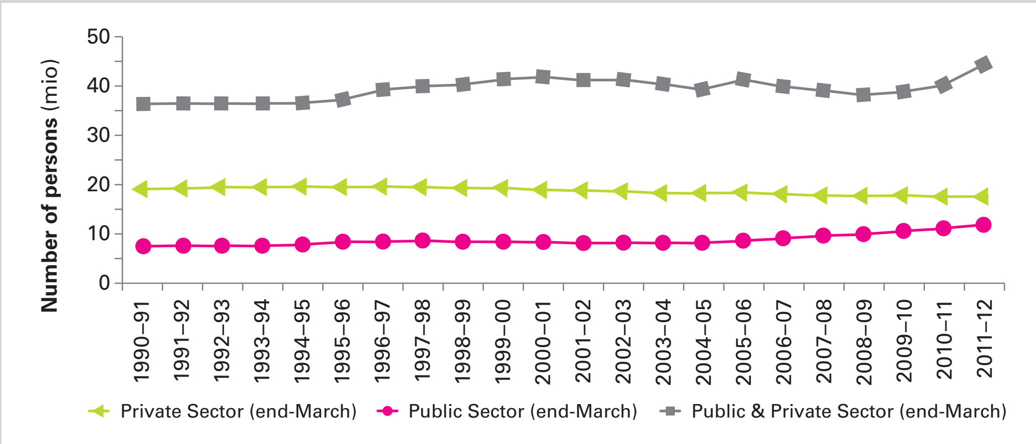
Figure 8: ASI estimates of registered manufacturing employment



Source: Annual Survey of Industries (AIS), Central Statistical Organization (CSO), 2013–14

As outlined in **Figure 9** the change relating to organized manufacturing sector using the DGET data reported in RBI's *Handbook of Statistics on Indian Economy* is indicated. As is clear, since the early 1990s, there has been a small decline in the number employed in the public sector along with a small increase of the private sector: on the whole there is little to cheer about.

Figure 9: Employment in organized sector manufacturing



Source: Handbook of Statistics on Indian Economy, 2016–17

As regards the overall regular employment and the National Sample Survey Organisation (NSS), the last three decades have been a period of tremendous stress (**Table 1**). For rural male, the proportion of regular employed was about 10.3% in 1987, which declined to 8.5% in 2009–10, and again improved to 10% in 2011–12. Also, in urban areas, the share of regular employed in male category, declined from 43.7% in 1987–88 to 40.6% in 2004–05 and again improved and reached to 43.4% in 2011–12. The increase in regular employment during the period from 1983 to 2011–12 for both rural and urban females was too small to raise the share of those regularly employed in total employment (**Table 2**). We may also note that the annual increment in regular employment was about 2 million during 1993 to 2005, which declined to approx. 1 million during 2005 to 2010. Although, the data for the 61st and 68th NSS rounds show that the rate of regular employment generation in the private organized sector has picked up recently, it is also clear that this was more than offset by decline in the share of regular employment in rest of the economy. In fact, it is quite striking that over 80% of all new jobs created in the recent years have been of casual nature, with construction alone accounting for a substantial share (Jha, 2016; Chandrasekhar and Ghosh, 2007b, 2015).

In other words, in spite of the high growth rate in the Indian economy the process of informalization and casualization in the labour market has been on the rise during the last three decades. A substantial segment of workers who are unable to find even casual employment often remain 'self-employed', which, to a large extent, is same as being underemployed or disguisedly unemployed. Further, it is quite clear that the process of casualization and contractual employment has gained momentum in the organized sectors (Bhalla, 2005; Dutta, 2005; Neethi, 2008; Mathur and Mishra, 2007; Srivastava 2012; Ghosh 2015, Mitra 2015, among others). As regards sectoral distribution, the proportion of informal workers to total workers has been the highest in trade, followed by manufacturing, transport and real estate, and business services. In terms of composition of employment, manufacturing and trade constitute around 70–75 % of the total informal sector employment (**Table 4**). In urban areas, the share of trade exceeds the share of manufacturing. Hence, the dominance of the tertiary activities in the informal sector, which was observed almost three decades ago, does not appear to have undergone any major change.

As per the latest (Sixth) Economic Census (EC) conducted from January 2013 to April 2014, there are 58.5 million establishments (private and public) in the country. It may be noted that the said EC enumerated all establishments engaged in various activities excluding crop production, plantation, public administration, defence and compulsory social security. Thus, it is a good source to draw the sketch of non-agricultural sector, both for output and employment. As per this source, of the total enumerated establishments, 35.0 million (59.9 %) were in rural area and the remaining 23.5 million (40.1 %) in the urban sector. Furthermore, 20.5 % of the establishments operate from outside household without fixed structure and these obviously constitute extremely vulnerable entities. **Table 6** provides a profile of the distribution of persons employed across different kinds of ownerships and establishments; almost 74 % are employed in private proprietary establishments and it is worth noting that around 45 % of all private proprietary establishments do not hire even one worker.

It is also interesting to note, that only five states, namely, Uttar Pradesh, Maharashtra, West Bengal, Tamil Nadu, and Andhra Pradesh together account for approximately 48 % of all establishments in the country. However, as already hinted, the overwhelming proportion of establishments does not generate any paid employment. For instance, 80 % of establishment in West Bengal are without any hired worker, but account for almost US$ 36.3 employment among the surveyed establishments in the state. Similarly, in Uttar Pradesh and Maharashtra 75.5 and 71.9 % establishments are without hired worker and account for 37.6 and 47.2 % employment, respectively (**Table 7**).

The comparable information on non-agricultural establishments, taking both organiszed and unorganized sectors together, can also be collated from the ASI and the National Sample Survey Organisation (NSSO). As is well known, for Indian economy, the ASI is the most important source of industrial statistics for the organized[10] manufacturing sector, whereas the NSSO plays a similar role for the unorganized sector as it provides the requisite information on unincorporated non-agricultural enterprises and various indicators of economic and operational characteristics of enterprises in manufacturing, trade and other service sectors (excluding construction) at the national and state level. As per the recent relevant data from the ASI and NSSO (**Table 8**), the total number of non-agricultural establishments in India was 57,832,182 of which the organized component accounted for 158,877 only or barely 0.28 %. If we take into account only the manufacturing sector, the share of the organized component was just about 0.85 %. These are indeed startling numbers as regards to the structure of Indian industry / broader economy. It is true that in terms of the contribution to the GDP, the organized sector punches hugely above its weight with respect to its numerical share, as indeed in guiding the economic policy destiny of the country, especially at the current juncture. As may be seen from **Table 9**, the contribution of the organized and unorganized non-agriculture GVA in Indian economy is almost evenly matched, although the distribution of specific subsectors varies dramatically.

10 A neat separation between organized (formal) and unorganized (informal) is conceptually quite a slippery exercise as is often acknowledged in literature. In India, the conventional basis of this distinction is the definition used in the Factories Act of 1948, as per which an establishment with 10 workers or more and using power, or 20 workers or more without power, is categorized as organized. It is compulsory for economic units in the organized sector to have registration with the relevant authorities. Hence, sometimes 'organized' and 'registered' are used interchangeably. However, it may be noted that not all registered units are organized.

Tables 10a–c provide a profile of the organized sector in India (based on the ASI data) since the late 1980s onwards with respect to the distribution of factories, output and employment within the sector. As should be evident, there have been some notable changes across a few subsectors (both within 'traditional' as well as modern activities) in terms of their contributions. What may well be a matter of serious concern is the slippage with respect to presumably the cutting edge manufacturing segments such as 'computer, electronic and optical products' and 'pharmaceuticals, medicinal, chemical and botanical products', whose shares in number of factories, output as well as employment have plummeted dramatically. We may also recall here that generation of employment in the organized sector has been a major challenge, particularly in the recent years; employment elasticity of output for the economy as a whole and in particular for the organized sector, in fact, has come under considerable pressure during the period of economic reforms[11]. As evident from **Table 11**, there is hardly any increase in overall employment in the organized sector for the country as a whole in the recent years, which has increased marginally from 27.0 to 29.6 million between 2006 to 2012; segments in the organized private economy which have shown incremental increase include 'finance, insurance, real estate etc.' (1.26 million), 'manufacturing' (0.98 million), 'wholesale and retail trade' (0.21 million), and 'transport, storage and communications' (0.12 million). In the public organized sector, 'community, social and personal services' (0.54 million) and 'transport, storage and communications' (0.19 million) account for most of the decline. However, if we look at the relevant numbers between mid-1980s and the recent years, it is a story of almost stagnation in the overall organized employment in the country.

11 This comes out clearly from NSS 1983 and 2011–12. The same is also confirmed by assessments done by other well-known institutions. For instance, as per the RBI's report on 'Estimating Employment Elasticity' (2014), UNDP Population Estimates and the HDFC Bank (2016) estimates, during the period 1977–78 to 1999–2000, employment elasticity was 0.39, which declined to 0.23 between 1999–2000 to 2011–2012 and further to a measly 0.15 between 2012–13 to 2015–16. It is important to highlight that this is happening at a juncture when addition to working age population is 12 million per annum.

As regards the unincorporated non-agricultural enterprises (excluding construction), **Table 12**, taking both rural and urban India, almost 60% of these operate with only one worker and another 26% with two workers. Obviously, this sums up not only the overwhelming smallness of the Indian non-agricultural sector but also its vulnerability. **Tables 13a–d** based on the 67th round of the NSS, provide a profile of the distribution of enterprises by broad activity category (manufacturing, trade and other services), as well as the distribution of workers in rural and urban India. As is evident from these tables, manufacturing is just about 30% of the total number of enterprises as well as the total number of workers in these activities. Furthermore, the distribution of unincorporated enterprises, in the aggregate, across rural and urban India is almost even, although the rural areas account for a much larger share of the Own Account Enterprises (OAEs). Using the same database, **Tables 3** and **4** provide information on formal and informal segments, both by broad activities as well as number of enterprises and workers. For the country as a whole, over 98% of the enterprises and close to 90% of the workers constitute the informal component. Furthermore, if we look at the distribution of the formal, as well as the informal in unincorporated enterprises, manufacturing accounts for just about one-third of both the estimated number of enterprises as well as the workers. We may also note here that in the recent years there has been a significant acceleration in the growth of informal employment even in the formal sector (**Table 5**). In 1999–2000, the share of informal workers in the formal sectors was already 37.8% which jumped to 54.4% in 2011–12 (NSS 68th round). Thus, as per the latest count of workers in the country, which stood at 484.7 million in 2011–12, 447.2 million were informal workers.

As mentioned earlier, the share of the manufacturing sector in the country's GDP has been stagnant at about 15–16% for almost 25 years now. Furthermore, a disturbing feature of industrial development, particularly organized manufacturing, in the country has been regional unevenness and concentration in a handful of states. Apart from Maharashtra and Gujarat accounting for almost 37% of the organized manufacturing, a small number of states (Andhra Pradesh Haryana, Punjab, Karnataka, and Tamil Nadu) have tended to increase their share in the overall manufacturing value added, whereas most other states have tended to lose out over time. As per the ASI data, eastern states such as West Bengal, Bihar, and Orissa account for a measly share of the country's manufacturing output. Important point to note is that there were some checks and balances on regional inequality during the *dirigiste* era, although it was no great success. However, the policy of regional dispersal of industries, which was followed up to the 1980s, had resulted in at least a few enclaves in most states (even though a couple of better-off states, such as Maharashtra and Gujarat had benefited disproportionately). The process of regional spread has clearly been reversed since the early 1990s with the dismantling of the regulatory regime.

There are a number of indicators which seem to indicate that the overall industrial structure and dynamics have come under severe stress during the reform era. In a careful study (Chaudhuri, 2015), it is argued that there is a veritable manufacturing crisis since the early 1990s; in fact, the author argues that India is experiencing 'premature deindustrialisation' and the argument is backed by a careful consideration of the evidence of 'manufacturing crisis'. Almost all the correlates of manufacturing dynamics seem to indicate that the period since the early 1990s has been a difficult one, hence, it is hardly surprising that the share of manufacturing in the GDP has stagnated during this period. Trends relating to manufacturing growth rate, trade balance, import dependency, or any other critical indicator for that matter, clearly suggest considerable stress for the period since the early 1990s. Going by the Index of Industrial Production (IIP), either by major sectors or in overall terms, it is clear that there is no significant improvement in the relevant rates during the post reform period (**Tables 14** and **15**). If anything, the last decade shows a discernible worsening in the major segments, as also in the general IIP. In fact, during the last few years (since 2010–11), there has been virtual stagnation and of course the ongoing global recessions has not helped matters. It is true that one can point to a few bright spots in India's industrial landscape since the early 1990s, but the point is that the expectations of a dramatic improvement as promised by the advocates of new economic policy in growth and overall performance of the manufacturing sector has certainly been belied.

We have noted earlier that the share of manufacturing in GDP has stagnated around 15–16 %, and its share in total employment has been stuck between 11 and 13 % since 1991. In fact, the growth of employment in manufacturing, in particular in its organized segment, has been more of a challenge compared to the growth of manufacturing value added. As per Economy Survey 2014–15, the share of employment of registered manufacturing in total employment marginally declined between 1984 and 2010 (from 2.7 to 2.6 %) and the annual growth rate of this segment over the same period was a negative 0.2 %. Further, as Chaudhuri (2015) notes, the organized manufacturing employment had witnessed a steady growth between early 1970s to mid-1990s (4.8 million to 7.1 million, resp.), before going down in absolute terms during the next decade (5.8 million in 2006–07), followed by a mild recovery (6.6 million in 2009–10). In any case, the point worth highlighting is that given the size of India's workforce and the challenges of decent employment, these numbers and the changes therein are too small to make any formidable impact.

Apart from the overall manufacturing sector not doing too well, the situation of the unincorporated enterprises may be of greater concern, given their role in employment and livelihood generation. As may be seen from **Table 16**, based on the recent rounds of the NSS data, the growth rates of both the value added as well as employment in the unorganized manufacturing sector are disturbing. Taking all industries together, between 2005–06 and 2010–11, the overall employment declined by 0.9%; furthermore, 5 out of 10 subsectors suffered significant reduction in the number of workers. If we take into account only own account manufacturing enterprises, 8 out of 10 subsectors show a negative growth over the said period, while taking all industries together the extent of decline was 2.5%. As regards the growth of GVA, in 2004–05 prices of most subsectors show expansion in output, which is obviously the case for all industries taken together. Thus even when there is an expansion in output, prospects of employment generation appear to be dismal. *In other words, employment elasticity of output even in the unoranized manufacturing sector has tended to decline significantly; we already know that the story in the organized sector is much worse.*

Source: ICDD

4 Industrial Structure and Policies

It should be obvious from the foregoing discussion of India's industrial structure that policy obsession almost entirely with 'big players' needs to be revisited. As is amply clear, the context and prospects of India's industrial landscape, particularly from the point of employment, are organically connected with the unorganized segments incl. micro, small and medium enterprises (MSMEs), etc. The country needs, first and foremost, a robust industrial policy for them, embedded in an overall macro-economic policy regime. Substantive measures are required which include boosting support for domestic manufacturers through a variety of channels, in particular through the development of appropriate infrastructure for broad-based manufacturing (with a clear focus on 'small players'), encouragement of adequate technology policies, etc. It is also worth noting that the need for a synergy between manufacturing and other sectors requires a lot more attention, a problem which has been compounded during the era of reforms. Although some of the issues may be addressed in a piece-meal manner, in the currently dominant neo-liberal policy framework, it is our contention that a serious rethink of the framework itself is required. Unfortunately, there is little evidence of any such move at the current juncture. In fact, the so called 'Make in India' programme[12] of the current NDA government at the centre is, to a large extent, reminiscent of the above noted National Manufacturing Policy (NMP) of the erstwhile UPA regime. As in the case of the NMP, the thrust of the 'Make in India' initiative is on the corporate sector and the Foreign Direct Investment (FDI), emphasizing on 'ease of doing business'. It identifies 25 sectors in particular which currently account for approximately 20 % of the country's workforce (**Table 17**).

12 As per the press note issued by the Ministry of Commerce and Industry, Govt. of India: 'The "Make in India" programme aims at promoting India as an important investment destination and the global hub for manufacturing, design and innovation. The "Make in India" initiative does not target manufacturing sector alone, but also aims at promoting entrepreneurship in the country. The initiative is further aimed at creating a conducive environment for investment, modern and efficient infrastructure, opening up new sectors for foreign investment and forging a partnership between government and industry through positive mindset'.

To be sure, in terms of avowed intentions, 'feel good' objectives, etc., the policy discourses since the early 1990s have often flagged interesting ideas and it may be of some interest to revisit a couple of these briefly. The Ministry of Commerce and Industry, in their Annual Report 2012–13, pointed out that one of the main objectives of India's economic policy in general and industrial policy in particular is to maintain a sustained growth in productivity, along with enhancing gainful employment, to achieve optimal utilization of human resources, to attain international competitiveness, and to transform India into a major partner and player in the global arena. Of course, no one would quarrel with such laudable objectives! The real issue is that of choosing the appropriate instruments, policy interventions and putting in place an overall macro framework to achieve the stated goals. As we know, in pursuance of these objectives, the focus of our policymakers has been on a set of major changes since the early 1990s aimed largely at accelerated deregulation of the Indian industry and an overall policy regime which is ever more conducive to increased flexibility in responding to market forces. As discussed in the preceding section, such a thrust has been counter-productive in many ways.

For generation of adequate and decent employment, several key policies need to be in place. One of these is what gets highlighted as industrial policy in the relevant literature. Meaning and scope of industrial policy has generated substantial literature, emphasizing on different elements and aspects, and for many it may well seem akin to the proverbial elephant in the room. Industrial policy ought to be viewed as a number of strategic objectives and tools embedded in the larger development strategy and overall macroeconomic framework. As a recent UNCTAD report (2014), based on the deliberations of a panel of experts drawing on the collaborative research of the UNCTAD and the International Labour Organization (ILO) notes, the canvas of industrial policy includes not only the manufacturing sector but also agriculture and services. The policy challenge is to put in place conducive structures and processes to facilitate economic diversification which hinges on higher value additions and returns; high road to transformation and broad-based development would be the end objectives for any worthwhile set of industrial policies.

Clearly, straitjackets and 'one-size-fits-all' will not do and historically there has been space for a variety of industrial policies although, generally speaking, these are invariably about structural transformation with emphasis on industrialization. It was such an understanding that informed the development discourses soon after the World War II, in the heyday of 'Development Economics' during the 1950s and the '60s, particularly in the global South. The core concern was to 'catch-up' with the industrially advanced countries through a set of strategies to facilitate broad-based structural economic transformation and decent employment, with the manufacturing sector on the front burner. Creation of domestic manufacturing capabilities, sustained technological upgradation, economic diversification, rising incomes, etc., were supposed to be the important indicators of the process of catching up. It was argued that such a prospect could not and would not materialize without the visible hand of the state and well-designed industrial policies. Unfortunately, as is well known, the rise of neo-liberal order with accent on market fundamentalism, since the 1970s, tended to negate, at least in official pronouncements in most countries in the world, the role and significance of industrial policies.

Thus, there is no one magic bullet in the name of industrial policy and it is bound to be different across time and space. Initial conditions and the larger context obviously matter. However, the history of economic transformation across the world teaches us a number of important lessons which is worth paying attention to any developing country. For instance, the role of pro-peasant land reforms in conjunction with appropriate macro-economic policies, which requires significant economic space for the state, disciplining of corporate powers and rentier classes, a long-term vision for economic transformation and industrialization, etc., are among the critical elements that the policymakers must grapple with. It hardly needs emphasis that any coherent development strategy has to be steered through the state; but of course, it also begets the question, whose state, what kind of state and is there a socio-political mobilization to have a state conducive to progressive economic transformation?

In view of the sketch provided in *Section 2*, what can be said of India's industrial policy at the current juncture? In sum, our contention is that, in spite of all the official discourses and claims regarding some kind of industrial policy being in place in the country, even a preliminary assessment for the last three decades or so would seem to indicate that such claims are highly exaggerated. At best what we have had during this period are knee-jerk reactions and piece-meal interventions and grade slogans (such as 'Make in India'), which do not cohere well; in fact, a more realistic conclusion may well be that we simply do not have an industrial policy in place. As hinted earlier, the focus of the policymakers has been to integrate the country's economy in the global production systems, to have a slice of the pie either through an increase in exports in particular sectors or to get a share of the global capital in expanding domestic manufacturing. Sure enough, in both these respects, there have been some 'gains' in specific sectors but, in an aggregate sense, these have been modest and possibly with significant costs to segments of manufacturing (particularly MSMEs) and sections of workers. As already discussed earlier, the objective of getting integrated in the global manufacturing value chains required significant deregulation and liberalization in cross-border movements with respect to almost all the factor and product markets and were often accompanied by various questionable concessions to corporate investors, both domestic and foreign. Furthermore, obsession with 'sound finance', which is at the core of neo-liberal macroeconomic strategy, in conjunction with liberalization, has resulted in fiscal stringency and massive erosion in the capacity of the state to intervene in the economy.

During the *dirigiste* era, India's economic federalism gave a lot of space for the state governments to have their own policy interventions. As noted earlier, there is considerable differentiation, in terms of industrial performance, across the major states of India and some of it is on account of historical legacies and policies prior to Independence. However, there have been important differences, with respect to industrial policy, across states after independence as well. Thus, there may be a good deal to learn from experiences of each other; emergence of industrial hubs in particular sectors in some of the southern states in recent years may well be worth careful examination to draw some lessons regarding creation of appropriate economic environments. However, as a word of caution we must note here that any industrial policy which is exclusively concerned with output expansion without caring for employment generation ought to be viewed, at best, as a limited success, (if not a failure), particularly so at the current juncture in case of most developing countries where creation of decent employment outside agriculture has been among the biggest challenge.

As should be evident from the structure of India's non-agricultural sector, for healthy and sustained growth in manufacturing the focus on MSMEs will have to be critical and the relevant policy interventions must be tailored to their needs and conditions. In particular, government policies for MSMEs should help them improve their technological capabilities by focusing on: (i) providing access to risk capital, (ii) setting up of standards for the industry, (iii) improving industry/research institute/academia, interaction, mostly in clusters, (iv) stimulating demand/providing scale through preferential treatment in government purchases, modular industrial estates/laboratories near premier technical institutions with the required plug and play facilities. As per the 12th FYP, Prime Minister's Group Report (PMGR) had also recommended enunciation of a clear policy to provide incentives for acquisition of advanced technologies strengthening the country's technological capabilities in the long term. A review of the current FDI policy from the point of view of transfer of technology as well as considerations of national security was also recommended. This can be done by giving preference to Joint Ventures instead of 100% foreign-owned companies.

According to Economic Survey 2013–14, the MSME sector showed consistent growth of more than 11% every year till 2010–11, whereas in 2011–12, the growth rate was 19% and in 2012–13 about 14%. The contribution of MSMEs is approximately 8% of the country's GDP, 45% of the manufacturing output and 40% of the country's exports, and the sector is the second largest provider of employment in the country, after agriculture. As per the Economic Survey, 2012–13, the number of registered MSMEs was estimated to be about 1.58 million units with subsector-wise composition in the proportion of 94.9% micro enterprises, 4.9% small and 0.2% medium enterprises. The total registered MSME sector comprised 67.1% manufacturing enterprises and 32.9% services enterprises. About 45% of these registered enterprises were located in rural areas. Thus it is quite evident that a conducive policy towards MSMEs will play a critical role in India's broad based industrialization and employment engendering drive.

One of the major issues confronting Indian economy is that of training and skills of its workers across sectors. Skill building is predominantly achieved by in-house training of workers by each enterprise. However, clusters and National Investment and Manufacturing Zones (NIMZs) provide opportunities for shared infrastructure to provide training for skilled and semi-skilled workers. The MSME sector alone needs to skill 4.2 million persons in the Twelfth Plan period. The 12^{th} FYP recommends for scaling up programmes such as Visionary Leadership for Manufacturing (VLFM) at the national level. The Ministry of MSMEs adopted the cluster approach as a key strategy for enhancing the productivity and competitiveness as well as capacity building of small enterprises (including small-scale industries and small-scale service and business entities) and their collectives in the country. The ministries have been administering hard and soft interventions to help the cluster participants. While hard interventions will include investments in infrastructure like common facilities, common testing centres, roads, etc., soft interventions will include training, capacity building, skill improvement, marketing inputs, product design and development, etc.

As already noted earlier, an obvious critical obstacle in the country's growth towards a significant 'manufacturing hub' happens to be a serious inadequacy of infrastructure (such as ports, roads, power, etc.), for instance, in comparison to a country like China. It is well known during the last few years, different governments have tended to rely on so-called 'public-private partnerships', or on private investments, for the funding of quality infrastructure; most of these have been limited to a few pockets (by and large in urban areas) and the track records of such initiatives have hardly inspired confidence. Given the fiscal orthodoxy, which is the lynchpin of economic reforms, the Union as well as the state governments are generally loathe to expand overall public expenditure which, of course, has impacted on public provisioning for a whole range of critical pre-requisites, including infrastructure, for expansion of manufacturing. On the 'supply side', apart from the infra-structural constraints, there are other gaps in terms of institutional constraints at different levels which impinge on the prospects of broad-based industrialization. We may also note that there are significant problems on the 'demand side' as well which require careful consideration. Given very high levels of mass poverty, massive disguised unemployment and serious deprivations afflicting large sections of the masses, there is an obvious problem of domestic demand. In the era of economic reforms, the pressure to squeeze labour cost has of course added to the problem further. Moreover, in the neo-liberal global economy in general, there have been similar pressures, thus contributing to the 'race to the bottom' in terms of overall well-being of the workers, with adverse impacts on the level of demand everywhere. In fact, the neo-liberal pressures to outcompete each other amongst countries (in particular in the developing world) leading to 'beggar thy neighbour'.

Apart from the issue of the squeeze in domestic demand, we also need to reckon the dynamics of overall demand in the global economy. As already hinted in the preceding paragraph, neo-liberalism invariably results in strong tendencies of compression of demand, through wage squeeze and worsening labour standards, almost everywhere. On top of this, there are other factors which may create serious demand pressures, as has been the case with the world economy due to a recession which started in developed countries in the aftermath of the well-known financial crisis beginning 2007–08. Given such a context, it is highly unlikely that India, or for that matter, most developing countries can hope to gain from the strategy of 'export-led' manufacturing growth, which had been significant in the case of a handful of East Asian countries. To the extent that one relies on such a strategy, it may certainly help a small set of big corporate players, both domestic and foreign, but the gains are unlikely to go beyond the confines of such players. In fact, majority of the workers and the masses in general, may well get a short shrift precisely because of the favourable conditions created for the small set of big players mentioned above. In other words, one of the big challenges confronting any strategy of broad-based industrialization is to engage with the issue of broad-based domestic demand. This has been a major lacuna in all official policy discourses on industrialization in India since the early 1990s. To the extent some important constraints and challenges have been flagged, they are almost invariably with respect to the 'supply side' and a good deal of it has remained mere lip-service!

5 Conclusions

India's chequered record of industrial development since the early 1990s raises several important concerns with respect to overall economic policies, in particular its industrial policy. One of the major casualties of the neo-liberal globalization has been the shrinking of the national economic policy space. Post the Uruguay Round Agreements (URAs), creation of the World Trade Organization (WTO) in 1995, subsequent proliferation of the regional trade agreements (RTAs) with their WTO-plus and WTO-extra provision, etc., the conduct of the industrial and trade policies have been subjected to severe restrictions. These have impacted adversely on many developing countries. In conjunction with their respective domestic contexts and capabilities, it is hardly surprising that the economic performance of different countries throw up a somewhat mixed picture, with a handful appearing to be relative gainers whereas the overwhelming majority seems to be losers. Our purpose in this paper was not to engage in a detailed discussion of neo-liberal globalization and its implications for development. Rather the focus was on non-agricultural, particularly industrial structure and policy with respect to the Indian economy at the current juncture. Even the minimalist objective of adequate employment generation seems like a tall order.

Sure enough, as mentioned earlier, in terms of the GDP growth rates, the performance of the economy in the era of economic reforms has been a notch higher, compared to the preceding decade. The fact of high and sustained GDP growth rates, along with low to moderate inflation for much of the period since the early 1990s, significant achievements in the information and communication technology (ICT) segment and few other sectors are the obvious positives. Furthermore, India's attractiveness for foreign investors has certainly increased and shows up in the rising levels of foreign exchange reserves which stood at approximately US$ 402 billion (as on 22 September 2017). Putting all these positives together, India does look like a 'success story' (although not quite in the same league as China even in terms of the above noted select indicators); however, as soon as one starts probing into further details related to the structure and process of growth, in particular the performance of the manufacturing sector, and whether high GDP growth has generated positive outcomes for the majority of the population, the 'success story' become seriously debatable. However, it is worth emphasizing that even the prospects of sustained and high growth have come under serious strain during the last couple of years.

The well-known major challenge, possibly the most daunting, that India's growth strategy confronts at the current juncture, is that of generating adequate employment and decent jobs. For the period since early 1990s, overall employment growth has been relatively sluggish compared to the preceding couple of decades, with very few opportunities for quality employment. In fact, as highlighted earlier manufacturing in India contributes only approximately 11–12 % of the total employment. This compares unfavourably to several so-called emerging economies where the share of employment in manufacturing ranges from 15–30 %. It was hoped by the advocates of the economic liberalization that greater integration with the global economy would provide a significant boost to expansion of the manufacturing sector and overall employment generation, while also improving the prospects for other variables impacting the wellbeing of labour. However, by now it is well acknowledged that most of the important labour market outcomes have shown little improvement during the reform period. Furthermore, deterioration with respect to employment is also reflected in different dimensions of quality such as growing informalization, high incidence of vulnerable self-employment, etc. Clearly, a rethink on overall policy regime is required and such a rethink must include labour as a partner instead of viewing it as a hindrance to economic and social progress. Social dialogue in a genuine tripartite spirit, involving employers, unions, and governments can go a significant distance in overcoming the employment crisis that the country is confronted with. One of the key elements in the dialogue will have to be the issue of reclaiming the national economic policy space, the overall macroeconomic policy regime, and, of course, the industrial policy.

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Annexure

Table 1: Percentage share and annual rate of growth of sectors in value added (2004–05 prices)

	AGRICULTURE AND ALLIED ACTIVITIES AND MINING	MANUFACTURING, UTILITIES, AND CONSTRUCTION	TRADE, TRANSPORT, STORAGE, AND COMMUNICATION	FINANCING, INSURANCE, REAL ESTATE AND BUSINESS SERVICES	PUBLIC ADMINISTRATION, DEFENCE AND OTHER SERVICES
PERCENTAGE SHARE					
1980–81	38.3	23.0	16.8	8.2	12.7
1985–86	35.8	23.1	17.6	9.8	12.9
1990–91	33.0	24.2	17.6	11.5	13.4
1995–96	29.0	25.1	19.7	13.0	13.0
2000–01	25.2	24.3	21.6	14.4	14.4
2004–05	21.9	25.1	24.5	14.7	13.8
2009–10	16.9	26.0	26.5	17.1	13.5
2010–11	16.8	25.7	27.3	17.3	12.9
2011–12	16.5	26.1	26.7	18.0	12.7
2012–13	15.9	25.3	26.9	19.1	12.8
2013–14(PE)	15.8	24.3	26.4	20.6	12.9
RATE OF GROWTH					
1980–81 to 1985–86	3.5	4.9	5.9	8.9	5.2
1985–86 to 1990–91	4.2	6.8	5.9	9.2	6.6
1990–91 to 1995–96	2.6	6.1	7.6	7.8	4.5
1995–96 to 2000–01	3.3	5.5	8.2	8.4	8.5
2000–01 to 2004–05	2.4	6.9	9.4	6.6	5.0
2004–05 to 2009–10	3.3	9.5	10.5	12.0	8.1
2009–10 to 2010–11	8.3	7.6	12.2	10.0	4.2
2010–11 to 2011–12	4.4	8.5	4.3	11.4	4.9
2011–12 to 2012–13	1.0	1.2	5.1	10.9	5.3
2012–13 to 2013–14 (PE)	4.0	0.5	3.0	12.9	5.6

Source: Growth rates are computed from figures based on national accounts statistics, Central Statistical Organisation, Government of India.

Table 1.1: Percentage share and annual rate of growth of sectors in value added (2011–12 prices)

	AGRICULTURE AND ALLIED ACTIVITIES AND MINING	MANUFACTURING, UTILITIES, AND CONSTRUCTION	TRADE, TRANSPORT, STORAGE, AND COMMUNICATION	FINANCING, INSURANCE, REAL ESTATE AND BUSINESS SERVICES	PUBLIC ADMINISTRATION, DEFENCE AND OTHER SERVICES
PERCENTAGE SHARE					
2011–12	21.8	29.3	17.4	18.9	12.7
2012–13	20.9	28.9	18.1	19.6	12.5
2013–14	20.4	28.6	18.4	20.3	12.3
2014–15	19.3	28.2	18.9	21.0	12.7
2015–16	18.4	28.2	19.2	21.6	12.6
RATE OF GROWTH					
2011–12 to 2012–13		4.0	9.7	9.5	4.1
2012–13 to 2013–14		1.2	7.8	10.1	4.5
2013–14 to 2014–15	1.4	4.0	9.8	10.6	10.7
2014–15 to 2015–16 (PE)	2.2	7.4	9.0	10.3	6.6

Source: RBI (2016) Handbook of Statistics on Indian Economy, 16 September.

Table 2: Employment status: composition of workers (UPSS) by sex and rural-urban residence

	YEAR	SELF-EMPLOYED	REGULAR EMPLOYED	CASUAL LABOUR
RURAL MALES	1983	60.5	10.3	29.2
	1987–88	58.6	10	31.4
	1993–94	57.9	8.3	33.8
	1999–2000	55	8.8	36.2
	2004–05	58.1	9	32.9
	2007–08	55.4	9.1	35.5
	2009–10	53.5	8.5	38
	2011–12	54.5	10.0	35.5
RURAL FEMALES	1983	61.9	2.8	35.3
	1987–88	60.8	3.7	35.5
	1993–94	58.5	2.8	38.7
	1999–2000	57.3	3.1	39.6
	2004–05	63.7	3.7	32.6
	2007–08	58.3	4.1	37.6
	2009–10	55.7	4.4	39.9
	2011–12	59.3	5.6	35.1
URBAN MALES	1983	40.9	43.7	15.4
	1987–88	41.7	43.7	14.6
	1993–94	41.7	42.1	16.2
	1999–2000	41.5	41.7	16.8
	2004–05	44.8	40.6	14.6
	2007–08	42.7	42	15.4
	2009–10	41.1	41.9	17
	2011–12	41.7	43.4	14.9
URBAN FEMALES	1983	45.8	25.8	28.4
	1987–88	47.1	27.5	25.4
	1993–94	45.4	28.6	26
	1999–2000	45.3	33.3	21.4
	2004–05	47.7	35.6	16.7
	2007–08	42.3	37.9	19.9
	2009–10	41.1	39.3	19.6
	2011–12	42.8	42.8	14.3

Table 2 (cont.)

	YEAR	SELF-EMPLOYED	REGULAR EMPLOYED	CASUAL LABOUR
RURAL PERSONS	1993–94	58	6.4	35.6
	1999–2000	55.8	6.8	37.4
	2004–05	60.2	7.1	32.8
	2007–08	56.3	7.5	36.2
	2009–10	54.2	7.3	38.6
	2011–12	55.9	8.7	35.4
URBAN PERSONS	1993–94	42.3	39.4	18.3
	1999–2000	42.2	40	17.7
	2004–05	45.4	39.5	15
	2007–08	42.6	41.2	16.2
	2009–10	41.1	41.4	17.5
	2011–12	41.9	43.3	14.8
ALL INDIA MALES	1993–94	53.7	16.7	29.6
	1999–2000	51.5	17.2	31.3
	2004–05	54.7	17.2	28.1
	2007–08	56	9	35.1
	2009–10	50	17.7	32.2
	2011–12	50.7	19.8	29.4
ALL INDIA FEMALES	1993–94	56.8	6.2	37
	1999–2000	55.8	7.1	37.1
	2004–05	61.4	8.3	30.3
	2007–08	56	9	35.1
	2009–10	27.3	10.1	36.6
	2011–12	56.1	12.7	31.2

Source: Various rounds of NSS survey reports (1983–2011–12: All India (%))

Table 3: Formal and informal Sectors in unincorporated non-agricultural enterprises (excluding construction) in India, 2010–11

		PERCENTAGE DISTRIBUTION OF WORKERS	PERCENTAGE DISTRIBUTION OF ENTERPRISES	PERCENTAGE DISTRIBUTION OF SAMPLE ENTERPRISES
MANUFACTURING	Informal	89.3	98.5	96.4
	Formal (appx)	10.7	1.5	3.6
	Total	100.0	100.0	100.0
TRADE	Informal	98.1	99.8	99.4
	Formal (appx)	1.9	0.2	0.6
	Total	100	100	100
OTHER SERVICES	Informal	80.7	97.1	95.7
	Formal (appx)	19.3	2.9	4.4
	Total	100.0	100.0	100.0
ALL	Informal	89.1	98.5	97.1
	Formal (appx)	10.9	1.5	2.9
	Total	100	100	100

Source: Based on key results of survey on unincorporated non-agricultural enterprises (excluding construction) in India, NSS 67th round, July 2010–June 2011.
Note: 'Formal' enterprises are those with 10 workers or more; rest has been designated as informal.

Table 4: Formal and informal sectors in unincorporated non-agricultural enterprises (excluding construction) in India, 2010–11

		PERCENTAGE DISTRIBUTION OF WORKERS	PERCENTAGE DISTRIBUTION OF ENTERPRISES	PERCENTAGE DISTRIBUTION OF SAMPLE ENTERPRISES
INFORMAL	Manufacturing	32.2	29.9	29.5
	Trade	35.5	36.5	33.8
	Other Services	32.3	33.7	36.8
	All	100.0	100.0	100.0
FORMAL (APPX)	Manufacturing	31.5	29.4	37.0
	Trade	5.5	5.4	6.5
	Other Services	63.0	65.2	56.5
	All	100	100	100

Source: Based on key results of survey on unincorporated non-agricultural enterprises (excluding construction) in India, NSS 67th round, July 2010–June 2011.
Note: 'Formal' enterprises are those with 10 workers or more; rest have been designated as informal.

Table 5: Estimated number (%) of informal/formal sector workers in 1999–2000 and 2011–12 (in million)

SECTOR/WORKER	TOTAL EMPLOYMENT (MILLION)		
	INFORMAL/ UNORGANIZED WORKERS	FORMAL/ORGANIZED WORKERS	TOTAL WORKERS
1999–2000 (NSS 55TH ROUND)			
Informal/Unorganized sector	341.3 (99.6)	1.4 (0.4)	342.6 (100)
Formal/Organized sector	20.5(37.8)	33.7 (62.2)	54.1 (100)
Total	**361.7 (91.2)**	**35.0 (8.8)**	**396.8 (100)**
2004–05 (NSS 61ST ROUND)			
Informal/Unorganized sector	393.5 (99.6)	1.4 (0.4)	394.9 (100)
Formal/Organized sector	29.1 (46.6)	33.4 (53.4)	62.6 (100)
Total	**422.6 (92.4)**	**34.9 (7.6)**	**457.5 (100)**
2009–10 (NSS 66TH ROUND)			
Informal/Unorganized sector	388.0 (99.6)	1.6 (0.4)	389.6 (100)
Formal/Organized sector	36.9 (52.3)	33.5 (47.6)	70.5 (100)
Total	**425.0 (92.3)**	**35.1 (7.65)**	**460.2 (100)**
2011–12 (NSS 68TH ROUND)			
Informal/Unorganized sector	403.8 (99.7)	1.4 (0.3)	405.2 (100)
Formal/Organized sector	43.4 (54.4)	36.1 (45.5)	79.5 (100)
Total	**447.2 (92.2)**	**37.5 (7.7)**	**484.7 (100)**

Source: Different rounds of NSSO Employment Unemployment Surveys

Table 6: Total number of persons employed by type of ownership by type of establishments and by sector in all India

	RURAL		URBAN		COMBINED	
	WITH AT LEAST ONE HIRED WORKER	TOTAL	WITH AT LEAST ONE HIRED WORKER	TOTAL	WITH AT LEAST ONE HIRED WORKER	TOTAL
GOVERNMENT / PSU	5,678,337	5,678,337	3,709,420	3,709,420	9,387,757	9,387,757
	22.6	12.1	8.4	6.0	13.6	8.7
PRIVATE: PROPRIETARY	13,752,181	33,475,585	31,012,298	47,417,860	44,764,479	80,893,445
	54.6	71.5	70.5	77.0	64.7	74.6
PRIVATE: PARTNERSHIP	908,537	1,025,026	2,090,723	2,238,067	2,999,260	3,263,093
	3.6	2.2	4.8	3.6	4.3	3.0
PRIVATE: COMPANY	1,663,114	1,683,362	3,358,370	3,375,016	5,021,484	5,058,378
	6.6	3.6	7.6	5.5	7.3	4.7
PRIVATE: SELF HELP GROUP	152,520	636,716	128,781	243,333	281,301	880,049
	0.6	1.4	0.3	0.4	0.4	0.8
PRIVATE: COOPERATIVE	278,678	301,635	296,797	308,868	575,475	610,503
	1.1	0.6	0.7	0.5	0.8	0.6
PRIVATE: NON-PROFIT INSTITUTION	780,921	1,304,454	680,329	886,246	1,461,250	2,190,700
	3.1	2.8	1.6	1.4	2.1	2.0
PRIVATE: OTHERS	1,964,302	2,732,986	2,688,928	3,394,456	4,653,230	6,127,442
	7.8	5.8	6.1	5.5	6.7	5.7
TOTAL	**25,178,590**	**46,838,101**	**43,965,646**	**61,573,266**	**69,144,236**	**108,411,367**
	100	**100**	**100**	**100**	**100**	**100**

Source: Sixth Economic Census (Table 4.6)

Table 7: State wise total number of establishments engaged in manufacturing by sector and type of establishment

	RURAL			URBAN			COMBINED		
	WITHOUT HIRED WORKERS	WITH AT LEAST ONE HIRED WORKER	TOTAL	WITHOUT HIRED WORKERS	WITH AT LEAST ONE HIRED WORKER	TOTAL	WITHOUT HIRED WORKERS	WITH AT LEAST ONE HIRED WORKER	TOTAL
Jammu & Kashmir	67200	13871	81071	23839	13975	37814	91039	27846	118885
Himachal Pradesh	54449	8640	63089	5444	3563	9007	59893	12203	72096
Punjab	96126	44800	140926	81858	82485	164343	177984	127285	305269
Chandigarh	86	69	155	3395	2982	6377	3481	3051	6532
Uttarakhand	26049	6587	32636	13533	9774	23307	39582	16361	55943
Haryana	65321	15469	80790	47191	48800	95991	112512	64269	176781
Delhi	781	616	1397	57537	97016	154553	58318	97632	155950
Rajasthan	212687	52031	264718	128222	83009	211231	340909	135040	475949
Uttar Pradesh	479357	117949	597306	331797	212300	544097	811154	330249	1141403
Bihar	177504	53194	230698	50736	31228	81964	228240	84422	312662
Sikkim	729	188	917	217	257	474	946	445	1391
Arunachal Pradesh	970	450	1420	529	480	1009	1499	930	2429
Nagaland	6596	1177	7773	1207	1024	2231	7803	2201	10004
Manipur	41246	4237	45483	20925	3220	24145	62171	7457	69628
Mizoram	1406	378	1784	1561	1557	3118	2967	1935	4902
Tripura	21298	3586	24884	8342	3821	12163	29640	7407	37047
Meghalaya	4622	2590	7212	1154	1547	2701	5776	4137	9913
Assam	111738	44221	155959	26928	28282	55210	138666	72503	211169
West Bengal	753670	111516	865186	387208	212450	599658	1140878	323966	1464844
Jharkhand	39022	25337	64359	32608	33635	66243	71630	58972	130602
Odisha	278002	49014	327016	40034	21656	61690	318036	70670	388706
Chhattisgarh	42574	7837	50411	25020	14950	39970	67594	22787	90381
Madhya Pradesh	224892	39232	264124	143846	70459	214305	368738	109691	478429
Gujarat	91632	46480	138112	155983	210413	366396	247615	256893	504508
Daman & Diu	83	235	318	418	1393	1811	501	1628	2129
D & N Haveli	253	443	696	263	1323	1586	516	1766	2282
Maharashtra	315057	58527	373584	276119	270769	546888	591176	329296	920472
Karnataka	277627	45249	322876	175125	96596	271721	452752	141845	594597
Goa	2949	1300	4249	3818	3101	6919	6767	4401	11168
Lakshadweep	89	53	142	357	157	514	446	210	656
Kerala	210085	53406	263491	189411	78905	268316	399496	132311	531807
Tamil Nadu	247639	110322	357961	331556	244690	576246	579195	355012	934207
Puducherry	1336	1038	2374	3301	2835	6136	4637	3873	8510
A & N islands	564	421	985	255	544	799	819	965	1784
Telangana	221108	35141	256249	105645	72028	177673	326753	107169	433922
Andhra Pradesh	309259	103260	412519	159679	90667	250346	468938	193927	662865
Total	**4384006**	**1058864**	**5442870**	**2835061**	**2051891**	**4886952**	**7219067**	**3110755**	**10329822**

Source: Sixth Economic Census (Table 2.6)

Table 8: Number of non-agricultural enterprises

	NUMBER	%		NUMBER	%
Organized	158877	0.3	**Organized manufacturing**	146898	0.9
Unorganized	57673305	99.7	**Unorganized manufacturing**	17210269	99.2
Total	57,832,182	100	**Total manufacturing**	17357167	100

Sources: ASI, 2010–11 and NSSO 2010–11 (67th Round)
Note: The estimates of the organized sector are from ASI and the unorganized sector from NSSO data.

Table 9: Share of informal non-agricultural sector in GVA (Cross Value Added)

INDUSTRY GROUP	GVA (RS BILLION)	SHARE TO TOTAL INFORMAL GVA (%)	INFORMAL SECTOR GVA TO TOTAL GVA (%)
Mining	152	1.7	18
Manufacturing	12386	13.5	26.8
Electricity, gas and water	182	0.2	3.0
Construction	8602	9.4	46.3
Trade	31875	34.7	75.1
Hotels and restaurants	2021	2.2	50.8
Transport and storage	11122	12.1	44.5
Banking, finance and insurance	1559	1.7	9.3
Real estate, renting and business services	15562	16.9	63.4
Public administration anddefence	71	0.1	0.4
Education	1315	1.4	12.3
Health and social work	1232	1.3	23.2
Other community, social and personal services	3886	4.2	69.4
Private household and extra territorial organisation	589	0.6	95.3
Total	**91923**	**100**	**49.9**

Source: NCEUS (2009), Volume-I, Table 11.5, Page 260.
Note: As mentioned earlier after a careful examination of the relevant literature NCEUS offered definitions and empirical estimation of the informal economy in India for the year 2004–05; assuming that the share would not have changed very significantly.

Table 10a: Share of factories among various industries in organized sector

	1988–89	1999–2000	2008–09	2009–10	2010–11	2011–12
Support activities to agriculture and post-harvest crop activities	---	2.6	1.9	1.8	1.5	2.0
Food, beverages and tobacco	25.3	20.3	20.0	19.6	14.8	16.0
Textile, wearing apparel, leather related products	14.0	14.6	16.2	16.4	9.6	15.2
Food and wood products except furniture, paper and paper products, printing and reproduction recorded media	8.0	7.6	7.2	7.1	2.6	7.1
Coke, refined petroleum products, chemicals and chemical products	6.7	0.6	6.2	6.1	25.1	6.1
Pharmaceuticals, medicinal chemical and botanical products	---	7.9	2.2	2.2	3.3	2.3
Rubber, plastic and other non-metallic mineral products	13.2	14.1	16.3	16.5	7.3	17.4
Basic metals, fabricated metal products, except machinery and equipment	19.5	11.5	8.6	8.9	5.3	12.9
Computer, electronic and optical products	---	11.4	0.9	0.8	2.3	1.3
Electrical equipment and machinery and equipment n.e.c.	4.3	0.8	9.7	9.7	10.6	9.0
Motor vehicles, trailers and semi-trailers and other transport equipment	3.2	3.7	3.6	3.8	10.0	3.7
Other manufacturing and other industries	5.9	4.9	7.3	7.0	7.6	7.1
All industries	100	100	100	100	100	100

Source: Calculated from Annual Survey of Industries (factory sector) (various years)

Table 10b: Share of total output among various industries in organized sector

	1988–89	1999–2000	2008–09	2009–10	2010–11	2011–12
Support activities to agriculture and post-harvest crop activities	0	0.1	0.5	0.8	1.5	1.1
Food, beverages and tobacco	15.2	13.4	15.0	14.3	14.8	8.1
Textile, wearing apparel, leather related products	11.5	11.9	9.1	9.2	9.6	7.5
Food and wood products except furniture, paper and paper products, printing and reproduction recorded media	3.1	2.9	2.4	2.3	2.6	2.1
Coke, refined petroleum products, chemicals and chemical products	13.0	6.4	27.1	25.0	25.1	25.1
Pharmaceuticals, medicinal chemical and botanical products	0	16.9	3.6	3.4	3.3	3.3
Rubber, plastic and other non-metallic mineral products	14.5	7.1	7.8	7.7	7.3	6.6
Basic metals, fabricated metal products, except machinery and equipment	20.3	13.0	5.3	4.7	5.3	18.6
Computer, electronic and optical products	0	9.4	2.5	2.7	2.3	1.9
Electrical equipment and machinery and equipment n.e.c.	6.3	0.7	10.9	10.2	10.6	8.4
Motor vehicles, trailers and semi-trailers and other transport equipment	6	7.3	8.5	9.6	10.0	9.3
Manufacturing and other industries	10.3	10.9	7.3	10.0	7.6	8.0
All industries	100	100	100	100	100	100

Source: Calculated from Annual Survey of Industries (various years)

Table 10c: Share of employment among various industries in organized sector

	1988–89	1999–2000	2008–09	2009–10	2010–11	2011–12
Support activities to agriculture and post-harvest crop activities	0	1.8	1.0	0.8	1.0	0.89
Food, beverages and tobacco	18.4	22.3	19.0	18.2	17.4	14.0
Textile, wearing apparel, leather related products	19.3	20.8	23.0	23.1	22.5	20.6
Food and wood products except furniture, paper and paper products, printing and reproduction recorded media	4.5	4.2	4.0	3.9	4.1	3.9
Coke, refined petroleum products, chemicals and chemical products	7.3	0.9	6.5	6.4	6.2	6.0
Pharmaceuticals, medicinal chemical and botanical products	0	10.0	3.6	3.7	3.9	4.2
Rubber, plastic and other non-metallic mineral products	8.5	8.9	11.4	11.4	12.0	11.5
Basic metals, fabricated metal products, except machinery and equipment	16.4	11.1	6.8	6.9	7.3	13.5
Computer, electronic and optical products	0	10.4	1.5	2.0	1.5	1.9
Electrical equipment and machinery and equipment n.e.c.	4.8	0.8	10.8	10.7	10.3	9.3
Motor vehicles, trailers and semi-trailers and other transport equipment	6.5	5.8	6.9	7.5	8.2	8.3
Other Manufacturing and other industries	14.5	3.1	5.6	5.4	5.6	5.9
All Industries	100	100	100	100	100	100

Source: Calculated from Annual Survey of Industries (various years)

Table 11: Employment in organized sector – public and private (million persons as on 31 March 2012)

PUBLIC SECTOR	2006	2007	2008	2009	2010	2011	2012
A. BY BRANCH							
1 Central government	2.9	2.8	2.7	2.7	2.6	2.5	2.5
2 State governments	7.3	7.2	7.2	7.2	7.4	7.2	7.2
3 Quasi-governments	5.9	5.9	5.8	5.8	5.9	5.8	5.8
4 Local bodies	2.1	2.1	2.0	2.1	2.1	2.1	2.1
Total	**18.2**	**18.0**	**17.7**	**17.8**	**17.9**	**17.6**	**17.6**
B. BY INDUSTRY							
1 Agriculture, hunting etc.	0.5	0.5	0.5	0.5	0.5	0.5	0.5
2 Mining and quarrying	1.2	1.1	1.1	1.1	1.1	1.1	1.1
3 Manufacturing	1.1	1.1	1.0	1.1	1.1	1.0	1.1
4 Electricity, gas and water	0.9	0.9	0.8	0.8	0.8	0.8	0.8
5 Construction	0.9	0.9	0.9	0.9	0.9	0.9	0.8
6 Wholesale and retail trade	0.2	0.2	0.2	0.2	0.2	0.2	0.2
7 Transport, storage and communications	2.7	2.6	2.6	2.6	2.5	2.4	2.5
8 Finance, insurance, real estate etc.	1.4	1.4	1.4	1.4	1.4	1.4	1.4
9 Community, social and personal services	9.2	9.1	8.9	9.0	9.1	9.1	9.0
Total	**17.9**	**17.7**	**17.3**	**17.5**	**17.5**	**17.3**	**17.3**
PRIVATE SECTOR							
1 Agriculture, hunting etc.	1.0	1.0	1.0	0.9	0.9	0.9	0.9
2 Mining and quarrying	0.1	0.1	0.1	0.1	0.2	0.1	0.1
3 Manufacturing	4.6	4.8	5.0	5.2	5.2	5.4	5.5
4 Electricity, gas and water	0.0	0.1	0.1	0.1	0.1	0.1	0.1
5 Construction	0.1	0.1	0.1	0.1	0.1	0.1	0.1
6 Wholesale and retail trade	0.4	0.4	0.3	0.5	0.5	0.6	0.6
7 Transport, storage and communications	0.1	0.1	0.1	0.1	0.2	0.2	0.2
8 Finance, insurance ,real estate etc.	0.7	0.9	1.1	1.3	1.6	1.7	1.9
9 Community, social and personal services	1.9	2.0	2.2	2.0	2.1	2.4	2.5
Total	**8.8**	**9.2**	**9.8**	**10.3**	**10.8**	**11.4**	**11.9**

Source: Economic Survey 2014–15, Table 3.1, pp. A55

Table 12: Share of enterprises by number of workers in India 2010–11

NUMBER OF WORKERS	ESTIMATED NUMBER OF ENTERPRISES	SHARE OF ESTIMATED NUMBER OF ENTERPRISES (%)	SAMPLE NUMBER OF ENTERPRISES	SHARE OF SAMPLE NUMBER OF ENTERPRISES (%)
0	5144	0.01	59	0.02
1	34,400,662	59.65	154,790	46.28
2	15,013,197	26.03	98,006	29.30
3	3,920,884	6.80	36,478	10.91
4	15,27,651	2.65	14,944	4.47
5	826,108	1.43	8587	2.57
6	441,790	0.77	5164	1.54
7	309,462	0.54	3048	0.91
8	197,322	0.34	2201	0.66
9	156,336	0.27	1589	0.48
10	284,278	0.49	1636	0.49
11	115,945	0.20	1096	0.33
12	103,197	0.18	783	0.23
13	59,257	0.10	620	0.19
14	36,905	0.06	438	0.13
15	56,010	0.10	433	0.13
16	55,617	0.10	429	0.13
17	20,253	0.04	293	0.09
18	17,,703	0.03	256	0.08
19	18036	0.03	211	0.06
20	8819	0.02	126	0.04
20+	98,729	0.17	3287	0.98
All	57,673,306	100	334,474	100

Source: Compiled from NSS 67th KI: Key results of survey on unincorporated non-agricultural enterprises (excluding construction) in India, 2010–11, pp 427
Note: Rural and Urban (manufacturing, trade and other services, unincorporated non-agricultural enterprises (excluding construction))

Table 13a: Estimated number and percentage in parentheses of enterprises by broad activity category, 2010–11

	RURAL			URBAN			RURAL + URBAN		
	OAE	ESTT.	ALL	OAE	ESTT.	ALL	OAE	ESTT.	ALL
MANUFACTURING	9,138,228 (63.3)	976,854 (35.1)	10,115,082 (58.8)	5,291,761 (36.7)	1,803,426 (64.9)	7,095,188 (41.2)	14,429,989 (100)	2,780,280 (100)	17,210,269 (100)
TRADE	9,953,886 (55.8)	610,732 (20.9)	10,564,618 (50.9)	7,870,356 (44.2)	2,315,730 (79.19)	10,186,086 (49.1)	17,824,242 (100)	2,926,462 (100)	20,750,704 (100)
OTHER SERVICES	9,153,903 (55.3)	1,057,490 (33.5)	10,211,394 (51.8)	7,402,353 (44.7)	2,098,586 (66.5)	9,500,939 (48.2)	16,556,256 (100)	3,156,076 (100)	19,712,332 (100)
ALL	28,246,017 (57.9)	2,645,076 (29.8)	30,891,094 (53.6)	2,056,4470 (42.1)	6,217,742 (70.2)	26,782,213 (46.4)	48,810,487 (100)	8,862,818 (100)	57,673,305 (100)

Source: NSSO Survey on Unincorporated Non-agricultural Enterprises Excluding Construction) in India, 67th Round (2010–11)
Note: OAE: 'Own Account Enterprises' are enterprises that do not employ hired workers on a fairly regular basis in the reference year and the second type, Estt.: 'Establishments': enterprises that employed least one hired worker on a fairly regular basis in the reference period. Figures in parenthesis denote the percentage distribution between rural and urban across activity categories.

Table 13b: Percentage distribution of enterprises by broad activity category, 2010–11

	RURAL			URBAN			RURAL + URBAN		
	OAE	ESTT.	ALL	OAE	ESTT.	ALL	OAE	ESTT.	ALL
MANUFACTURING	32.4	36.9	32.7	25.7	29.0	26.5	29.6	31.4	29.8
TRADE	35.2	23.1	34.2	38.3	37.2	38.0	36.5	33.0	36.0
OTHER SERVICES	32.4	40.0	33.1	36.0	33.8	35.5	33.9	35.6	34.2
ALL	100	100	100	100	100	100	100	100	100

Source: NSSO Survey on Unincorporated Non-agricultural Enterprises Excluding Construction) in India, 67th Round (2010–11);
OAE: 'Own Account Enterprises'; Estt.: 'Establishments'

Table 13c: Estimated number of workers by broad activity category, 2010–11

	RURAL			URBAN			RURAL + URBAN		
	OAE	ESTT.	ALL	OAE	ESTT.	ALL	OAE	ESTT.	ALL
MANUFACTURING	13,212,564 (63.4)	5,297,787 (37.7)	18510351 (53.1)	7,631,588 (36.6)	8,746,495 (62.3)	16,378,083 (46.9)	20,844,151 (100)	14,044,283 (100)	34,888,434 (100)
TRADE	13,629,416 (55.6)	1,749,079 (18.2)	15378495 (45.1)	10,876,584 (44.4)	7,874,195 (81.8)	18,750,779 (54.9)	24,506,000 (100)	9,623,274 (100)	34,129,274 (100)
OTHER SERVICES	14,857,638 (60.9)	4,435,821 (30.5)	19293458 (49.5)	9,556,241 (39.1)	10,111,468 (69.5)	19,667,708 (50.5)	24,413,878 (100)	14,547,288 (100)	38,961,167 (100)
ALL	41,699,618 (59.8)	11,482,687 (30.1)	53182304 (49.3)	28,064,412 (40.2)	26,732,158 (70.0)	4,796,570 (50.8)	69,764,030 (100)	38,214,845 (100)	107,978,875 (100)

Source: NSSO Survey on Unincorporated Non-agricultural Enterprises Excluding Construction) in India, 67th Round (2010–11)
Note: OAE: 'Own Account Enterprises' are enterprises that do not employ hired workers on a fairly regular basis in the reference year and the second type, Estt.: 'Establishments': enterprises that employed least one hired worker on a fairly regular basis in the reference period. Figures in parenthesis denote the percentage distribution between rural and urban across activity categories.

Table 13.d: Percentage distribution of workers by broad activity category, 2010–11

	RURAL			URBAN			RURAL + URBAN		
	OAE	ESTT.	ALL	OAE	ESTT.	ALL	OAE	ESTT.	ALL
MANUFACTURING	31.7	46.1	34.8	27.2	32.7	29.9	29.9	36.8	32.3
TRADE	32.7	15.2	28.9	38.8	29.5	34.2	35.1	25.2	31.6
OTHER SERVICES	35.6	38.6	36.3	34.1	37.8	35.9	35.0	38.1	36.1
ALL	100	100	100	100	100	100	100	100	100

Source: NSSO Survey on on unincorporated non-agricultural enterprises (excluding construction) in India, 67th Round (2010–11); OAE: 'Own Account Enterprises'; Estt.: 'Establishments'

Table 14: Index of industrial production (IIP)

YEAR	MINING AND QUARRYING	MANUFACTURING	ELECTRICITY	GENERAL
	Base : 1980–81 = 100			
Weight	11.46	77.11	11.43	100
1981–82	117.7	107.9	110.2	109.3
1982–83	132.3	109.4	116.5	112.8
1983–84	147.8	115.6	125.4	120.4
1984–85	160.9	124.8	140.4	130.7
1985–86	167.5	136.9	152.4	142.1
1986–87	177.9	149.7	168.1	155.1
1987–88	184.6	161.5	181	166.4
1988–89	199.1	175.6	198.2	180.9
1989–90	211.6	190.7	219.7	196.4
1990–91	221.2	207.8	236.8	212.6
1991–92	222.5	206.2	257	213.9
1992–93	223.7	210.7	269.9	218.9
1993–94	231.5	223.5	290	232
	Base : 1993–94 = 100			
Weight	10.47	79.36	10.17	100
1994–95	109.8	109.1	108.5	109.1
1995–96	120.5	124.5	117.3	123.3
1996–97	118.2	133.6	122	130.8
1997–98	126.4	142.5	130	139.5
1998–99	125.4	148.8	138.4	145.2
1999–00	126.7	159.4	148.5	154.9
2000–01	130.3	167.9	154.4	162.5
2001–02	131.9	172.7	159.2	167
2002–03	139.6	183.1	164.3	176.6
2003–04	146.9	196.6	172.6	189
2004–05	153.4	222.5	181.5	211.1
	Base : 2004–05 = 100			
Weight	14.16	75.53	10.32	100
2005–06	102.3	110.3	105.2	108.6
2006–07	107.5	126.8	112.8	122.6
2007–08	112.5	150.1	120	141.7
2008–09	115.4	153.8	123.3	145.2
2009–10	124.5	161.3	130.8	152.9
2010–11	131	175.7	138	165.5
2011–12	128.5	181	149.3	170.3
2012–13	125.5	183.3	155.2	172.2
2013–14	124.7	181.9	164.7	172.0
2014–15	126.5	186.1	178.6	176.9
2015–16	129.3	189.8	188.7	181.1

Source: RBI, Handbook of Statistics on Indian Economy, 2014; Table 28.

Table 15: Compound Growth Rates of IIP

YEAR	MINING AND QUARRYING	MANUFACTURING	ELECTRICITY	GENERAL
1981–82 to 1993–94	5.8	6.3	8.4	6.5
1994–95 to 2004–05	3.4	7.4	5.3	6.8
2005–06 to 2013–14	2.5	6.5	5.8	5.9

Source: Based on Table 14

Table 16: Growth in employment and GVA in unorganized manufacturing: 2005–06 through 2010–11

	OAME		ESTABLISHMENT		ALL	
INDUSTRY	WORKERS	GVA IN RS. MILLION (IN 2004–05 PRICES)	WORKERS	GVA IN RS. MILLION (IN 2004–05 PRICES)	WORKERS	GVA IN RS. MILLION (IN 2004–05 PRICES)
Food products, veverages and tobacco	-6.8	21.2	-3.4	-12.9	-5.9	3.5
Textiles and leather	2.5	151.4	0.5	98.4	1.8	120.7
Paper and products	-13.4	-40.4	15.5	234.5	-0.6	172.9
Chemical and chemical products	-17.4	-47.0	-2.04	45.9	-11.0	29.5
Non-metallic mineral products	-4.9	20.1	11.3	90.3	4.0	76.7
Basic metals	13.3	190.6	-2.3	-129.2	2.5	-91
Metal products	-3.7	96.5	4.8	14.7	1.8	25.4
Machinery and equipment	-26.2	-144.4	-8.7	-57	-12.6	-66.0
Transport equipment	-5.6	156.3	-7.7	42	-7.5	47
Other manufacturing incl. wood	-1.3	127.9	4.4	77.7	0.9	94.7
All industries	-2.5	95.8	1.9	52.5	-0.9	67.2

Source: Computed from National Sample Survey data on unorganized manufacturing enterprises, 2005–06 and 2010–11. OAME; own account manufacturing enterprises (household enterprises); cited in Arup Mitra (forthcoming) 'Informal Economy in India: Persistence and Meagerness'; Agrarian South, Sage.

Table 17: Employment share of "Make in India" sectors, 2011–12

MAKE IN INDIA SECTORS	NUMBER OF WORKERS	PERCENTAGE
Automobiles	1,099,663	0.2
Automobile components	464,390	0.1
Aviation	126,188	0.0
Chemicals	1,178,728	0.2
Construction	43,489,774	9.2
Defence manufacturing	52,593	0.0
Electrical machinery and electronic systems	1,418,231	0.3
Food processing	6,438,740	1.4
IT and Bpm	3,275,236	0.7
Leather	1,312,137	0.3
Media and entertainment	1,035,909	0.2
Mining oil and gas	77,479	0.0
Pharmaceuticals	782,171	0.2
Ports	213,800	0.0
Railways	1,211,526	0.3
Roads and highways	6,638,771	1.4
Space	6365	0.0
Textiles and garments	18,359,856	3.9
Thermal power	292,212	0.1
Tourism and hospitality	5,059,310	1.1
Wellness	4,362,697	0.9
Total share of employment under "Make in India"	96,895,773	20.5
Share of sectors falling outside "Make in India"	376,744,241	79.5
Total workers in India	**473,640,014**	**100**

Source: Computed from the 68th Round of the NSS EUS, which is the latest available data; as mentioned earlier it pertains to 2011–12

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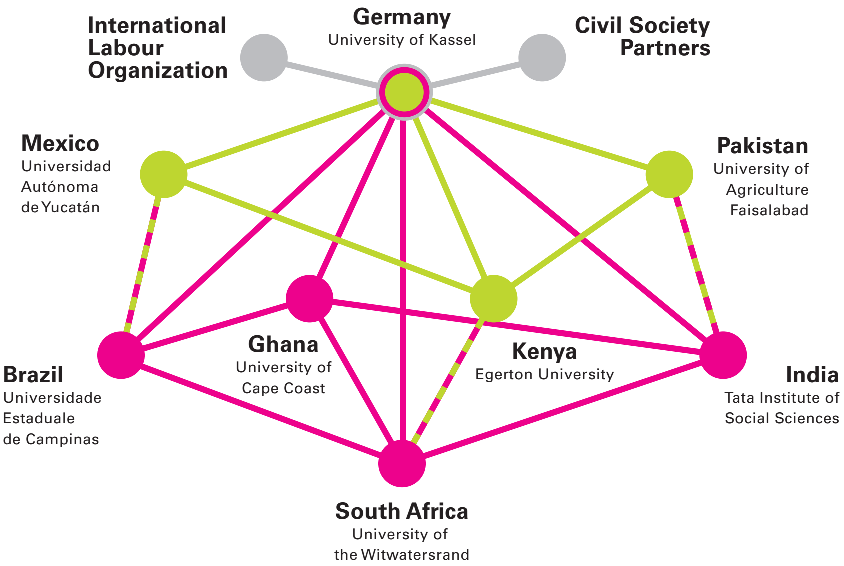

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