



INDIAN INSTITUTE OF MANAGEMENT CALCUTTA

WORKING PAPER SERIES

WPS No. 640/ June 2009

The dynamics of employment generation in post-reform India

by

Mritiunjoy Mohanty

Professor, IIM Calcutta, Diamond Harbour Road, Joka P.O., Kolkata 700 104 India

The dynamics of employment generation in post-reform India

Mritiunjoy Mohanty

May 2008

Abstract: The paper argues that India's occupational structure is in a transitional phase. Employment growth is driven by non-agricultural employment and more specifically rural non-farm employment. Not surprisingly the drivers of rural and urban non-farm employment are different and likely to diverge further in the near future. As is well known informalisation has emerged as a dominant trend in recent labour market performance. But less well known is the result that formal and informal labour markets have very different contractual dynamics. Therefore, the formal labour market is overwhelmingly dominated by regular employment and informal employment by self-employment and, equally importantly, this behaviour is remarkably similar across geographies, rural and urban. Our analysis would suggest that formal and informal labour markets are organically linked not only in the same geography but also in ways which have probably begun blurring differences between geographies. Sectoral drivers, educational requirements and demand-supply dynamics and not labour market regulations would appear to explain the choice capital makes between formal and informal employment.

(keywords: labour, employment, formal, informal, structure, dynamics, regulation, law, education, growth, labour force, labour demand, labour supply, self-employment, casual, regular, agriculture, industry, services)

The dynamics of employment generation in post-reform India

The employment performance of the Indian economy, unlike the output performance has been reasonably volatile. A sharp decline in employment elasticities in the 1990s saw heightened concerns about jobless growth. The more recent period has a revival of employment growth. This paper is an attempt to understand the underlying dynamic of that employment performance and how it has affected labour market performance in terms of sectoral outcomes and employment by contract types.

Outside of a few notable exceptions, most of the literature in occupational structure change in the Indian economy has analysed movements in shares. What this paper does in addition is also look at second order changes over time. As a result it is able to arrive at a far clearer understanding of labour market dynamics and the changing dynamics of employment generation, both in terms of sectors and contract type and how the former has influenced the latter. It then uses this analysis to address some issues in the on-going debate around informalisation of the labour market.

The paper is divided into seven sections: Section I briefly discusses patterns and employment and labour force growth since the early 1980s. Section II looks at change in occupational structures in terms of sectors and geographies. Section III is sub-divided in

three: Section IIIa analyses the dynamics of net new job generation; Section IIIb at the sectoral drivers of net new job generation; and IIIc at the dynamics of non-farm employment generation in terms of geographies and sectors. Section IV is sub-divided in two: Section IVa studies the structure and dynamics of employment generation by contract types; and IVb at the geography of employment generation by contract types. Section V looks at the dynamics of formal and informal employment by contract types. Section VI takes a more detailed look at informalisation and is sub-divided in three: Section VIa analyses the sectoral drivers and contractual dynamics of informalisation. Section VIb has a brief discussion of on homeworkers as a special category of informal labour; and VII tries to bring together the various strands in labour market dynamics and looks at the role of education and labour market regulation in the process of informalisation.

I. Introduction: Employment - the return of growth

After some concern¹ about the declining ability of the economy to produce jobs in the 1990s when the employment elasticity of growth fell to 0.15 (see Table 1 below), with its recovery to 0.48 for the period 1999/2000 – 2004/05, it has been argued that the phase of ‘job-less growth’ is over and that rapid output growth is now accompanied by rapid employment growth as well (see for e.g., Sundaram (2007) and Rangarajan (2007)).

Seen from the standpoint of employment growth, the period 1999/2000 – 2004/05 has been unprecedented. The period produced approximately 60 million net new jobs (see Table 5 below), i.e., approximately 12 million net new jobs per annum. This is significantly higher than the approximately 4 million net new jobs per annum generated over the period 1993/94 – 1999/2000 (a total of 23.4 million). It is also compares very favourably with the period 1983 – 1993/94 when approximately 7 million net new jobs were created per annum (a total of 71.7 million).

What is perhaps equally noteworthy is that despite a significantly improved employment growth performance over the period 1999/2000 – 2004/05, it was still somewhat lower than the labour force growth rate for that period of 2.93% (see Table 1). This is to say that despite an unprecedented employment growth performance, it was unable to keep pace with labour force growth over the period, which grew even faster. As Table 1 demonstrates and others have argued² the surge in the labour force growth rate over 1999/2000 – 2004/05 went against the trend deceleration exhibited by labour force growth until that period and was clearly unanticipated³. It has therefore been argued that this surge in labour force growth rate was not an autonomous phenomenon but the ex-post outcome of distress-driven employment seeking particularly in agriculture and therefore a high rate of employment generation coexists with declining quality of

¹ See for example Planning Commission (2001), p.5 and Planning Commission (2002), p.2.

² See for example, Himanshu (2007).

³ Indeed, for its projections, Planning Commission (2001) used 1.8% as the upper bound for labour force growth, i.e. an addition of 8.1 million per annum to the labour force (p.55)! Assuming labour force growth of 1.8% and an employment elasticity of growth of 0.22, it had argued that if GDP grew at 9%, then unemployment would decline by 2012. Despite the fact that the actual employment elasticity of growth was 0.48 in the last period, and the economy generated 12 million net new jobs, it was unable to keep pace with labour force growth rate.

employment, rising unemployment levels and stagnant or declining real wages (see Ghosh and Chandrasekhar (2006) and Himanshu (2007)). We will have occasion to return to this below.

Table 1: Annual growth rates of labour force and employment (%)			
	1983-1993/94	1993/94-1999/2000	1999/2000 – 2004/05
Labour force	2.05	1.03	2.93
Workforce (employment)	2.04	0.98	2.89
Employment elasticity (ratio)	0.41	0.15	0.48

Source: Planning Commission (2001), p. 19, Table 2.3 and Rangarajan (2007) Table 1
 Note: Employment refers to 'usual status' employment as defined by the NSSO. See Table A1 for estimates of total employment and labour force.

II. Patterns of change in occupational structure: by sector and geography

As Tables 2, 3 and 4 suggest, on the face of it, occupational structure change in India, albeit slow, is along expected lines. Between 1983 and 2004/05, the share of rural employment in total employment declines from 81 to 75% (Table 2) with a corresponding increase urban employment.

Table 2: Employment in Rural and Urban India (in millions)			
	Rural Employment	Urban Employment	Total Employment
1983	245 (80.8)	58 (19.2)	303
1993/94	293 (78.2)	82 (21.8)	374
1999/2000	304 (76.5)	94 (23.5)	398
2004/05	343 (74.9)	115 (25.1)	458

Source: Computed on the basis of Table 1 from Sundaram (2007), Tables 3, 12 and 21 from Himanshu (2007) and Table 2.5 (p.22) in Planning Commission (2001)
 Note: Figures in parentheses are percentages of total. Employment, unless otherwise indicated, refers to 'usual status' employment as defined by the NSSO

Table 3: Sectoral distribution of employment (%age)				
	1983	1993/94	1999/2000	2004/05
agriculture	68.5	64.0	60.3	56.6
mining	0.6	0.7	0.6	0.5
manufacturing	11.2	10.6	11.0	12.2
electricity, water	0.3	0.4	0.3	0.3
construction	2.3	3.3	4.4	5.7
trade, hotel	6.4	7.6	10.3	10.8
transport, storage	2.5	2.9	3.6	4.1
other services	8.4	10.6	9.6	9.9

Source: Computed on the basis of Table 5.9 (p.90) in NSSO (2006), Tables 12 and 21 in Himanshu (2007) and Table 2.5 (p.22) in Planning Commission (2001)

Table 4: Employment by sectors and geographies (in millions)				
	Agriculture	Rural non-farm	Urban non-farm	Total Employment
1983	207 (68.5)	45 (14.8)	51 (16.7)	303
1993/94	240 (64.0)	63 (16.9)	72 (19.1)	374
1999/2000	240 (60.3)	72 (18.5)	86 (21.5)	398
2004/05	259 (56.6)	94 (20.6)	105 (23.0)	458
Source: Computed on the basis of Table 5.9 (p.90) in NSSO (2006), Tables 12 and 21 from Himanshu (2007) and Table 2.5 (p.22) in Planning Commission (2001)				
Note: Figures in parentheses are percentages of total				

The slow decline of rural employment actually understates the extent of occupational and geographical diversification. Over the same period, i.e., between 1983 and 2004/05, the share of agriculture declined from 68.5 to a little less than 57% and there is a concomitant increase in the shares of both rural non-farm (from 15 to nearly 21%) and urban non-farm (from 17 to 23%) employment of roughly equal magnitude (see Table 4).

As Table 3 tells us, construction has been a significant gainer from the almost 12% decline in agriculture's employment share over the 20 year period from 1983 to 2004/05. Its share increases nearly 3 times – from a little more 2% to nearly 6%. Services taken as a whole have also seen their share increase from a little more than 17% to a little more than 24%. Within services however most of the gains have gone to trade and hotels on the one hand and transport, storage and communication on the other. Manufacturing employment's share in the total increases by a mere 1% over this 20 year period – from 11 to 12%. It should be noted however that from 1993/94 onwards it has been on a slowly rising trend.

To put this change in employment shares in context, agriculture's share⁴ in GDP (at factor cost) over this twenty year period declined from about 34 to 18.5% - a decline of more than 15%. Manufacturing's share in output, as in employment, has risen very slowly – from 14.5 to 15.1%, or less than a percentage point. Though it bears pointing out that it actually rose to 16.4% in 1996/97 and declined from thereon. Construction's share in GDP, unlike in employment, has also risen very slowly – rising from 5.8 to 6.5%, again less than a percentage point. Services have been the main beneficiary of agriculture's decline in output share – rising from 38.6 to 53.7%, or a little more than 15%.

Therefore when we look at aggregate data, whether by sectors or geography, change in the occupational structure of the Indian economy has been slow (because it lags change in output shares) but along expected lines. As the economics of structural change would suggest, the shares of both the rural economy and agriculture in employment have declined, with concomitant increases in the shares of both rural and urban non-farm geographies. The only surprise perhaps is Construction, whose employment share has

⁴ Sectoral output shares of GDP (at factor cost) have been calculated on the basis of data from RBI's 'Handbook of Statistics on Indian Economy'. Available at <http://www.rbi.org.in/scripts/publications.aspx> and accessed on 2nd February 2008.

increased by significantly more than its output share. In parentheses it is also worth noting that the increase in Services' employment share is substantially lower⁵ than its increase in output share.

IIIa. Dynamics: the geography of net new job generation

However, this picture of reasonably smooth change in occupational structure along expected lines changes once we start looking at the generation of net new jobs, or the underlying dynamic of employment generation. As we will see this dynamic has undergone some important changes.

	Rural	Urban	Total net jobs
1983 -1993/94	48.1 (67.1)	23.5 (32.8)	71.7
1993/94-1999/2000	11.6 (49.6)	11.8 (50.4)	23.4
1999/2000 – 2004/05	38.7 (64.4)	21.4 (35.6)	60.1

Computed on the basis of Table 2
Note: Figures in parentheses are percentages of total

In terms of geography of net new job creation, as Table 5 tells us, the Period II (i.e., 1993/94-1999/2000) is quite different from both Periods I (1983 -1993/94) and III (1999/2000 – 2004/05). In Period II, as opposed to the Periods I and III, urban employment generation accounts for more than 50% of total net new jobs created in the economy⁶. It will be recalled this period has been referred to as one of 'job-less growth' with the employment elasticity of output growth dropping to 0.15 (see Table 1 above). In Period III however, the economy would appear to revert back to type, with the rural economy generating roughly two-thirds of the net new jobs created in the economy, as in Period I.

	Agriculture	Rural non-farm	Urban non-farm	Total net jobs
1983-1993/94	32.4 (45.2)	18.3 (25.5)	21.1 (29.4)	71.7
1993/94-1999/2000	0.2 (0.8)	9.2 (39.3)	13.9 (59.4)	23.4
1999/2000 – 2004/05	19.1 (31.9)	21.7 (36.3)	19.5 (32.5)	60.1

Source: Computed on the basis of Table 5.9 (p.90) in NSSO (2006), Tables 12 and 21 in Himanshu (2007) and Table 2.5 (p.22) in Planning Commission (2001)
Note: Figures in parentheses are percentages of total

However as Table 6 makes clear, the volatility in the geographical dynamic is largely the result of agriculture's contribution to net new job creation. Effectively, in Period II

⁵ Employment share of 'services' increases by less than half the increase in the output share.

⁶ One of the reasons, among others, why Mohanty (2006) characterises this period as marking a "tectonic shift" in labour market dynamics as compared with earlier periods. On this score at least (i.e., the emerging dominance the urban economy in employment generation) he had spoken too soon.

(1993/94-1999/2000) agriculture did not create any net new jobs, its contribution being less than 1%. This clearly affected the share of the rural economy in net new job generation, which saw a significant decline in its share of net new jobs in Period II (Table 5). Volatility apart, reflecting its decline in total employment share, the share of agriculture in net new jobs has clearly been declining over time. Agriculture goes from being the largest generator of net new jobs in Period I to being the smallest generator in Period III.

The declining importance of agriculture in net new job creation has happened alongside the emergence of rural non-farm employment as the new driver of rural employment generation. In Period I, rural agriculture⁷ (29.8 million) created more net new jobs than the rural non-farm sector (18.3 million). In Period II rural agriculture generated 2.4 million net new jobs as opposed to 9.2 million by the rural non-farm segment. In Period III, despite the revival of agricultural employment generation as a result of which rural agriculture generated more than 17 million net new jobs, the rural non-farm sector created significantly more (21.7 million).

It is interesting to note that the sharp decline of rural agriculture in net new job creation in Period II did not lead to the collapse of net new job generation in the rural non-farm sector. Clearly it was affected, as is evidenced by the decline in the share of net new rural non-farm jobs in total non-farm jobs from 46.5% in Period I to 39.8 in Period II. This ratio then climbs to 52.3% in Period III, perhaps in part reflecting the revival of net new job creation in agriculture.

Alongside the growing importance of non-farm jobs - it increases from 55% in Period I to 65% Period III - in the generation of net new jobs, is the growing dynamism of rural non-farm sector in non-farm employment generation. In Periods I and II the urban non-farm sector generated more net new jobs than the rural non-farm sector (see Table 6). In Period III however the rural non-farm sector generated more net new jobs than urban non-farm. Indeed in Period III, the rural non-farm sector is the largest generator of net new jobs in the economy. Each of the three periods have seen different dominant sectors and geographies in terms of net new job creation, suggesting that the occupational structure of the economy is undergoing a transition – agriculture in Period I, urban non-farm in Period II and rural non-farm Period III. However when we put the three periods together, two trends stand out clearly – first, the increasing dominance of non-farm sector in the creation of net new jobs in the economy since Period I; and second, the emergence of the rural non-farm sector as the driver of net new employment generation with the non-farm sector.

Given that these are change on change trends (i.e. second order trends), we expect that these will influence overall trends as well. The rise to dominance of the rural non-farm sector in the creation of net new jobs suggests that the share of the urban economy in

⁷ Urban agriculture accounts for about 4% of total agricultural employment. Of course the collapse of net new job creation in agriculture affected both rural and urban agriculture. One indicator of this is the contribution of urban non-farm jobs in Period II to net new job creation is greater than that of urban jobs (see Tables 5 and 6).

employment generation will rise but slowly. However the increasing dominance of non-farm jobs in the generation of net new jobs implies that occupational diversification away from agriculture will actually accelerate⁸ in the coming years, if the tempo of employment generation is maintained.

IIIb. Dynamics: Sectoral drivers of net new job generation

	1983-1993/94	1993/94-1999/2000	1999/2000 – 2004/05
agriculture	32.4 (45.2)	0.2 (0.8)	19.1 (31.9)
mining	0.9 (1.2)	-0.3 (-1.4)	0.2 (0.3)
manufacturing	5.7 (8.0)	4 (17.3)	12 (20.0)
electricity, water	0.6 (0.9)	-0.5 (-2.1)	0.2 (0.3)
construction	5.4 (7.5)	5.5 (23.3)	8.3 (13.9)
trade, hotel	9.1 (12.7)	12.6 (53.8)	8.6 (14.4)
transport, storage	3.3 (4.7)	3.6 (15.5)	4.2 (7.0)
other services	14.2 (19.8)	-1.7 (-7.2)	7.3 (12.2)
Total	71.7	23.4	60

Source: Same as Table 3
Note: Figures in parentheses are percentages of total

When we turn our attention to occupational diversification away from agriculture in the generation of net new jobs, there are a couple of trends that stand out immediately. First, manufacturing's share in net new jobs has increased 2.5 times between Periods I and III – rising from 8 to 20% (see Table 7). Second, construction's share almost doubles over the same period – rising from 7.5 to 13.9%. As a result, manufacturing becomes the largest non-farm sector generating net new jobs in Period III and construction has a share almost equal to the other important generator of net new non-agricultural jobs - trade, hotels and restaurants - which sees its share increase⁹ from 12.7 to 14.4%.

Services taken as a whole have actually seen their share of net new jobs created decline from 37.2 to 33.6% between Period I and III¹⁰. The decline in the share the service sector is really result the decline in the contribution of 'other services' and we will return to this in a moment. Therefore 'trade, hotels and restaurants' and 'transport, storage and communication' taken together actually increase their share in net new jobs from 17.4 to

⁸ This view of the dynamics of employment generation is very different from Sundaram (2007) who argues that "India remains a land of farmers ... with marginal gains in the share of production process workers and of professional ... managerial workers." (pp. 3126-7). Sundaram comes to this assessment solely on the analysis of employment shares. As we have shown, looking only at shares one misses out the woods for the trees by missing out the underlying dynamics of employment generation and an acceleration in non-farm diversification.

⁹ It should be mentioned that in Period II, trade hotels and restaurants generated more than 50% of the net new jobs in the economy.

¹⁰ In Period II, services accounted for more than 62% of net new jobs created in the economy. Within service sector it was really 'trade, hotels and restaurants' that accounted for the bulk of the increase, generating more than 50% of the total net new jobs. It is also worth remembering that one part of the reason for high shares for the service sector was the collapse of agriculture in generating new jobs.

21.4%. Be that as it may, what is undeniable is the growing importance of manufacturing – the last two service sectors mentioned accounted for more than twice manufacturing’s contribution to net new jobs in Period I but by Period III they were almost equal in their contributions.

Turning to ‘other services’, unfortunately Table 5.9 (page 90) of NSSO (2006) uses this residual category and clubs together service sub-sectors with very different employment generation trends. We did not have access to a consistent data source with a more detailed break-up for all our three time periods and therefore decided to use the NSSO’s residual categorisation for reasons of comparability. Himanshu (2007) however gives a more detailed break-up¹¹ for Period III and we will use that below, wherever appropriate.

‘Other services’, which accounts for about 9-10% of total employment (see Table 3), comprises two broad sub-categories: financial services and ‘community, social and personal services’. In 1999/2000 financial services accounted for 1.3% of total employment (Planning Commission (2001)) and 1.5% in 2004/05 (Rangarajan (2007)). For community, social and personal services employment shares were 8.4 and 7.8% respectively in 1999/2000 and 2005/05 (same sources). The three major components of community, social and personal services are public administration and defence, education and research, and personal services (a euphemism for household help). In 1999/2000 these three components - public administration and defence, education and research, and personal services – accounted for 2.7, 2.2 and 2.4% respectively of total employment¹².

Public administration has been relatively quiescent in terms of employment generation since the early 1990s and ‘personal services’ has been very volatile. A contraction of employment in personal services¹³ explains in part why ‘other services’ actually sheds employment in Period II (see Table 3). On the other hand, as Himanshu (2007) points out personal services have grown quiet rapidly in Period III. All this to say that within ‘other services’, the relatively dynamic segments (financial services and education) are small even in terms of net new job creation and some of the larger segments are contracting or volatile and pull the overall sector down, as a result of which the sector has seen a deceleration in creation of net new jobs, resulting in a decline in its overall employment share. From our standpoint, no segment of ‘other services’ is currently in a position to be an important driver of net new job creation, even though one can discern a couple of future drivers (education and health).

To conclude, in terms of net new jobs, occupational diversification away from agriculture is being driven by manufacturing and construction employment growth and to a lesser extent, that of trade, hotels and restaurants. Whereas the importance of construction and

¹¹ Himanshu’s (2007) detailed break-up in Tables 18 and 22 uses a slightly narrower definition (principal status) of employment than what we have used (usual status) in this paper. But it at least gives a sense of magnitude of these changes.

¹² On the basis of Table 3, Sundaram (2001)

¹³ On the contraction in personal services in Period II see Table 3, Sundaram (2001). Personal services (largely household help) are one of the lowest paying options in the labour market and have very low entry barriers because they require relatively few skills. Therefore its net new job creation status is a reasonably good barometer of slackness or tightness of the labour market.

trade, hotels and restaurants in net new job creation is discernible in the way overall employment shares have evolved (see Table 3 and associated discussion), the rising importance of manufacturing in net new job creation has not yet been reflected in the movement of overall shares. But if present trends continue, we expect manufacturing and construction to be important drivers in the diversification of employment away from agriculture.

	Urban non-farm		Rural non-farm	
	1993/94-1999/2000	1999/2000–2004/05	1993/94-1999/2000	1999/2000– 004/05
mining	-0.1 (-0.7)	0	-0.23 (-2.5)	0.18 (0.8)
manufacturing	2 (14.4)	6.8 (34.9)	2.04 (22.2)	5.19 (23.6)
electricity, water	-0.3 (-2.1)	0.1 (0.5)	-0.19 (-2.0)	0.06 (0.3)
construction	2.3 (16.5)	1.7 (8.7)	3.15 (34.2)	6.64 (30.5)
trade, hotel	9.5 (68.3)	3 (15.4)	3.09 (33.6)	5.65 (26.0)
transport, storage	1.6 (11.5)	1.9 (9.7)	2.02 (22.0)	2.30 (10.6)
other services	-1 (-7.2)	5.6 (28.7)	-0.69 (-7.5)	1.73 (7.9)
total	13.9	19.5	9.2	21.7

Source: Computed on the basis of Table 5.9 (p.90) in NSSO (2006), Tables 12 and 21 in Himanshu (2007)

Note: Figures in parentheses are percentages of total

IIIc. Dynamics of non-farm employment: the geography of sectoral change

Having located sectoral drivers of non-farm occupational change, it will be useful to locate these within a geographical context, particularly given that rural non-farm employment has emerged as an important driver of both of net new job creation as well diversification away from agriculture.

The volatility (see Table 8) in the pattern of generation of net new jobs in the urban non-farm economy suggests its occupational structure is undergoing a phase of transition, as new occupations and new sectors take hold. Perhaps the best example of this is the volatility in the contribution of ‘other services’ to net new job creation. As we have already noted, ‘other services’ includes a melange of services with very different dynamics: financial services, public administration and defence, education and research, health, community services, and personal services. In Period II ‘other services’ actually contracts largely because net new job creation in financial services, education and health is too small and is overwhelmed by a sharp contraction in personal services.

In Period III however, at nearly 29%, ‘other services’ are the second-largest (after manufacturing) contributor to net new job creation in the urban non-farm economy. Therefore continued net new job creation by the smaller service sectors (financial services, education and health) and a revival in personal services is able to counteract the sharp contraction of employment in public administration and defence (see Table 22 in Himanshu (2007)). Therefore, if current trends continue in the future these smaller service sectors should become important contributors to net new job creation in the urban non-farm economy, though the strong revival of employment growth in low-skilled personal services can hardly be a good omen about the state of the labour market.

Outside of ‘other services’, the other important contributors to net new job creation in the urban non-farm economy are manufacturing and trade, hotels and restaurants. At nearly 35%, manufacturing is the largest generator of net new jobs in the urban non-farm economy during Period III and would seem to be on a rising trend. Trade, hotels and restaurants accounted for more than 68% of net new jobs in Period II but saw a sharp deceleration in Period III, falling behind ‘other services’ in importance. However taking Period II and III together, there can be little doubt about the importance of these two sectors in the generation of net new jobs in the urban-non farm economy. It is also important to note that construction plays a relatively minor role in the generation of net new jobs in the urban non-farm economy, accounting for 16.5 and 8.7% respectively in Periods II and III and equally important, exhibiting a sharp deceleration.

To conclude, manufacturing, trade, hotels and restaurants and ‘other services’ have been the important generators of net new jobs in the urban non-farm economy since the early 1990s and will probably remain so in the immediate future. The urban non-farm economy is however undergoing a transition in its occupation structure and the relative importance of these sectors in net new job generation will probably alter in the near future.

The rural non-farm economy on the other hand exhibits more stable dynamics in terms of generation of net new jobs. In both Period II and III, construction is the leading generator of net new jobs, accounting for more than 30% of the total in each period. Construction is closely followed by trade, hotels and restaurants which accounted for more than 30% of total net new jobs in Period II and 26% in Period III. Both have however exhibited signs of mild deceleration. These two sectors are followed by manufacturing which accounted for more than 20% of total net new jobs in both Periods II and III. It is also important to note that ‘other services’ plays a relatively minor role in generation of net new employment in the rural non-farm economy – as with its urban counterpart, employment generation by ‘other services’ contracted in Period II but accounted for less than 8% of net new jobs in Period III¹⁴.

Finally, to draw together the discussion around geographical and sectoral aspects of net new non-farm job creation: we had noted earlier that in terms of sectors, occupational diversification away from agriculture is being largely driven by construction and manufacturing followed by trade, hotels and restaurants; we had also noted that in terms of geographies, rural non-farm employment have emerged as an important driver of this diversification. We can now add that the importance of construction in net new job creation is largely the result of its importance in rural non-farm employment generation. The importance of manufacturing in net new employment generation is driven by both rural and urban non-farm employment generation, with it being somewhat more important in the latter than in the former. The importance of trade, hotels and restaurants in net new job creation is driven more by the rural non-farm sector than the urban. The declining importance of ‘other services’ in net new job generation is the result of its

¹⁴ In an interesting sidelight, as opposed to the urban non-farm economy where it has grown significantly in Period III, employment in personal services (a sub-sector of ‘other services’) actually contracted in the rural non-farm economy (see Table 18 in Himanshu (2007)).

relative unimportance in the rural non-farm geography, despite it emerging as an important generator of new jobs in the urban non-farm economy.

IVa. Employment generation by contract type: structure and dynamics of change

We now turn our attention to the dynamics of employment generation from the standpoint of its contractual nature as well as quality.

As Table 9 makes clear Period III (1999/2000 – 2004/05) is clearly different because it sees the reversal of a nearly two-decade long trend of the declining share of self-employment in total employment. The share of self-employment declined by nearly 5% - from 57.4 to 52.6% - between 1983 and 1999/2000. It then increased by nearly 4% in the five year period in Period III to climb back to 56.4% in 2004/05.

Table 9: Employment by contract type (in millions)				
	1983	1993/94	1999/2000	2004/05
Self-employed	174 (57.4)	204 (54.6)	209 (52.6)	258 (56.4)
Regular	42 (13.9)	51 (13.5)	58 (14.7)	70 (15.2)
Casual	87 (28.7)	119 (31.8)	130 (32.8)	130 (28.3)
Waged employment	129 (42.6)	170 (45.4)	189 (47.4)	200 (43.6)
Total	303	374	398	458
Source: Computed on the basis of Tables 12 and 21 from Himanshu (2007) and Tables 2.5 and 2.15 from Planning Commission (2001)				
Note: Figures in parentheses are percentages of total				

The increase in the share of self-employment obviously happened at the expense of waged (regular + casual) employment. However within waged employment, trends were somewhat divergent. The share of regular employment rises in Period III from 14.7% in 1999/2000 to 15.2 in 2004/05, maintaining a rising trend that begins from around 1993/94 onwards. As a result, the share of regular employment in waged employment increases from nearly 30 to 35% between 1993/94 and 2004/05. Sundaram (2007) makes a similar point when he argues that in per annum terms the economy produced a much larger amount of regular employment in Period III than in either Period I or II¹⁵. The brunt of the increase in the share of self-employment was, therefore, borne by casual employment, which saw its share decline 4.5% in Period III and stood at 28.3% in 2004/05. The decline in Period III reversed a rising trend over both Periods I and II, which had seen the share of casual workers in total employment rise from 28.7% in 1983 to 32.8% in 1999/2000. Clearly then the type of employment that the economy generated went through a major adjustment in Period III.

Table 10: Net new jobs by contract type (in millions)					
	Self-employed	Regular	Casual	Waged employment	Total net jobs

¹⁵ His and our estimates of per annum regular employment generation are somewhat different particularly for Period I. According to him in the economy produced 0.41, 1.46 and 2.14 million regular jobs per annum in Period I, II and III respectively (p. 3124). Our estimates are 0.82, 1.27 and 2.28 million regular jobs per annum respectively. There is of course no disagreement on the overall trend.

1983-1993/94	30.6 (40.9)	8.6 (12.0)	32.3 (45.1)	40.9 (57.1)	71.7
1993/94-1999/2000	4.8 (20.5)	7.6 (32.5)	11.1 (47.4)	18.7 (79.9)	23.4
1999/2000 – 2004/05	49.2 (81.9)	11.4 (18.9)	-0.5 (-0.1)	10.9 (18.1)	60.1
Computed on the basis of Table 9 above					
Note: Figures in parentheses are percentages of total					

The extent and nature of the adjustment becomes much more apparent when we look at net new jobs generated by contract type. The first thing to note about Table 10 is the importance of waged employment in the creation of net new jobs in Periods I and II. Waged employment accounted for 57 and 80% in Periods I and II respectively of net new jobs created. This is to say that there was acceleration¹⁶ in the growth of waged employment generation in the economy over the two periods. It is important to note that the acceleration was true for both regular work and casual employment, with it being particularly sharp in the former. The obverse was a sharp deceleration in the growth of self-employment.

This dominance of waged employment in the creation of net new jobs gets completely overturned in Period III. Casual employment actually contracts slightly, but even regular employment sees a very sharp deceleration – in Period II it accounted for 32.5% of net new jobs created whereas in Period III this had come down to 19%. Among other things to which we will come later, it is this sharp deceleration in regular employment that Sundaram (2007) completely misses out when he looks at absolute increments in employment generated. Self-employment accounted for a phenomenal 82% of net new jobs created! It could be argued that Period II is anomalous because agriculture created practically no jobs and the bulk of jobs created in agriculture are in self-employment (see Table 11). It is however worth noting that Period III, in which net new job creation in agriculture resumes, is nothing like Period I and the big difference between the two is the increase in the share of self-employment and the virtual elimination of casual employment in net new job creation.

Therefore Period III is special because it reverses the nearly two-decade long dominance of waged employment in net new job creation which in this period is completely overshadowed by self-employment. It is also important to remember that while the sharp decline in waged employment is largely the result of the contraction of casual employment in net new job creation, there is also a significant deceleration in the creation of regular employment in net new jobs.

IVb. Employment generation by contract type: the geography and dynamics of change

It will be useful to see how this shift in favour of self-employment and away from waged employment in the creation of net new jobs has played out across sectors (rural agriculture) and geographies (rural non-farm and urban). Unfortunately because of a lack of a consistent set of estimates, we have had to drop Period I from this part of the analysis.

¹⁶ The term acceleration has been defined in terms of second-order-changes. Therefore a variable accelerates (decelerates) if second order changes are increasing (decreasing).

Self-employment is the dominant employment mode in rural agriculture and this dominance increases in Period III. Even though self-employment declined between 1993/94 and 1999/2000, by 2004/05 it had increased its share by more than 6% to a little over 64% of the workforce in rural agriculture. In Period III therefore, rural agriculture clearly moved in favour of self-employment (see Table 11) and away from waged employment as the shares of both regular and casual employment declined between 1999/2000 and 2004/05.

	1993/94	1999/2000	2004/05
Self-employed	138 (60.1)	134 (57.8)	159 (64.1)
Regular	3 (1.3)	3 (1.3)	2 (1)
Casual	89 (38.6)	95 (40.9)	87 (35)
Total	229	232	249

Source: Computed on the basis of Tables 12 from Himanshu (2007).
 Note: Figures in parentheses are percentages of total

	Self-employed	Regular	Casual	Total net jobs
1993/94-1999/2000	-3.8 (-146.2)	0.1 (3.9)	6.3 (242.3)	2.6
1999/2000 – 2005/05	25.3 (150.6)	-0.7 (-4.2)	-7.8 (-46.4)	16.8

Computed on the basis of Table 11
 Note: Figures in parentheses are percentages of total

Over the eleven-year period (1993/94 to 2004/05) for which we have data, Table 12 suggests that in the creation of net new jobs in rural agriculture, the nature of adjustment is for self-employment and casual employment to move in opposite directions – when the share of self-employment increases that of casual employment falls and vice versa. It is also however important to note that going against the trend for the economy as a whole, regular employment in agriculture in Period III actually contracted by 700,000 jobs, i.e., 140,000 p.a., or the 2004/05 stock of regular employment in rural agriculture was more than 20% lower than the 1999/2000.

On the other hand, in terms of contract types, rural non-farm employment generation has been a lot more stable, and when compared with the overall economy, movement in employment shares by contract-type has been marginal. Self-employment and waged employment are roughly evenly matched, with each accounting for roughly 50%, with a slight increase in self-employment's share between 1999/2000 and 2004/05 (see Table 13). Within waged employment, however there has been a small change and that has gone against the national trend. As opposed to the economy-wide trend, the share of regular employment in total rural non-farm employment declines from 24.8 to 23.2% between 1993/94 and 2004/05 (see Table 13). On the other hand over the same period the share of casual labour increases from 25 to 27.1%. This includes the Period III (1999/2000 – 2004/05) during which, as we have already seen, nationally, the share of

causal labour actually declines. As a result, the share of regular employment in waged employment in rural non-farm sector declines from 49.8 to 46.1% between 1993/94 and 2004/05.

Therefore unlike rural agriculture which has witnessed such volatility in its employment contract patterns, rural non-farm employment has been much more stable – the share of self-employment and waged employment is roughly equal and has moved within a narrow range, with the former’s share increasing slightly in Period III. Within waged employment however there is some movement, with the share of regular employment declining in Periods II and III. It will be recalled that this goes against the national trend where the share of regular employment in waged employment actually increases over the same period.

	1993/94	1999/2000	2004/05
Self-employed	32 (50.2)	36 (49.3)	47 (49.7)
Regular	16 (24.8)	18 (24.5)	22 (23.2)
Casual	16 (25.0)	19 (26.2)	26 (27.1)
Total	63	72	94

Source: Computed on the basis of Tables 12 from Himanshu (2007).
Note: Figures in parentheses are percentages of total

	Self-employed	Regular	Casual	Total net jobs
1993/94-1999/2000	3.9 (43.3)	2 (22.2)	3.1 (34.4)	9
1999/2000 – 2005/05	11.2 (51.1)	4.1 (18.7)	6.6 (30.1)	21.9

Computed on the basis of Table 13
Note: Figures in parentheses are percentages of total

In terms of net new job creation by contract type in rural non-farm employment, the first thing to note (see Table 14) is that in Period II (1993/94-1999/2000) the bulk (nearly 57%) of net new jobs created were in waged employment. In Period III (1999/2000 – 2005/05) however, it was self-employment that accounted for the bulk (more than 51%) of net new jobs. Therefore it would be fair to say that though both self-employment and waged employment are growing at not very dissimilar rates, there is some acceleration in the growth of self-employment and some deceleration in the growth of waged employment in the rural non-farm sector. Within waged employment, the deceleration is greater for regular employment than casual employment – one of the reasons behind its decline in share in waged employment.

The urban economy, in terms of employment shares by contract type (see Table 15), is reasonably different from the rural non-farm economy. As opposed to rural geographies, both farm and non-farm, at nearly 55% in 2004/05, waged employment is the dominant contractual form in the urban economy. However, in line with national trends, the share of waged employment declined by more than 3% in Period III, from nearly 58% in

1999/2000. Unlike the national trend however, where it has seen a slow increase from 1993/94 onwards, the share of regular employment in total urban employment has moved up and down within a very narrow range.

Therefore from a little more than 39% in 1993/94 it increased by 1% up to 1999/2000 and then declined by 0.5% to reach 39.6% in 2004/05. Casual employment on the other hand has declined right through both Periods II and III, from little more than 18% in 1993/94 to 15% in 2004/05, including a decline of almost 3% in Period III. Therefore, despite the fact that share of regular employment has not changed very much, the decline in the share of casual employment has meant that the share of the former in urban waged employment has increased from 68.2 to 78.4% between 1993/94 and 2004/05. This increase is in line with national trends.

	1993/94	1999/2000	2004/05
Self-employed	35 (42.5)	40 (42.2)	52 (45.4)
Regular	32 (39.1)	38 (40.1)	46 (39.6)
Casual	15 (18.2)	17 (17.7)	17 (15.0)
Total	82	94	115

Source: Computed on the basis of Tables 21 from Himanshu (2007).
Note: Figures in parentheses are percentages of total

	Self-employed	Regular	Casual	Total net jobs
1993/94-1999/2000	4.7 (39.8)	5.5 (46.6)	1.7 (14.4)	11.8
1999/2000 – 2005/05	12.7 (59.3)	8 (37.4)	0.7 (3.3)	21.4

Source: Computed on the basis of Table 15
Note: Figures in parentheses are percentages of total

The movement in employment shares by contract type in the urban economy reflects very clearly in net new job creation. In Period II (1993/94-1999/2000) waged employment accounted for 60% of net new urban job creation. In addition, regular employment (nearly 47%) accounted for more net new jobs than self-employment (nearly 40%). In other words, waged employment in general and regular employment in particular, was the dominant drivers of employment growth in the urban economy. However in Period III (1999/2000 – 2005/05) the share of waged employment dropped sharply to under 41% and regular employment (a little more than 37%) accounted for a significantly lower share of net new jobs than self-employment (a little more than 59%). Therefore in Period III self-employment was clearly dominant driver of urban employment generation. It should also be noted that even though there is a deceleration in the generation of regular employment in the urban economy, it is not as steep as that in casual employment. The share of casual employment in net new jobs created falls from 14 to 3%. There is of course a sharp acceleration in the generation of self-employed work.

Therefore when we compare rural non-farm and urban employment patterns and changes in these, the following differences stand out: first, waged employment is more important in urban employment generation than in rural non-farm; second, even though there has been an acceleration between Periods II and III in the generation of self-employed jobs in both geographies, this acceleration is greater in urban than in rural non-farm; the brunt of the adjustment in the rural non-farm sector to the acceleration in self-employment has been borne by regular employment whereas in the urban economy it has been borne by casual employment.

We have noted earlier that for the economy as a whole, Period III saw a sharp increase in the share of self-employment and an even sharper decline in that of casual employment, both of which went against trends in Periods I and II. It has been argued elsewhere (see e.g., Himanshu (2007)) that the increase in the share of self-employment and the decline in that of casual employment is largely due to movements in agriculture and that “trend in non-farm employment has continued to be the one of increasing casualisation of the workforce” (p.28, op.cit). However as we have just established, the switch towards self-employment encompasses the non-farm geography as well. Indeed in the urban geography, just as in rural agriculture, the increase in the share of self-employment happens alongside a decline in the share of casual employment. However, unlike in the instance of rural agriculture, the decline is the continuation of an earlier trend. In addition as we have demonstrated in Period III there is has been acceleration in the generation of self-employed work in both rural non-farm and urban geographies.

V. Dynamics of employment generation: the geography of change in informal and formal labour markets by contract type

Table 17: Informal and formal employment ratios		
	1999/2000	2004/05
Informal Rural non-farm/Rural non-farm	0.71	0.78
Informal Urban/Urban	0.69	0.73
Total Informal/ Total Rural non-farm and Urban	0.70	0.75
Total Formal (urban + rural non-farm)/ Total employment	0.073	0.067
Total Urban Formal/ Total employment	0.053	0.045
Source: Computed on the basis of Table A2		

There is another tendency that needs to get factored in so as to be able to clearly understand the dynamics of employment generation by contract types – informalisation of the workforce. The National Commission for Enterprises in the Unorganised Sector in its report on informal employment (NCEUS (2007)) has defined informal employment as being characterised by one or more of the following characteristics: “employees with informal jobs generally do not enjoy employment security (no protection against arbitrary dismissal) work security (no protection against accidents and illness at the work place) and social security (maternity and health care benefits, pension, etc.)” (p.3). Formal

employment is defined as being those employed in the organized¹⁷ sector and who enjoy employment security, work security and social security.

Unfortunately the NSSO did not collect data on informal¹⁸ labour in NSS rounds prior to 1999/2000 therefore we only have two data points. Be that as it may, Table 17 makes amply clear the significant increase in the informalisation of both rural non-farm and urban employment in Period III (1999/2000 – 2004/05).

In 2004/05, in the rural non-farm sector, the informal workforce accounted for 78% of the total in that sector (see Table 17 above), an increase of 7% over 1999/2000. In the urban economy, the informal workforce accounted for 73% of the total in 2004/05, an increase of 4% over 1999/2000. Informalisation of the combined rural non-farm and urban workforce increased by 5% between 1999/2000 and 2004/05, from 70 to 75%. The obverse of this was a decline in the share of formal employment. The combined formal employment of rural non-farm and urban geographies taken together declined from 7.3% of total employment in the economy as a whole to 6.7% between 1999/2000 and 2003/04. Similarly, total formal employment in the urban geography declined from 5.3 to 4.5% over the same period. (see Ghosh and Chandrasekhar (2006) and Himanshu (2007))

Table 18: Net new jobs in the Informal Rural Non-farm and Urban economies (in millions)	
	1999/2000 – 2004/05
Net new jobs in the informal rural non-farm economy	22.2 (101.4)
Net new jobs in the informal urban economy	19.7 (92.1)
Total net new jobs in rural non-farm and urban economies	41.9 (96.7)
Computed on the basis of Table A2	
Note: Figures in parentheses are percentages of net new jobs created in the relevant geography	

Looking at shares of the informal workforce actually understates the extent of informalisation. It comes out in much greater force when we look at informalisation in the net new job creation. As Table 18 above tells us, the net new jobs generated in the informal rural non-farm economy were a more than 101% of total net new jobs in the

¹⁷ The CSO classifies an enterprise to be in organised sector if it has 10 or more employees with power or 20 or more employees without power (see NCEUS (2007), p.2)

¹⁸ NSSO classifies (and this also forms the basis of the NCEUS classification) *informal employment* as jobs held by:

- Own-account workers and employers who have their own informal sector enterprises;
- Contributing family workers, irrespective of whether they work in formal or informal sector enterprises;
- Employees with informal jobs: described as those not subject to national labour legislation, income taxation, social protection or entitlement to certain employment benefits; casual jobs or jobs of a limited short duration; jobs with hours of work or wages below a specified threshold; employment by unincorporated enterprises or by persons in households; jobs where the employee's place of work is outside the premises of the employer's enterprise (e.g. outworkers without employment contract); or jobs, for which labour regulations are not applied, not enforced, (or not complied with) whether employed by formal sector enterprises, informal sector enterprises, or as paid domestic workers by households.
- Members of informal producers' cooperatives; and
- Persons engaged in the own-account production of goods exclusively for own final use by their household, such as subsistence farming or do-it-yourself construction of own dwellings.

rural non-farm economy, i.e. employment in the formal segment of the rural non-farm economy actually contracted (also see Himanshu (2007)¹⁹). Even though net new job creation in the informal urban economy was not as dramatic, it still accounted for a massive 92% of the net new jobs generated in the urban economy. Overall, taking the rural non-farm and urban geographies together, informal employment accounted for nearly 97% of net new jobs. Therefore the formal economy has been as senescent as the informal has been dynamic in net new employment generation. The formal economy produced 1.4 million net new jobs (based on Tables 20 and 22 below) as opposed to 41.9 million (based on Tables 19 and 21 below) in the informal economy in Period III. This, as we have already seen, despite the fact of a significant increase in the generation of regular waged jobs in the non-farm economy in Period III. So much for Sundaram's (2007) implication that the organised sector has been performing well in terms employment generation (see pp.3124-25), which he has based purely on the trend for regular waged jobs.

From our standpoint, informalisation also seems to have an important impact on employment structure by contract type. Informal employment in the rural non-farm sector (see Table 19) is dominated by self-employment which accounted for almost 61% of the sector's total informal employment in 2004/05, slightly lower than the 63% in 1999/2000. This is followed by casual employment that accounted for nearly 28% in 2004/05, an increase of more than 2% over 1999/2000. And finally regular employment accounted for 12% in 2004/05, an increase of less than 1% over 1999/2000. In terms of net new jobs in the informal rural non-farm sector in Period III, self-employment accounted for 55%, 32% were in casual employment and 14% had regular employment contracts.

Table 19: Informal Rural Non-farm employment by contract type (in millions)		
	1999/2000	2004/05
Self-employed	32 (63.4)	45 (60.9)
Regular	6 (11.4)	9 (12.0)
Casual	13 (25.4)	20 (27.6)
Total	51	73
Computed on the basis of Tables 19 from Himanshu (2007).		
Note: Figures in parentheses are percentages of total		

On the other hand, formal employment in the rural non-farm sector (see Table 20) is dominated by regular employment which accounted for almost 63% of the sector's total formal employment in 2004/05, significantly higher than 56% in 1999/2000. This is followed by casual employment that accounted for nearly 26% in 2004/05, a decrease of 1.5% over 1999/2000. And finally self-employment accounted for nearly 11% in 2004/05, a decrease of almost 5% over 1999/2000. It is worth pointing out that total formal rural non-farm employment actually contracted in Period III - from 21.1 to 20.8 million between 1999/2000 and 2004/05, i.e., net new job creation was negative. But the contraction in this segment was entirely due to contraction in self-employment and casual employment, and not regular employment which actually grew from nearly 12 million to

¹⁹ Himanshu (2007) has a detailed discussion on the informalisation of employment in both rural non-farm and urban geographies both by sector and gender.

13 million. But the more than 1 million jobs added in regular employment were overwhelmed by the loss of 1 million jobs in self-employment and 0.6 million in casual employment.

Table 20: Formal Rural Non-farm employment by contract type (in millions)		
	1999/2000	2004/05
Self-employed	3.2 (15.2)	2.2 (10.6)
Regular	11.9 (56.4)	13 (62.5)
Casual	5.9 (28)	5.3 (25.5)
Total	21.1	20.8
Computed on the basis of Tables 13 and 18 above		
Note: Figures in parentheses are percentages of total		

The difference between informal and formal employment patterns in the rural non-farm geography gets repeated in the urban geography as well. Informal urban employment (see Table 21) is also dominated by self-employment which accounted for 60% of the sector's total informal employment in 2004/05, an increase more than 2% over 1999/2000. This is followed by regular employment that accounted for 23% in 2004/05, and is roughly unchanged as compared with 1999/2000. And finally casual employment accounted for nearly 17% in 2004/05, a decline of more than 2% over 1999/2000. In terms of net new jobs in the informal urban employment in Period III, self-employment accounted for 68%, regular employment for 22% and casual employment for 10%.

Table 21: Informal Urban employment by contract type (in millions)		
	1999/2000	2004/05
Self-employed	37 (57.8)	51 (60.2)
Regular	15 (23.3)	20 (23.1)
Casual	12 (18.9)	14(16.7)
Total	65	84
Computed on the basis of Tables 23 from Himanshu (2007).		
Note: Figures in parentheses are percentages of total		

On the other hand, more than even in the rural non-farm sector, formal employment in the urban economy is dominated by regular employment which accounted for almost 85% of this geography's total formal employment in 2004/05(see Table 22), significantly higher than 77.5% in 1999/2000. This is followed by casual employment that accounted for 10.5% of total formal urban employment in 2004/05, a decrease of nearly 5% over 1999/2000. And finally self-employment accounted for a little less than 5% in 2004/05, a decrease of almost 3% over 1999/2000. It is also worth noting that in Period III net new regular employment in the formal urban economy accounted for more than 200% of total net new formal jobs in the urban economy, i.e., net new regular employment increased by 3.6 million as opposed to a total increase of 1.7 million in net new formal jobs in the urban economy. In other words, both self-employment and casual employment in the formal urban economy contracted – a loss of 0.7 million jobs in self-employment and 1.2 million in casual employment.

Table 22: Formal Urban employment by contract type (in millions)		
	1999/2000	2004/05
Self-employed	2.1 (7.3)	1.4 (4.6)
Regular	22.4 (77.5)	26 (85)
Casual	4.4 (15.2)	3.2 (10.5)
Total	28.9	30.6
Computed on the basis of Tables 15 and 20 above		
Note: Figures in parentheses are percentages of total		

It would therefore appear that informal and formal employment have very different patterns in terms of employment share by contract type – informal employment is dominated by unwaged employment (specifically, self-employment) and formal employment by waged employment (and within that, specifically regular waged jobs)²⁰. Perhaps what is equally interesting is that this pattern holds across geographies – i.e., the difference between informal and formal employment is true across both rural non-farm and urban economies.

Even though there are differences – formal employment in the rural non-farm economy is about two-thirds that of urban and the share of regular waged jobs in formal employment in the former is lower than the latter (see Table 20 and 22) – the dominance of regular waged jobs in formal employment increases sharply in Period III across both geographies. The increase in dominance is not simply because of an increase in regular waged jobs in formal employment, but also because of a contraction in self-employment and casual employment in both geographies, unlike what has been suggested by some observers²¹.

Informal employment in both geographies (see Tables 19 and 21) tends to be more dissimilar than similar even though they are not very different in size - with informal rural non-farm and urban employment respectively accounting for 73 and 84 million – and self-employment is the dominant category in both – 61 and 60% respectively. Regular employment is more important in the informal urban economy than in rural non-farm, accounting for 23% of total informal employment in 2004/05 in the former as opposed to 12% in the latter. Conversely, casual employment is much more important in the informal rural non-farm economy than its urban counterpart – it accounted for nearly 28% of total informal employment in 2004/05 in the former as opposed to nearly 17% in the latter. Finally even though self-employment is dominant in both, in Period III it is relatively more important in the informal urban economy as opposed to the rural non-farm, accounting for 68% of the net new jobs in the former as opposed to 55% in the latter.

²⁰ One of the major differences between informal and formal employment is in the existence of written contracts in the two. According to NCEUS (2007) nearly all casual workers and more than 90% of regular workers in informal employment had no written contracts. In formal employment however roughly 50% of waged workers (regular + casual) had written contracts (p.38). Also see Table 3.2.

²¹ Bhattacharya (2007, p.121), among others, has suggested that there has been an increasing casualisation of formal employment.

The picture which emerges for Period III then is of the formal economy in both rural non-farm and urban geographies increasingly dominated by regular employment and shedding both self-employment and casual employment. The informal economy on the other hand is somewhat differentiated across geographies – in the rural non-farm geography the informal economy produces largely self-employed jobs followed by casual employment; and even though the informal urban economy also largely produces self-employed jobs, this is followed by regular waged jobs rather than casual employment. This difference between the informal geographies also holds true of the generation of net new jobs.

We are now in a position to draw together the various strands of the discussion on the contractual dynamics of employment generation. The discussion in this and the next paragraph pertains to Period III (1999/2000 – 2004/05). First, the relatively greater importance of waged employment (regular + casual) in urban geographies than in rural non-farm²² is explained by its (waged employment's) domination of formal employment and a larger formal segment in the former as compared with the latter. Second, despite differences in size, given that formal employment patterns and dynamics in terms of contract types is very similar across urban and rural non-farm geographies, the differences between them (i.e., geographies) in overall employment patterns by contract types are determined by the pattern of informal employment in each.

Third, given that, in formal employment, the share of regular waged jobs in both geographies rises quite sharply and that of self-employment and casual jobs contracts, the acceleration in self-employment growth in total employment in both is explained by its (self-employment's) dominance and acceleration in the informal segment. Fourth, the greater acceleration in self-employment in the urban economy in Period III as compared with the rural non-farm economy is also explained by its relatively greater acceleration in the informal urban economy. Fifth, we had noted earlier that the adjusting variable to the acceleration in self-employment was casual employment in the urban geography and regular employment in the rural non-farm geography. This overall pattern of adjustment is obtained entirely because it is the adjustment pattern that obtains in the informal employment segment of both geographies.

VIa. Informalisation: contractual dynamics, sectoral drivers and geography

What explains the increasing informalisation of the labour market? What explains the dynamics of formal employment with its increasing dominance of regular employment? What explains the increasing dominance of self-employment in informal employment? And why are informal employment adjustment patterns different in rural non-farm and urban geographies?

Before we try and address some of these issues, it is worth pointing out a conclusion that emerges from the above and is supported by related analysis elsewhere. The first is what we call the increasing 'informalisation of regular work'. In 1999/2000, outside of rural agriculture, the economy generated 55.2 million regular jobs of which 20.9 million, or

²² Even though declining, waged employment accounted for nearly 55% of total urban employment in 2004/05 (see Table 15) and whereas in the rural non-farm sector it was stable at roughly 50% across all three time periods (see Table 13).

nearly 38%, were in the informal sector. In 2004/05 of the 67.3 million regular jobs generated, 28.3 million, or 42%, were in the informal sector²³. There is therefore a substantial and increasing proportion of regular work that is now generated in the informal sector. Second, is what NCEUS (2007) has called “the informalisation of the formal sector” where “any employment increase consists of regular workers without social security benefits and casual or contract workers again without the benefits that should accrue to formal worker.” (p.4; also see p.39). As a result of both of these tendencies, using regular employment as a proxy for organised (or formal) sector employment, a common practice in the literature,²⁴ is clearly not tenable.

Returning to question of what determines employment shares by contract types, it will be recalled that in terms of net new jobs, in Period III, the leading drivers of urban non-farm employment generation were manufacturing, other services and trade, hotels and restaurants. Among other services, real estate and finance, education, health and personal services had performed very well. In manufacturing net new jobs (principal status)²⁵, self-employment and regular waged jobs had an equal share of around 44% and casual employment around 11%. Real estate and finance, education, health taken together in net new jobs, generated 67% regular waged jobs, 32% self-employed jobs and less than 2% in casual employment. In trade, hotels and restaurants 99% of the net new jobs were in self-employment, 19% were regular waged jobs and casual employment actually contracted by 18%. Transport and communications, the next in order of importance in terms of generation of net new jobs, produced 81% self-employed jobs, 33% regular waged jobs and casual employment contracted by 15%.

As Himanshu (2007) points out manufacturing, trade, hotels and restaurants and transport and communication were also sub-sectors which saw the most informalisation in employment²⁶. Indeed in each of these formal employment contracted. On the other hand, financial intermediation, education and health had relatively much lower levels of informal employment²⁷ (see Table 24, Himanshu (2007)).

²³ Figures for overall regular and informal sector totals have been calculated on the basis of Tables 13, 15, 19 and 21 above.

²⁴ See for example the discussion on RWS workers in p.3124 of Sundaram (2007). Or as Fagernäs (2007) states “In the absence of precise figures on the shares of organised workers over time, regular, salaried workers are used as an approximation of formal workers.” (p.30)

²⁵ Ratios reported in this paragraph about sub-sectoral distribution of employment shares by contract types in the urban non-farm sector have been computed on the basis of data in Table 22 (p.34) from Himanshu (2007). Himanshu uses principal status employment data for this table as opposed to the usual (principal + subsidiary) status that we have used throughout. The results reported here are at least indicative of the broader trend and we do not anticipate usual status statistics in this regard being markedly different.

²⁶ In 2004/05 81% of urban manufacturing employment (usual status) was informal; the same ratio was 95% for trade hotels and restaurants and 73% for transport and communication. Also in all three sectors informalisation in Period III increased sharply, with increases greater than the average increase for urban non-farm as a whole (see Table 24, Himanshu (2007)).

²⁷ In 2004/05 27% of employment (usual status) in financial intermediation was informal. It was 37% in education and 49.5% in health and social services. In fact education, one of the largest contributors of net new jobs in ‘other services’, saw one of the lowest increases in informalisation, well below the average for urban non-farm as a whole (see Table 24, Himanshu (2007)).

Therefore the leading sub-sectoral generators of net new jobs in the urban non-farm economy were dominated by self-employment or regular employment (in some of these sectors casual employment actually contracted) alongside increasing informalisation. It is this which explains the distribution of net new jobs by contract type in urban non-farm employment – dominated by self-employment and followed by regular waged jobs – as well as the significant increase in informalisation of employment in the urban economy. Given the rising importance of real estate and finance, education, health in net new job generation, we can expect that in near future the share of regular employment in net new jobs will increase and perhaps also slow down the informalisation process. The pattern however also suggests the increasing dominance of business services, health and education in formal employment in the urban non-farm economy.

As we have noted earlier, in rural non-farm employment the leading generators of net new jobs were construction, trade, hotels and restaurants, manufacturing and transport and communication in descending order of importance. Other services were not particularly important and within them, real estate and finance, education and health produced a very small proportion of net new jobs. As in urban non-farm, trade hotels and restaurants and transport and communication produced essentially self-employed jobs²⁸. Trade hotels and restaurants generated 77% self-employed and 24% regular waged jobs in net new jobs created. Transport and communication produced 65% self-employed and 30% regular waged jobs.

However unlike in the urban non-farm geography, manufacturing generated more self-employed and casual jobs and fewer regular waged jobs – 62% in self-employment and roughly 19% reach in casual and regular employment. The largest generator of net new jobs in the rural non-farm geography – construction – generated largely casual employment: 85% in casual employment, 14% in self-employment and less than 2% in regular waged jobs. It is also worth noting that even though business and social services had a very small proportion of net new jobs their distribution in terms of contract types was similar to that of urban non-farm.

Again as Himanshu (2007) points out construction, trade, hotels and restaurants, manufacturing and transport and communication were also sub-sectors which saw the most informalisation in employment²⁹. Therefore the leading sub-sectoral generators of net new jobs in the rural non-farm economy were dominated by self-employment or casual employment alongside increasing informalisation. Thus in both urban and rural non-farm geographies the pattern of employment generation by contract type and the process of informalisation is explained by patterns in leading sub-sectors in terms of

²⁸ Ratios of sub-sectoral distribution of employment shares by contract types in the rural non-farm sector have been computed on the basis of data in Table 18 (p.30) from Himanshu (2007).

²⁹ In 2004/05 88% of rural non-farm manufacturing employment (usual status) was informal; the same ratio was 94% for trade hotels and restaurants; 79% for construction and 83% for transport and communication (see Table 20 in Himanshu (2007)). However as opposed to urban non-farm, in Period III the first two sub-sectors saw increases in informalisation smaller than the average increase for rural non-farm as a whole. Construction and transport and communication however saw increases significantly higher than the average increase for rural non-farm.

employment generation. The differing adjustment patterns (the brunt being borne by casual employment in urban non-farm and regular employment in rural non-farm) is also explained by the different sub-sectoral drivers of employment growth in the two geographies.

Manufacturing however stands out as the sector where employment patterns by contract type are different across geographies – in Period III self-employment is the preferred contractual form in rural non-farm geographies whereas in urban non-farm, regular waged jobs are as important as self-employment. In neither is casual employment an important contract type, though it is relatively more important in rural non-farm manufacturing than in urban geographies. There is however another wrinkle to add to this description before we can get a reasonable understanding of prevalent employment patterns by contract type in manufacturing.

Vlb. Informaliation and homeworkers: the blurring of contractual boundaries

To begin with NCEUS (2007) classifies self-employed enterprises into two categories – own account enterprises (OAEs) that operate without hired labour and enterprises that work with hired labour. In 1999/2000, OAEs accounted for 87% of all informal enterprises with a marked divergence between rural and urban geographies – accounting for 94% in the former as against 78% in the latter³⁰. OAEs accounted for 73% of the total self-employed workforce and were marked by the same divergence – in rural geographies they accounted for 87.5% as against 59% in urban³¹ (see Table 4.3, p.51 in NCEUS (2007)). Therefore an overwhelming proportion of self-employed enterprises operate without hired labour and in both geographies – rural and urban – the bulk of these are really single person enterprises.

It then goes on to classify self-employed workers into independent self-employed workers and homeworkers or “dependent sub-contract workers operating from home” (p.57, NCEUS (2007)) under some kind of putting-out system³². In 1999/2000, 8.2 million (12%) of the 69 million non-agricultural self-employed workers were homeworkers³³. There is a clear gender bias involved with women more likely to be homeworkers than men – 30% of the female non-agricultural self-employed workforce were homeworkers as opposed to 6.5% of males. 85% of this 8.2 million were concentrated in manufacturing. That is to say of the 21.6 million self-employed in manufacturing, 7 million (32%) were homeworkers³⁴. Again there is a clear gender bias – 49% of the female self-employed workforce in manufacturing was classified as

³⁰ 62% of rural and 52% of urban informal enterprises were single OAEs, i.e. there was just one person who ran the enterprise on her own without the aid of family members.

³¹ Single OAEs accounted for 40% of rural informal workforce and 27% of the urban informal workforce.

³² The ILO classifies homeworkers as industrial outworkers. Under the putting-out system a homeworker manufactures products according to specifications provided by parent enterprises or contractors which typically also provide raw material. The homeworker bears some costs of production and, like other self-employed persons, is unsupervised. However like a waged worker, she neither markets her products nor determines its price (see p.57, NCEUS (2007)).

³³ The total non-agricultural employment in that year was 158 million (see Table 4 above).

³⁴ Total manufacturing employment (rural and urban non-farm taken together) that year was 43.8 million.

homeworkers as opposed to 20% of males³⁵ (see Table 4.9 p.58, NCEUS (2007)). In 1999/2000, homeworkers, particularly female, were largely concentrated in tobacco products, textile products and wearing apparel.

Unfortunately we do not have estimates for homeworkers for 2004/05. But what we do know is that in 2004/05 within manufacturing some of the sub-sectors that posted the largest increases in net new job generation were manufacture of wearing apparel (in rural non-farm) and manufacture of textiles and wearing apparel (in urban non-farm). And perhaps equally important, self-employment accounted for a substantial proportion of these³⁶ (see p. 29 and 33 in Himanshu (2007)). We also know that a substantial proportion of net new manufacturing employment was accounted for by women, particularly in urban non-farm and in self-employment (see Table 4 and associated discussion in Ghosh and Chandrasekhar (2006)). Therefore it would be reasonable to assume that the importance of homeworkers in manufacturing employment in general and female manufacturing employment in particular continues unabated in Period III.

The continuing importance of homeworkers in manufacturing takes us back to the issue of the importance of self-employment in net new manufacturing jobs particularly in Period III. We had noted earlier that self-employment accounted for the bulk of net new jobs generated in manufacturing, particularly in rural non-farm geographies but was important in urban geographies as well. It is worth reminding ourselves however that manufacturing played a much more important role in the generation of net new jobs in the urban economy as opposed to rural non-farm. We had also noted that casual employment was not an important contractual form particularly in urban non-farm areas.

Given that homeworkers are much closer to waged rather than unwaged employment (self-employment) (see fn.33), it would be fair to say that the data on self-employment in manufacturing perhaps overstates somewhat its overall importance in that sector. Much more importantly however, even as self-employment and informalisation have emerged as driving forces of the labour process in the economy in general and manufacturing in particular, labour market segmentation in terms of gender and the blurring of lines between waged and unwaged labour by the use of homeworkers, has given capital access to the cheapest and most vulnerable source of labour in the economy (relatively uneducated women in the informal economy) while still retaining control over the labour process through non-supervisory means.

³⁵ The gender bias across rural and urban geographies in terms of homeworkers is quite similar – 52% of the female self-employed workforce in urban manufacturing were homeworkers as opposed to 48% for rural; 18% of the male self-employed workforce in urban manufacturing were homeworkers as opposed to 21% for rural (see p.58 op.cit).

³⁶ In 2004/05 in rural non-farm geographies, manufacturing of wearing apparel accounted for 49% of net new jobs in manufacturing. 90% of these were in self-employment. In urban non-farm geographies, manufacturing of textiles and wearing apparel taken together accounting for 67% of net new jobs. 41 and 58% respectively of net new jobs in textiles and wearing apparel were in self-employment. Computed on the basis of Tables 18 and 21 in Himanshu (2007).

VII. Tying strands together: education, informalisation and labour market regulation

So what is driving this process of informalisation and the choice of self-employment as the preferred employment form? Before we briefly address this question and try and suggest the contours of a probable answer, there is a particular difference – education – between the informal and formal labour market attributes that might be worth keeping in mind.

As NCEUS (2007) points out, there is significant difference between the informal and formal labour markets in average years of schooling. In 2004/05, on average a person working in the formal sector has 9 years of schooling as opposed to 5.6 years in the informal sector (see Table A2.2, p.243 in NCEUS (2007)). In the urban economy the education gap between the two is a little wider, with average schooling in urban formal employment at 10.1 years and in informal at 6.6 years. Conversely, it is a little narrower in the rural economy with average years of schooling at 7.2 and 4.6 years respectively for formal and informal employment.

It is worth recalling that the employment in the formal economy is dominated by regular waged jobs. In the urban formal economy 85% of the jobs were regular waged (see Table 22 above) and its most important employment drivers were finance, health, education and manufacturing (see p. 21 and fn. 28 above). In the rural non-farm formal economy on the other hand 62.5% of the jobs were regular waged (see Table 20 above). It is also worth reminding ourselves that the dominance of regular waged employment in formal employment has risen sharply in Period III (see Tables 20 and 22 above).

Regular waged informal work in the urban formal economy had 9 years of average schooling. Regular employment in non-farm informal economy had 6.7 years of schooling on average with very little variation between rural and urban geographies (see Table A2.2, NCEUS (2007)). Self-employment in non-farm informal employment had marginally lower levels of average schooling at 5.9 years, but with a high variation between rural and urban geographies – 4.7 and 7.2 years respectively. Casual employment in non-farm informal work had 3.5 years of schooling on average, again with very little variation between rural and urban geographies. Casual employment in rural agriculture had 1.8 years of schooling on average and self-employment in rural agriculture had 3.4 years (see Table 2.2, p.17 in NCEUS (2007)).

Therefore it would seem that significantly high (relatively) levels of education are a necessary but not sufficient condition for regular waged formal employment in the organised sector. We have used the qualifier ‘necessary condition’ advisedly because, as we have already seen, there has been a significant increase in the informalisation of formal (organised) economy in terms of employment, including regular waged jobs. It however appears that relatively high levels of education are a sufficient condition to be a member of the urban formal economy – either as a holder of a formal job (10.1 years average) or regular waged informal job (9 years average)³⁷. Therefore education appears

³⁷ Recall that regular waged employment in the non-farm informal economy had 6.7 years of schooling and regular waged employment in the rural formal economy had 7.2 years of schooling.

to be a discriminator for both quality (formal) and geography (urban). In addition, whereas high (relatively) levels of education do not guarantee regular waged urban formal employment, low levels of education do guarantee lack of access. The fact that the level of education is an important discriminator between employment in the formal and informal economy is also suggested by Fagernäs (2007)³⁸ (see p.51) who uses probit analysis with cross-sectional data to test for attributes of formal and informal employment.

Returning to the question of deepening of informalisation, what explains the acceleration in the process? A full-fledged discussion on that is outside the scope of this paper but it is worthwhile flagging a couple of issues. Besley and Burgess (2004) studied state level amendments of the Industrial Disputes Act (IDA) and suggested that pro-worker changes in regulations had a negative impact on productivity of the organised sector and were therefore an important driving force behind the push towards informalisation of manufacturing. Besley and Burgess (2004) have been critiqued elsewhere and we do not intend entering that debate. But in the context of informalisation and labour market regulation some of the results of Fagernäs (2007) are worth mentioning. She argues that looking at amendments to the IDA, as Besley and Burgess (2004) do, gives a partial picture. The more important variable from the standpoint of regulation is outcome (court rulings and implementation) rather than simply intent. Implementation becomes a particularly important given the India's notoriously slow and inefficient judicial and labour tribunal processes.

Fagernäs (2007) then constructs variables to measure court efficiency and the stance of rulings (pro-worker or anti-worker) and tests whether these have any correlation with the decision to be in the formal or informal economy. She finds "little support for a negative association between pro-worker judicial change and regular versus irregular work in the entire service or industrial sector". Whereas it does not seem to affect the choice between formal and informal sector, but "Judicial change ... pro-worker orientation and efficiency" do seem positively correlated with the implementation of social security provisions and labour law within the formal sector. In other words, if the judiciary is effective and implements IDA provisions fairly it will slow down the "informalisation of the formal sector" that the NCEUS talks about. It however will make little difference to 'informalisation of regular work' that we have discussed earlier. As we have mentioned earlier, she suggests that education levels are a much better predictor of the formal/informal divide.

The point is not that Fagernäs (2007) is the last word on institutions, regulations and labour marker performance but that it is time we moved away from simplistic formulations where labour market regulation drives informalisation and therefore liberalisation of labour law and labour market flexibility are seen to be the panacea for formal sector employment growth. Fagernäs (2007) work and India's Period III

³⁸ Her data stops at the 1999/2000 NSSO sample survey.

performance in terms of employment patterns by contract type suggests that we clearly are in the realm of diminishing returns with that kind of analysis³⁹.

The point also is not that India's labour market laws and regulation do not need reform. Indeed seen even from the standpoint of labour, as Bhattacharjee (2000) points out, both the IDA (1947) and the Trade Union Act of 1926 are responsible for some of the most glaring weaknesses of India's trade union movement – multiplicity of unions at the workplace and no process of recognising a representative union (p.3759) (also see Sharma (2006) and Bhattacharya (2007)). But the point is that reform has to be of a kind that gives both capital and labour reasonably equitable positions at the negotiating table, otherwise from the standpoint of industrial relations it simply stores up problems for the future.

Returning to the issue of informalisation, it might be more promising to try and see whether the sharp increase in Period III is better explained by integrating supply and demand factors together as has been argued by Ghosh and Chandrasekhar (2006) and Himanshu (2007)⁴⁰. They have argued that self-employment driven informalisation is at least in part the outcome of demand adjusting to supply. Particularly in Period III, they argue that the sharp increase in labour supply (see Table 1 above) is the result of distress driven increases in the labour participation ratios as a result of the agrarian crisis. This characterisation would fit with the asymmetric increases in Period III in female labour participation ratios (see e.g., Ghosh and Chandrasekhar (2006), Himanshu (2007), and Sundaram (2007)) and that of the elderly (Himanshu (2007)) as well as the fact of, despite very high rates of employment growth (see Table 1 above), increases in the unemployment rate and a declining real wage (see Ghosh and Chandrasekhar (2006) and Himanshu (2007)).

On the other hand, urban biased growth⁴¹ of the formal economy driven, as we have seen, by manufacturing and business services has resulted in a shortage of an educated workforce and rising wage levels⁴². It is possible that one response to this shortage could be the offer of formal employment (with job and some elements of social security) in the formal economy as an incentive to new entrants. On the other hand, outside this narrow band of education and skills for which there is a labour shortage, at lower levels of

³⁹ Also see Wadsworth (2004), Sharma (2006) and Bhattacharya (2007) in this regard. The OECD too seems to be moving towards a more nuanced and heterodox position of labour market flexibility. OECD (2006) has argued that strong unions and coordinated collective bargaining are not incompatible with wage flexibility. See also p.13 in OECD (2006a) in this regard. Compare this with the famous OECD (1994) 'Jobs Study' with its emphasis on labour markets being an important source of "structural rigidity" and therefore its focus on labour market flexibility and industrial relations reform.

⁴⁰ Rangarajan et al (2007) acknowledge that looking only at demand factors presents a partial view of likely outcomes, particularly when it comes to changes in real wages and productivity (see p.67).

⁴¹ On urban biased growth see for example Narayana (2008).

⁴² According to Watson Wyatt Worldwide, a global human resource consulting firm, salaries across all sectors will rise by 14.8%. In manufacturing and pharmaceuticals it will rise by 16 and 15.7% in 2008 on top of 12.5 and 12% respectively in 2007. See Nandini Lakshman's (2008) story in Business Week on wage increases in corporate India due to significant gap between demand and supply and corporate India's plans for rapid expansion. Inflation in 2007 was around 5%.

education⁴³ and skills there is a huge increase in supply, driven at least in part by distress-driven increases in labour participation ratios. To take advantage of this increase (and the consequent low wages), the formal economy outsources ‘non-essential operations’ and keeps only ‘core’ activities.

This would then also help explain the rising domination of regular waged jobs and the contraction of self- and casual employment in urban formal employment (with relatively high education levels) alongside an informalisation, driven by self-employment and casual employment. The formal economy (and large capital) then not only has access to cheap labour but also reduces costs and resources engaged in supervision. Formal and informal labour markets are organically linked not only in the same geography but also in ways which have probably begun blurring differences between geographies⁴⁴. But new dualities driven by education are probably emerging.

Therefore choice (from the standpoint of non-agricultural capital) between formal and informal employment could at least in part be informed by demand-supply gaps in the labour market in general. How these gaps shape local/regional labour markets may then be explained by the nature of regional economic growth, the process of unionisation and/or collective bargaining and, following Fagernäs (2007), the manner in which labour law is implemented⁴⁵. All these propositions need to be tested, but it cannot be denied that they are reasonable, based on the evidence we have. But if these are correct then the process of informalisation is unlikely to be affected other than marginally by alterations in the industrial relations regime. To affect the nature and pace of that process we have to look elsewhere.

[I am grateful to Debashish Bhattacharjee, Gautam Mody, Himanshu, Mohan Mani and Sauamyajit Bhattacharya for comments and discussions. None of them is in any way implicated in the outcome. This paper was written when I was a Visiting Researcher at Institut d'études internationales de Montréal (IEIM) of the Université du Québec à Montréal (UQAM). Support from IEIM is gratefully acknowledged.]

References:

Bhattacharjea, A., (2006), ‘Labour Market Regulation and Industrial Performance in India: a critical review of the empirical evidence’, **Indian Journal of Labour Economics**, Vol. 39(2).

Bhattacharjee, D., (2000), ‘Globalising Economy, Localising Labour’, **Economic and Political Weekly**, October 14

⁴³ The drop-out rate in India’s school-going population is very high. See Mohanty (2006) for a discussion.

⁴⁴ As we have discussed earlier, sub-sectoral employment patterns by contract type are quite similar across rural non-farm and urban geographies, with the exception of manufacturing.

⁴⁵ In an otherwise nuanced reading of the evolution of Indian industrial relations, Bhattacharjee (2001) misses out on the labour supply and labour demand dynamics and for him as well the impact on informal sector labour is seen to be the outcome of union negotiation strategies in the formal sector (“their microeconomic successes may have created negative spillover effects on unorganised labour markets” p.257)). From our standpoint, a case of the tail wagging the dog.

Bhattacharjee, D., (2001), 'The evolution of Indian Industrial Relations: a comparative perspective', **Industrial Relations Journal**, Vol. 32(3)

Bhattacharya, S., (2007), 'Vicissitudes of the Relationship between State, Labour and Capital: an Appraisal of Neoliberal Labour Market Reforms in India and Beyond', **Labour, Capital and Society**, Vol. 40 (1&2)

Fagernäs, S., (2007), 'Labour Law, Judicial Efficiency and Informal Employment in India', **Working Paper No. 353, Centre for Business Research**, University of Cambridge
(available at <http://www.cbr.cam.ac.uk/pdf/WP353.pdf>)

Ghosh, J. and C.P. Chandrasekhar (2006), 'Employment Growth and Employment Generation in India: old problems and new paradoxes', Paper presented at IDEAs International Conference in Memory of Guy Mhone on 'Sustainable Employment Generation in Developing Countries: Current Constraints and Alternative Strategies', Nairobi, Kenya, 25 - 27 January, 2007.
(available at http://www.ideaswebsite.org/feathm/mar2007/fa10_Jayati_Ghosh.htm)

GOI (2008), **Economic Survey 2007-08**, Ministry of Finance, Government of India, New Delhi

Himanshu (2007), 'Employment Trends in India: a fresh look at past trends and recent evidence', paper presented at national conference on 'Making Growth Inclusive with reference to Employment Generation', Indian Institute of Advanced Studies and Jawaharlal Nehru University, 28th-29th June, Delhi

Kannan, K.P., (2006), 'Employment and Social Security for the Working Poor: Two Major Initiatives in India', paper presented at 'World Conference on Social Protection and Social Inclusion: Converging Efforts from a Global Perspective', International Labour Office, Geneva, European Union, Government of Portugal, 2nd-3rd, October, Lisbon

Lakshman, N., (2008), 'Indian companies struggle as wages rise' in **Business Week**, 25th January
(available at http://www.businessweek.com/globalbiz/content/jan2008/gb20080125_990924.htm?chan=search)

Mohanty, M., (2006), 'Social Inequality, Labour Market Dynamics and Reservation', **Economic and Political Weekly**, Vol.41, No.35, 2-8 September

Narayana, M.R., (2008), 'Performance of Urban India during Globalization Period: An Economic Analysis', **CIRJE Discussion Papers** No. CIRJE-F-543, Centre for International Research on the Japanese Economy (CIRJE), University of Tokyo, Tokyo

NCEUS (2007), '**Report on the Conditions of Work and Promotion of Livelihoods in the Unorganised Sector**', National Commission for Enterprises in the Unorganised Sector, Government of India, New Delhi

OECD, (1994), **The OECD Jobs Study: Facts, analysis, strategies**, OECD, Paris.

OECD, (2006), **OECD Employment Outlook 2006 – Boosting jobs and incomes**, OECD, Paris

OECD, (2006a), **Boosting jobs and incomes: Policy lessons from reassessing the OECD jobs strategy**, OECD, Paris

Planning Commission (2001), **Report of the Task Force on Employment Opportunities**, Planning Commission, Government of India, New Delhi

Planning Commission (2002), **Special Group on Targeting 10 million Employment Opportunities per year**, Planning Commission, Government of India, New Delhi

Rangarajan, C., (2007), 'Employment and Growth: the emerging scenario', **The Hindu**, 23rd October
(available at <http://www.hindu.com/2007/10/23/stories/2007102353780801.htm>)

Rangarajan, C., P.I. Kaul and Seema, (2007), 'Revisiting Employment and Growth', **Money & Finance**, September 2007

Sundaram, K., (2007), 'Employment and Poverty in India, 2000-05', **Economic and Political Weekly**, July 28

Sundaram, K., (2001), 'Employment and Poverty in the 1990s: further results from the NSS 55th round', **Economic and Political Weekly**, August 11

Wadsworth, J., (2004), 'Is the OECD Jobs Strategy behind U.S. and British Employment and Unemployment Success in the 1990s?', in D. Howell (ed), **Fighting Unemployment: the limits of free market orthodoxy**, Oxford University Press, New York

APPENDIX

Table A1: Aggregate labour force and employment (in millions)		
	Total Labour Force	Total Employment
1983		303
1993/94	382	374
1999/2000	406	398
2004/05	469	458

Source: Labour force from Rangarajan (2007) and Planning Commission (2002)
Employment computed on the basis of Tables 12 and 21 from Himanshu (2007).and
Table 2.5 in Planning Commission (2001).

Note: Employment, unless otherwise indicated, refers to 'usual status' employment as
defined by the NSSO

Table A2: Rural non-farm and Urban employment (in millions)

	1999/2000	2004/05
Rural non-farm	72	94
Rural non-farm informal	51	73
Rural non-farm formal	21	21
Urban	94	115
Urban informal	65	84
Urban formal	29	31
Total Rural non-farm and Urban	166	209
Total informal	116	158
Total formal	50	51
Total employment	398	458
Computed on the basis of Tables 12, 19, 21 and 23 from Himanshu (2007).		