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# The Low Wage Trap of Indian Manufacturing

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(Theme: Labour and Employment in the Manufacturing Sector)

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*Abstract: The period since the turn of the century appears at first sight to have been one of great 'dynamism' in the Indian manufacturing sector in the sense of the sector exhibiting or experiencing significant movement, but without that really adding up to a process of full-fledged industrialization. Though output and employment in manufacturing have grown but unevenly and investment too has fluctuated, the sector has been unable to raise its share in Indian output and employment. The unorganized segment has actually experienced a sharp relative shrinkage. India's trade in manufactured products – both exports and imports - has also grown significantly during this period accompanied by significant changes in the composition of trade and its geographical distribution. A shift towards more capital-intensive exports and a declining labour-intensity of Indian manufacturing have been some of the paradoxical features of Indian manufacturing. Real wage stagnation and increasing informalization and contractualization of labour have accompanied these changes. This paper argues that this stagnation in wages in fact underlies both the 'successes' as well as the failures of India's manufacturing performance in the last two decades. India's low wage road to industrial development has also been fraught with contradictions that may be now coming to a head as a result of which it is caught in a trap.*

Some degree of disquiet on the performance of the manufacturing sector can be said to characterize virtually every contemporary assessment of India's economic performance over the two and a half decades since the country moved towards greater integration with the global economy<sup>1</sup>. No matter what the underlying perspective and diagnosis of the problem, the failure of the manufacturing sector to increase its share in GDP and the limited employment creation in the sector are typically highlighted as the key indicators of India's failure on the manufacturing front. While everyone may not go that far, some assessments firmly place India in the category of developing countries experiencing what has been termed 'premature de-industrialization' (Rodrik 2015, Chaudhuri 2015). Even official policy statements and documents, otherwise characterized by a self-congratulatory tone, have acknowledged India's disappointing manufacturing performance (Government of India 2011).

The larger story of the failure of manufacturing to be the leader in a process of structural change in India does not of course mean there has been no expansion of manufacturing output. Such expansion and even the growth and diversification of manufacturing exports, all in the face of global competition, could be seen as signs 'dynamism' in the manufacturing sector. In other words, India's manufacturing story is not one of unmitigated disaster. This it could be argued holds out hope that India's faltering industrialization effort might still bear fruit provided policy is able to reinforce this dynamism. Indeed, the poor record of manufacturing is often invoked precisely in this way – to make the case for 'reforms' like in labour regulations that would remove the surviving impediments to an industrial take-off, most others having been eliminated by the liberalization process. The underlying assumption here of course is that the 'success' and the failure on the manufacturing front have entirely separate causes. In other words, what is in effect argued is that liberalization measures are what has kept manufacturing going despite the persistence of so-called labour-market rigidity while that rigidity has almost single-handedly managed to neutralize a major part of the impetus liberalization imparted to the manufacturing sector. That such assumptions may be unwarranted and that wage depression and stagnation, and labour-flexibility in general, has been the common underlying factor behind many dimensions of India's manufacturing performance in this period is the contention of this paper. It is further

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<sup>1</sup> Biswanath Goldar is probably a notable exception, having made the case for both the end of jobless growth (Goldar 2011) as well as claiming that GDP data severely underestimates manufacturing growth (Goldar 2015).

argued that the Indian economy may now be hitting the limits of such a low-wage road but the consequences of already having gone down it have made the transition to a new one more difficult to achieve. In that sense, Indian manufacturing may be said to be caught in a low-wage trap.

### **Indian Manufacturing in the Era of Liberalization: Some Key Trends**

Let us begin with identifying some of the key trends observed in relation to Indian manufacturing, in particular since the turn of the century, which in combination seem to reflect that the sector has experiencing significant movement without that really adding up to a process of full-fledged industrialization.

Manufacturing output growth, like in the past, has fluctuated greatly over the last twenty five years – reaching double-digit rates at times and plummeting to virtually zero in others. A phase of rapid growth immediately after the reforms was followed by a downswing down in the late 1990s. From 2003-04 onward manufacturing growth rates again rose sharply in tandem with the acceleration in overall GDP growth to unprecedented levels. This trend did not immediately fully falter with the outbreak of the global crisis, except for a slowdown in 2008-09. However, from 2011-12 there was a deceleration in manufacturing growth that has since persisted. What has been the extent of this slowing down has become controversial with the issue of a new GDP series – which shows a reasonable growth of manufacturing GDP while the Index of Industrial Production shows a stagnant industrial sector. All the evidence, however, at least supports a story of output stagnation even if value added is ‘growing’ (Mazumdar 2015).

Less ambiguous is the story of manufacturing investment which has shown fluctuations of even greater magnitude. An investment upswing beginning in the early part of the 1990s was followed by a massive collapse closer towards the end of the decade (Figure 1). An even bigger boom followed soon after the turn of the century alongside the acceleration in output. This too collapsed with the global crisis. In the case of investment, however, there was no temporary recovery and the investment stagnation has persisted for over seven years, longer than the previous boom (Table 1).

The trends in manufacturing employment over the entire period are somewhat unclear. NSS data seems to suggest a 53% increase in manufacturing employment between 1993-94 and

2011-12 (Mehrotra et al 2014). However, between 2004-05 and 2011-12 the increase was only 6.6%, almost entirely in organized manufacturing. Till 2011-12, it did appear from the ASI data (much less pronounced in DGTD data) that the trend of declining employment in organized manufacturing observed from the late 1990s had been reversed in the early years of the century. A decade of this rise in employment may, however, have ended recently as the 2012-13 employment figures show a drop. Such fluctuation in organized sector manufacturing employment somewhat in tandem with output underlay the controversy about the extent of break from the jobless growth pattern (Goldar 2011, Nagaraj 2011). Notwithstanding all of these, however, what is clear is that construction and services rather than manufacturing have been the major absorbers of the increments in the workforce and the exodus from agriculture that has been seen of late. Also, there has been a consistent and significant trend of decline in the labour intensity of Indian manufacturing (Sen and Das 2015), most sharply in the more labour-intensive sectors, and a rise in its capital-output ratio.

The persistence of a low share of manufacturing in employment combined with what has happened to the manufacturing share GDP underlies the de-industrialization argument. As far as the GDP share is concerned, it has of course fluctuated to an extent on account of those in growth but to a much lower degree for obvious reasons. However, both real and nominal shares have not managed to touch, in any year subsequently since the peak level attained in the mid-1990s (Figure 2) (and this conclusion is not affected by even with the new GDP series). That mid-1990s itself was not very much higher than the level in 1980 or for that matter that attained by the mid-1960s. A declining trend in its share in GDP, however, is far more pronounced for its unorganized component than for organized manufacturing, the divergence between the two having become even sharper in the current century (Figure 3). Thus there has seen a steady decline in the share of unorganized manufacturing in not only overall GDP but also in manufacturing value added. From less than one and a half times at the turn of the century, the GDP of organized manufacturing has become more than two and a half times that of its unorganized counterpart.

In contrast to what has happened to manufacturing value added, trade in manufactures as a proportion of GDP has increased quite consistently as the manufacturing sector has become more integrated with global networks and also changed in character (Veeramani 2012,

Chaudhuri 2013, Chakravarty 2015). This growth and changes in its pattern have been more marked features of Indian trade since the turn of the century than during the first decade after 1991. On the one side this was a process of a rise in India's share in world exports accompanied by significant changes in the composition of these exports as well as their destinations, though FDI has played no important role in this. Growth of India's traditional labour-intensive exports like textile and leather manufactures or gems and jewellery were steadily outpaced by those of the more capital-intensive chemical and engineering industries as well as petroleum products. Developing and emerging economies have also become the more important markets for exports as the share of advanced OECD economies has declined. All of this has been, however, was accompanied by an even more dramatic rise in the levels of manufactured imports and India's share in world imports also increased sharply. Manufacturing production itself became more intensive in the use of imported materials and capital goods, a sharp rise in this being seen till at least the eruption of the global crisis (Chaudhuri 2013, Mazumdar 2014, Mohanty 2015, Goldar 2015, Chakravarty 2015).

The trend of increasing manufactured import-intensity of Indian production and expenditure, with imports filling gaps where production in India was uncompetitive or displacing such production, was much more marked in the period of high growth before the global crisis than afterwards. Apart from the slowing down of manufacturing investment and output growth, the other contributory factor to the subsequent arrest though not reversal of it was perhaps the change in the direction of movement of the exchange rate after 2007-08. Till then large capital flows into India were tending to push up the value of the rupee but after the crisis there was a steady trend of depreciation. Of course this was a period of high inflation too so the real exchange rate appreciated somewhat. However, Indian inflation was driven by food prices rather than those of manufactured products – between 2007-08 and 2013-14 the annual average rupee value of the US dollar increased by over 50 per cent while the manufacturing WPI increased by just 33 per cent.

The private corporate sector of course has been at the centre of many of these developments in Indian manufacturing. The private corporate sector has become during this period even more dominant in organized manufacturing than had been the case before liberalization (Rajakumar 2011). Organized manufacturing in turn has also not only grown

faster than unorganized manufacturing, the shift in Indian exports has also reinforced its growing dominance within the sector. The production of products increasing in importance in India's export basket is far more concentrated in the organized sector than was the case with the traditionally dominant items.

### **Wage Stagnation in Organized Manufacturing and its Consequences**

While organized manufacturing has been the more 'dynamic' segment in a not too impressive overall manufacturing story during the last two decades, this dynamism has not characterized the behaviour of wages in that sector (Figure 4). That real wages in organized Indian manufacturing have completely stagnated since India embarked on its 'reform' path is now widely noted (Muralidharan et al 2014, Sen and Das 2015, Sood et al 2014). This stagnation has characterized the per worker as well as per manday real wages. Of course part of this has happened at a time when the price level of the principle wage-good, namely food, has generally increased much faster than prices of manufactures, so that product wage-rates may have still increased. However, this has not prevented the wage share in value added from steadily declining to extremely low levels or to a point where wage costs have become an insignificant fraction of manufacturing costs. This is usually described as a process of productivity gains outstripping wage increases but one may prefer to describe it as a process of intensified exploitation. Real wage stagnation has been accompanied by and also worked through a process of increasing contractualization and informalization of labour and other measures supporting the power of capital (Sood et al 2014). To that extent the productivity 'gains' may in part be the result of simply the increased intensity of labour as well as effective lengthening of working hours.

Real wage stagnation and other associated changes must have as their underlying basis a larger labour-market situation that does not quite square up with the notion of India experiencing a Lewisian transformation (Mehrotra et al 2014). Indeed, the real wage stagnation over such a long period, through all the changes described earlier and alongside a fourfold increase in per capita income and even a steady increase in the pay of managerial and supervisory employees in the same sector, in fact should be considered as reflective of the persistence a classic unlimited labour supply situation in the Lewisian sense. This is particularly so given that organized manufacturing is the closest concrete counterpart of Lewis' capitalist sector (Lewis 1954) and the one to which labour regulations apply the most.

In other words, what may be in a Lewisian framework simply reorganization within the subsistence sector or of subsistence activities might be being mistaken for a transformation (Roy 2008). Be that as it may it is almost certain that the general employment and income situation in the Indian economy has not moved to the extent that would be necessary for creating a tight labour-market situation which would increase the leverage of workers and push up wages.

Instead of a Lewisian transformation, what we may have been witnessing is precisely wage stagnation facilitating the Lewisian process of transforming surplus labour into capital goods. In other words the impact of declining wage share in value added on profits would have provided both the incentive as well significant financing of capital formation in organized manufacturing (the two working together to also reduce the interest share in the surplus). Indeed this is also consistent with the contention that it was investment that was the source of increasing organized sector employment in the current century (Nagaraj 2011). That these were not sufficient to sustain that process is of course established by the fluctuations in investment even in the face of wage stagnation – implying that other factors were also at work. However, it does mean that the declining labour-intensity of organized Indian manufacturing happened not only despite real wage stagnation but in some senses because of it. In other words, if the cheapening of capital goods as a result of trade reforms and an increase in the product wage-rates due to faster rises in prices of wage-goods created an incentive for replacement of workers by machines (Sen and Das 2015) the rising surplus is what facilitated such replacement.

The relatively poor employment performance in organized manufacturing and the reason why its expansion has not created a Lewisian tipping point cannot, however, be explained simply by declining labour-intensity induced by movement of relative prices. This is because rising average incomes and a decline in the relative price of manufactures could also be the basis for rapid growth in demand for manufactured products (Kaldor 1967), particularly in the case of an economy like India. This is where the de-industrializing effects of globalization on an economy without significant competitive advantages in manufactures (Rodrik 2015) – which work through increases in net imports of manufactures and the effect of exposure to global relative price trends without having all the benefits of their underlying technological



progress – and the domestic demand conditions associated with wage stagnation (Mazumdar 2008, 2014) become potentially relevant.

A strong adverse tendency in India's net imports of manufactures has already been referred to. What, however, should be noted in addition is the important contribution of wage-stagnation in limiting the extent of loss of competitiveness of Indian manufacturing. This effect may be said to have worked in at least three ways – one being a direct consequence of wage stagnation in the sector and the other two being the benefits of being located in a generally cheap labour economy. First, wage stagnation in organized manufacturing has shored up the profitability of Indian manufacturing at internationally competitive prices even in the face of increasing capital and material costs of manufacturing output referred to earlier. Second, cheap labour has also lowered the costs of various supporting activities which have a bearing on manufacturing competitiveness, compensating for the deficits that may exist in areas like infrastructure. The low and stagnant levels of wages via their effects on the prices of non-tradeables have also been the principal basis for preventing India's 'national price level' (ratio of PPP conversion factor to market exchange rate) from catching up even in the face of high inflation. This has helped sustain the rupee exchange rate at a more competitive level than that in other Asian economies (Figure 5).

In other words, whatever is the success actually attained by an Indian manufacturing sector increasingly exposed to global competition, wage depression has provided a critical foundation for that of success. If so, continued progress on the same path really would have little to offer to the existing or potential industrial working class even if such a progress was sustainable – and it might not in fact be.

Persistent wage stagnation has also had other longer-term adverse consequences for Indian manufacturing and its competitiveness that are important to keep in mind. Low wages, insecure employment and increasing intensity of labour, combined with the poor state of public education and health in India, may now also be acting as a serious barrier to further increases in labour 'productivity'. On the one hand these circumstances and their implications must have impeded the development of the latent capacities of workers including the acquisitions of skills. On the other, the availability of the easier option of cheap labour and the exercise of great power in the labour process would also have weakened the operation of an important force that drives the development of technological and

managerial 'capabilities' by capitalist manufacturing firms. Thus 'productivity' increases achieved through heightened control over the labour process aided by technology acquired in the market do not serve as an index of the accumulation of capability in this sense. This is particularly significant to note in the Indian case where the industrial capitalist class was an imperfectly developed one and never really shed its original mercantile character (Tyabji 2000).

In addition to the above less visible effects of a low wage regime are the domestic demand effects of growth in a low wage economy. The expansion in the demand for market for manufactured consumer goods is restricted on the one side by the persistence of low income of a large segment of the population and on the other by an increased diversification towards services of the demand of those experiencing rising incomes. The pattern of demand too has tended to be biased towards greater import and capital intensity. These combined with the demand effects of trade openness have been a factor repeatedly stalling industrial growth and investment, the latter reinforcing the manufacturing demand constraint (Mazumdar 2008).

### **Conclusion: The Low Wage Trap**

The current situation may be one where the contradictions of India's low wage road to industrial development are coming to a head. Wage and wage-share depression in the wage have limits that have been reached so that there is very little scope left to bolster the competitiveness of Indian manufacturing through this route. Yet, that being such an important basis for competitiveness, the dependence on it has only increased under current global economic conditions characterized by the existence of large excess capacities in manufacturing. On the one side this generates an intensified pressure to keep wages down in order to maintain competitiveness and to 'revive' industrial growth on the old basis. On the other is the effect of the exhaustion of the low wage regime's ability to provide the conditions for sustained industrial growth. It can neither serve any more the purpose of pushing up the profit nor can it, for the same reason, help break new ground on the export front. These, in combination with the barriers to growth of domestic consumption demand that must exist if wages are to be held down mean that the stimulus for investment is weak, further aggravating the demand constraint. All of these are also at a time when global economic conditions in addition mean greater difficulties in finding export markets and

intensified import competition. Indian manufacturing is thus caught in a trap and the spectre of continued deindustrialization truly haunts the Indian economy. This is not, however, because labour-markets have not been flexible enough but more because of its opposite being true and for too long, not just during the liberalization period.

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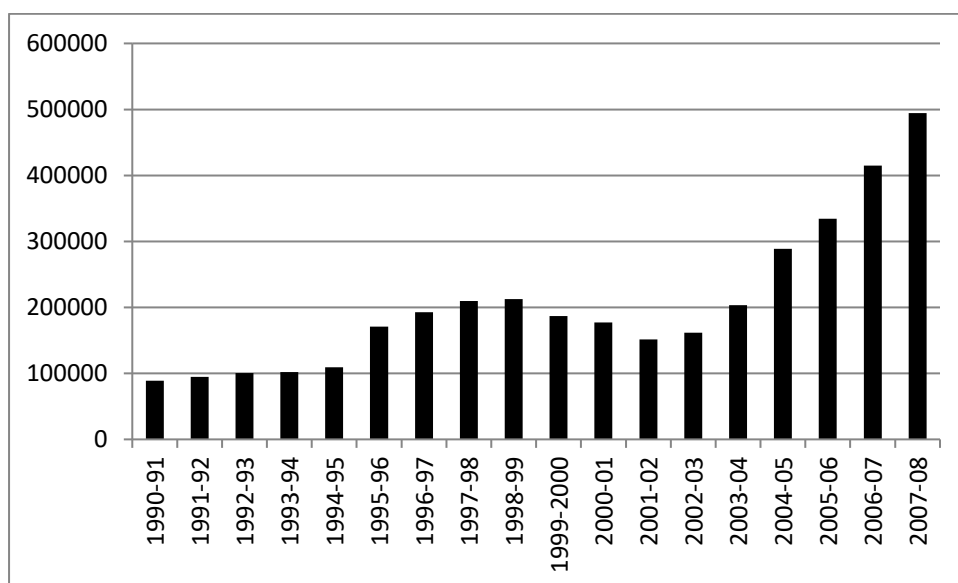
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**Figure 1: Gross Fixed Capital Formation in Manufacturing at Constant 2004-05 Prices (Rs. Crores)**



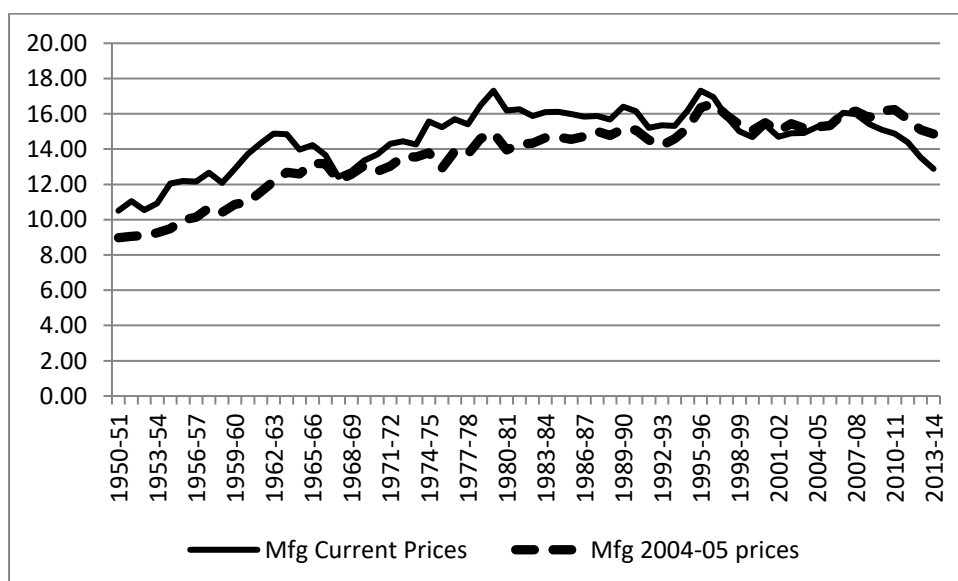
Source: CSO, National Accounts Statistics

**Table 1: Gross Fixed Capital Formation in Manufacturing at Constant Prices (Rs. Crores)**

Series	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
At 2004-05 Prices (Old)	494456	388087	463589	534421	511815	460927	
At 2011-12 Prices (New)					550645	595033	579976

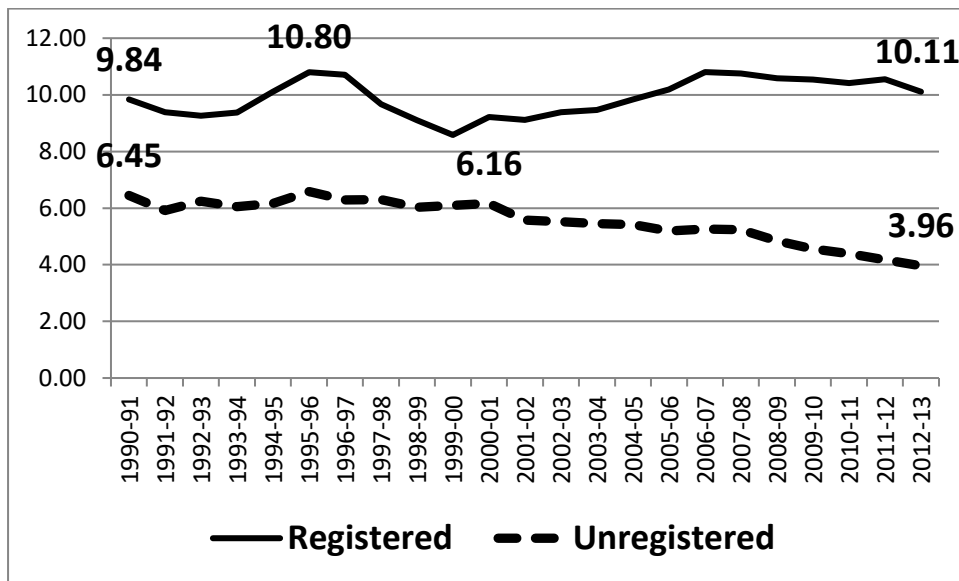
Source: CSO, National Accounts Statistics

**Figure 2: Manufacturing in GDP at Current and Constant 2004-05 Prices (Percentage)**



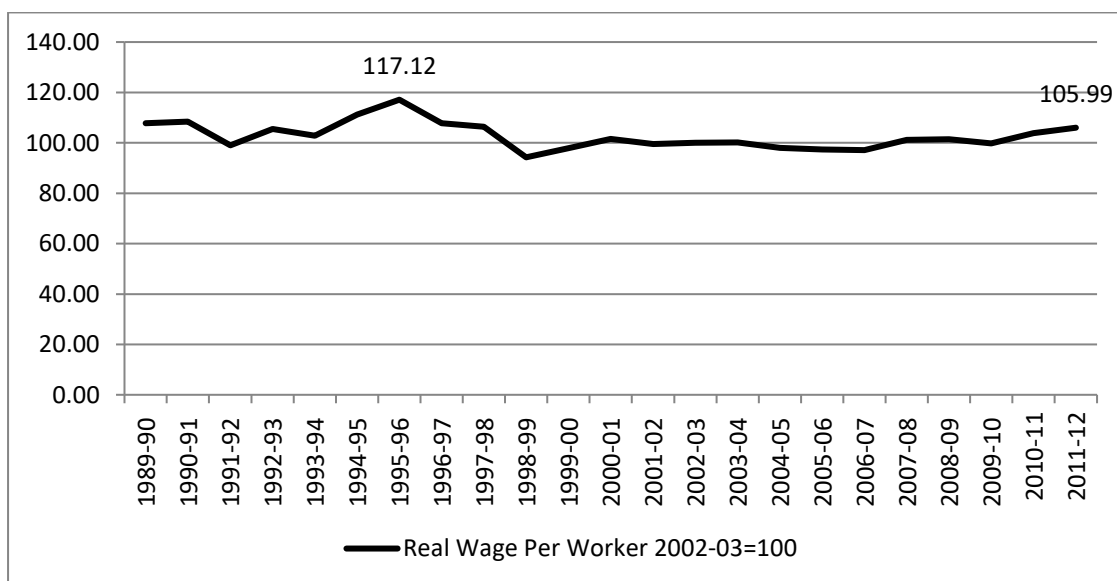
Source: CSO, National Accounts Statistics

**Figure 3: Registered and Unregistered Manufacturing in GDP at Current Prices (Percentage)**



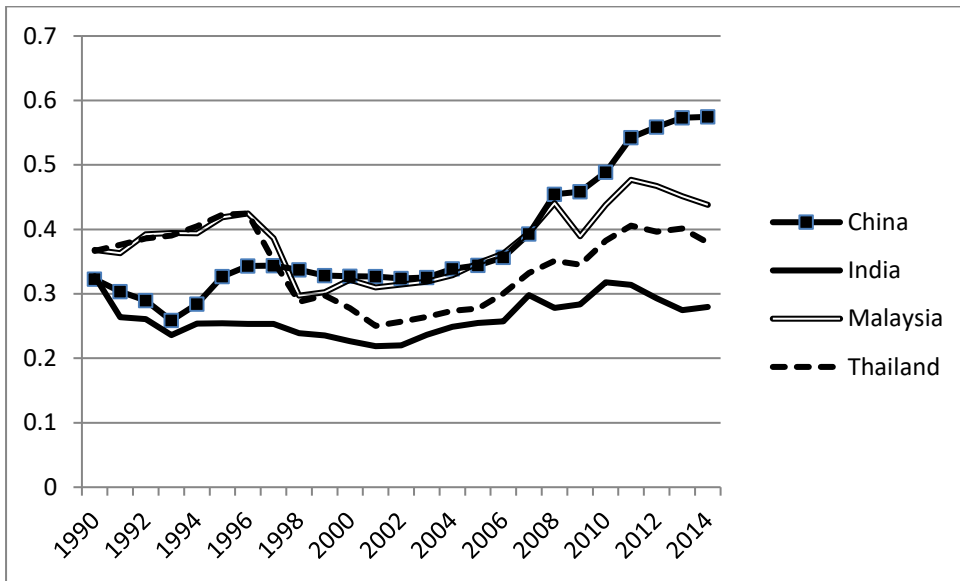
Source: CSO, National Accounts Statistics

**Figure 4: Index of Real Wage Per Worker in the Factory Sector (2002-03 = 100), 1990-91 to 2011-12**



Source: CSO, Annual Survey of Industries and Government of India, Economic Survey

**Figure 5: Price Level (Ratio of PPP Conversion Factor to Market Exchange Rate), Selected Countries (United States = 1)**



Source: World Bank, World Development Indicators