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A POINT OF NO RETURN?

CHANGING STRUCTURES AND JOBLESS GROWTH IN INDIA

Author(s): Anthony P. D'Costa

Affiliation(s): University of Melbourne, Australia

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Email(s): promothesdcosta@gmail.com

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ABSTRACT

Using a political economy framework this paper examines the relationship between structural change and jobless growth and by extension growing inequality in India. Despite recent high rates of economic growth and economic diversification, good jobs across the board have been hard to come by. Instead India's recent growth experience has largely contributed to a deeply dualistic form of employment structure, namely, a relatively small share of highly paid tradeable services and manufacturing jobs and a vast of pool of insecure informal sector jobs. Legacy problems as well as structural shifts consistent with contemporary dynamics of global capitalism have contributed to a conundrum: a stalled agrarian transition in a milieu of state-sponsored selective leapfrogging industrial and services sectors within the broader truncated manufacturing sector has produced a persistent petty commodity producer (PCP) sector. The latter is a reservoir of mostly low-wage, insecure jobs whose transformation appears to be heavily restricted, partly because of capital and technology bias in industry; and skill and tertiary education requirements in tradable services. Consequently, most workers continue to join the PCP sector, including the agricultural sector and reinforce it. Supply side arguments for employment creation is inadequate to the task and in a soft global economy the government's goals remain unrealistically lofty to stem the divide and pronounced inequality.

KEYWORDS

Structural change; India; jobless growth; political economy; inequality;

About the GPID research network:

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The objective of the ESRC GPID Research Network is to build a new research programme that focuses on the relationship between structural change and inclusive growth.

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THE DEVELOPER'S DILEMMA

The ESRC Global Poverty and Inequality Dynamics (GPID) research network is concerned with what we have called 'the developer's dilemma'.

This dilemma is a trade-off between two objectives that developing countries are pursuing. Specifically:

1. Economic development via structural transformation and productivity growth based on the intra- and inter-sectoral reallocation of economic activity.
2. Inclusive growth which is typically defined as broad-based economic growth benefiting the poorer in society in particular.

Structural transformation, the former has been thought to push up inequality. Whereas the latter, inclusive growth implies a need for steady or even falling inequality to spread the benefits of growth widely. The 'developer's dilemma' is thus a distribution tension at the heart of economic development.

1. INTRODUCTION

The global capitalist system since World War II has undergone several cycles of expansion and contraction. It has witnessed considerable growth in the OECD economies, especially the US, Western Europe, and Japan followed by a handful of smaller countries, the four "dragons" of South Korea, Taiwan, Singapore, and Hong Kong mostly through their labor-absorbing, export-driven strategies. Thus, economic growth in both these OECD and labor-surplus small countries of Asia witnessed considerable tightening of labor markets and therefore wage increases. Other, larger developing economies of Latin America and South Asia such as Brazil and India also industrialized but differently with domestic-oriented capital-intensive sectors. China with its one-party state pursued a different strategy entailing a mix of large state-owned companies and small enterprises for the domestic market but since 1979 it has joined the capitalist world order through its foreign-investment driven export strategy.

The consequences of such varied strategies have been the elimination of rural surplus labor in South Korea and Taiwan through labor-absorbing industrialization, while India and China are still dogged by their large rural population and low agricultural productivity even as their economies have structurally moved to a service- and manufacturing-driven growth trajectory respectively (D'Costa and Bagchi 2012). In late industrializing countries (LCCs) there has been considerable rural-urban migration but it is China that experienced the largest and historically unprecedented migration because of its rapid industrialization. However, in LCCs most migrants have left one kind of rural informal economic activity to join the ranks of another, namely, the urban informal sector comprising mainly the petty commodity producer (PCP) sector.[1] Recently many of the larger LCCs have experienced high rates of economic growth with China and India as the global poster boys of such growth.

The objective of this paper is to use a political economy framework to examine the relationship between structural change and jobless growth and by extension growing inequality in India. Non-trivial rates of growth suggest capitalist dynamics such as structural change, both on the internal and external fronts, in terms of output and export composition. The limited expansion

[1] Here I will use the informal and PCP interchangeably even though they are not identical. However, there is considerable overlap in the two definitions. Furthermore, in India the unorganized sector is also referred to as the informal sector. I will use all three interchangeably unless otherwise noted.

of jobs indicates a process of growth that violates the basic axiom of jobs being tied to economic growth. This decoupling of growth from jobs, labelled jobless growth, is the focus of this study. The investigation is particularly salient because first, India is labor abundant and if economic growth does not lead to job creation the socio-political outcome could be destabilizing on a grand scale. Second, the phenomenon of jobless growth allows us to theorize contemporary global capitalism and its impact on late developing country labor markets such as entrenched forms of segmentation and inequality. Jobless growth in the OECD countries has been attributed to slow growth, rising cost of labor and new technology adoption. India by its own historical and global standards has been growing rapidly hence jobless growth is counterintuitive, especially when labor costs are comparatively low. After all, labor-abundance works against the widespread use of technology as well. How might then jobless growth be explained?

Most observers have analyzed some of the India-specific factors contributing to jobless growth such as rising capital intensity, lack of credit for small firms, and arguably labor market rigidities, which compel firms to hire fewer workers with the larger firms opting for the adoption of more labor-displacing technologies. There is empirical support for these factors to influence labor market outcomes, however, the capitalist context for such business motivations behind such strategies or supply constraints are not well understood. Rather than simply review the reasons, I offer an alternative globally informed political economy perspective to explain jobless growth. I argue that it is the shift in the structure of power between capital and labor against the latter that is responsible for jobless growth.

To account for this shift I take a two-pronged approach. The first is to demonstrate the specific nature of capitalism unfolding in India or in other words the “in-house” capitalist expansion. The second is to account for the global level dynamics that propel the larger economic system but due to international economic integration influences the national system. Analytically I integrate these two levels to demonstrate a specific form of uneven and combined development termed compressed capitalism and position jobless growth in that context. An alternative historical-evolutionary structural (HES) approach is deployed to capture compressed capitalism in India and distinguish it from the trajectory of the early industrializers. However, identifying some of the underlying causes for jobless growth in the advanced capitalist countries (ACCs) is likely to help us understand some of the proximate causes of the phenomenon in India as well. The exercise will also substantiate the global nature of the problem.

The paper is divided as follows. Section two develops an alternative historical-evolutionary structural (HES) approach with the aim of capturing broadly the contours of contemporary capitalism in India and distinguish it from the trajectory of the early industrializers. The third section using recent data establishes jobless growth in India. The fourth section attempts a multi-faceted explanation of jobless growth, integrating India-specific and developing country capitalist features with advanced capitalist ones operating at the global level.

2. A Framework for Analyzing Jobless Growth

To explain jobless growth in India I depart from the typical economistic explanations and instead work with a political economy framework that places India in the larger system of global capitalism. At a basic level jobless growth has been defined as employment growth lagging substantially behind output growth or what economists would call low employment elasticity. Employment elasticity measures the percentage change in employment for one percent change in growth of output. Less than 1% increase in employment relative to 1% increase in output implies jobless growth, especially if it is substantially less than 1% and is a sustained trend over a long period.[2] One of the early usages of the term, though not the metric, was in the post-Depression era (New York Times 1935) and later in an era of hyper-globalization since the 1980s applied to the OECD as either jobless recovery or jobless growth.

The episodic but interconnected developments in the last five decades such as the rise of multinationals, oil price hikes, deindustrialization, global offshoring, and the rise of finance capital comprise a complex set of forces behind economic expansion, contraction, and jobless growth in the US and other OECD countries. The technology-led expansion of PC industry, the Internet, and the subsequent gamut of digital technologies while it created waves of new forms of employment and growth they have been also the harbinger of "jobless growth" in the ACCs through increased investments in capital equipment and automation (see Summers 2015).[3] However, there is also a structural component to this trend. In the context of global competition, as manufacturing gave way to the dominance of the services sector the advanced capitalist economies were substantially reconfigured. In this economic makeover, the shedding of well-paid industrial jobs through economic diversification and offshoring of economic

[2] Whether jobless growth is cyclical, short-term or increasingly a permanent feature of economies is not the focus of the paper.
[3] Summers (2015) refers to post-recession recovery with the same or less employment than before as jobless growth. The Indian case is not recessionary but rather historically unprecedented economic expansion.

activities on a wider and deeper scale and the substitution of labor with capital and automation has impacted employment. Even LCCs, beneficiaries of ACC restructuring in terms of their own capitalist development and employment, became subject to pressures from new technologies, inducing flexibility and efficiency.[4]

Economists of various persuasions have been skeptical of the technological argument contributing to joblessness and jobless growth, dismissing it as a Luddite fantasy. However, it has been also noted by others that capital and technological substitution of labor is real as evidenced by automation of both goods production and services provision (Ford 2015, Aronowitz and DiFazio 2010, Rifkin 1995). The efficiencies gained from capital and technology investments have translated into redundant labor in specific workplaces. There are also demand side factors that have impacted employment growth. Slower wage growth relative to productivity increase and the higher growth or returns to capital (Piketty 2014) reduces macroeconomic demand and when combined with state cutbacks of welfare and social protections economic growth is driven by a narrower, albeit wealthier, market. Under this scenario employment expansion is constrained and output growth is subject to increasing capital intensity and automation. Inequality is integral to this kind of growth process.

Since India is not an ACC, it also means there could be other reasons for jobless growth. Analytically, jobless growth in India could be explained if the ACC conditions, alluded to earlier, are present. However, given the level of development and structural differences, India is unlikely to experience ACC type jobless growth. Under certain conditions, namely, the existence of a globally inspired and oriented mature capitalist sector jobless growth in late capitalist countries (LCCs) such as India need not be precluded. What this suggests is that some of the mechanisms or forces operating in ACCs could be found in LCCs as well. The alternative that there is a completely different set of forces producing the same outcomes is unlikely for the simple reason India is no longer the autarkic economy it was until the early 1980s. Since jobless growth is a relatively recent global phenomenon and national economies today are increasingly internationally integrated the likelihood of forces common to both ACCs and LCCs, even if the level of capitalist economic development and maturity are substantially different, is not unrealistic. The commonality suggests that there are, at the minimum, small but influential pockets of advanced capitalist features in LCCs in a milieu of non-dynamic

[4] In some countries such as the US immigration has been also a factor in restructuring labor markets.

features, best captured by "compressed capitalism", a specific form of uneven and combined development.

Uneven development has been often analyzed as economic "dualism", which implied the coexistence of a small modern industrial sector and a large traditional production sector. This division of between sectors has been further analyzed in terms of formal and informal sectors.

The informal sector in India is also known as the unorganized sector and although the two are not the same thing, I will use them interchangeably.[5] To demonstrate jobless growth in India in the context of uneven and combined development first some of the reasons why the Indian formal sector does not create as much employment despite growth must be established. Second, the structural position of the informal sector vis-à-vis the formal sector and its relationship to the wider Indian capitalist economy must be delineated. There are several recent studies that have analyzed the National Sample Survey Organisation (NSSO) and other government data on Indian manufacturing to show the growing employment gap between the informal and formal sectors. The findings show that the Indian manufacturing sector as a whole is not expanding while the informal sector despite high rates of economic growth has remained at a persistently high level.

It may be mentioned, given the Indian definition of the unorganized sector, that most of India's agricultural employment is unorganized. The Ministry of Labour and Employment of India estimates that the unorganized sector employs 94 percent of workers, as cultivators, casual agricultural and urban workers, household industry laborers, and the self-employed in urban menial services (National Commission for Enterprises in the Unorganised Sector (NCEUS) 2009: 15; Bardhan 2006). Unorganized workers can be found in both informal and formal sectors and are defined as irregular workers with no social security benefits (NCEUS) 2009, 134.). Further, unorganized enterprises have no legal standing, have low capital intensity and labor productivity, and often use family labor, "concealed as self-employment under different forms of putting out systems" (NCEUS 2009: 357).

About 85% of India's workforce is engaged in the rural and urban informal sectors. Since the informal sector is a major absorber of workers it could, under the right conditions, be also a creator of good jobs. Hence, identifying the constraints to its dynamism has been a major

[5] There are many definitional and measurement issues around the informal sector. Here we take the official definition that pertains to production units that are small, unregulated, rely on family labor, and where do they hire a few workers (one to six) they are insecure, and earn low wages.

research undertaking. The dilemma is that under capitalist logic with growth the informal sector is expected to gradually disappear (Raj, S.N. and Sen 2016: 1). Instead it has remained persistently at a high level and hence deemed not a transitional development (Banerjee 2004: 30, Sanyal 2007). One hypothesis advanced for jobless growth is labor rigidity. However, this view has been refuted by Nagaraj (2007) and it has been further challenged by Chakraborty (2015) that if labor rigidity was the impediment as enshrined in unchanged labor laws then how come employers have been able to add insecure jobs by hiring contract and casual workers.

These competing perspectives on jobless growth can be resolved by not seeing the formal and informal sectors as separate and distinct when in fact the two are linked. Castells and Portes (1989) argued that the disappearance of the PCP (informal) sector is not inevitable. Its reproduction and persistence results from multiple causes, including the restructuring of capitalist economies, in the ways indicated earlier. In the Indian economy changing pattern of demand geared toward modern industrial products rather than the labor intensive crafts-based products offered by the informal sector and the absence of social protection compel people to create jobs for themselves. A substantial share of informal jobs consists of self-employment, as it is largely a coping mechanism to ensure some basic form of livelihood (Chowdhury 2011). Thus, the question why does the formal sector grow dynamically, while the other remains large and stagnant needs addressing.

Part of the answer depends on whether the PCP sector is a source of accumulation or one that is exploited (Raj S.N and Sen 2016). The problem with this question is that accumulation (dynamic) and exploitation (non-dynamic) are not separate but interlinked both conceptually and empirically (see Damodaran 2015). In the Marxist schema, since labor creates value, which is the result of exploitation, accumulation can proceed only with labor exploitation (generating surplus value). Hence, the distinction between accumulation and exploitation is superfluous. Now as it has been established that the informal sector is not a source of capital accumulation, meaning it does not expand based on increasing investments (therefore its persistence) in part because of non-wage labor (family, labor and self-employment) that keep the production units small and productivity low (Harriss-White 2014). This does not mean that the PCP sector is outside the circuits of capital or is not exploited in terms of unfair treatment. What it does mean that there are various labor arrangements within the PCP sector and both non-wage and wage labor can be part of the formal circuits of capital without PCP becoming transformed into the formal sector. Production conditions in the PCP sector are such that generating a large economic surplus is difficult. Whatever the impediments for the persistence (see Harriss-White

2014: 991), structurally the PCP sector acts as a reserve army of labor effectively facilitating capital accumulation in the formal sector and thus maintaining the supposed 'dualism".

Such type of "dualism" or more correctly uneven development has been theorized as compressed capitalism (D'Costa 2014, 2016). Compressed capitalism can be conceptualized as the outcome of a three-legged interdependent and integrated process. Also, rather than focus only on the manufacturing informal sector compressed capitalism sees the structural place of the entire informal sector as part of a larger process of uneven capitalist development in India.

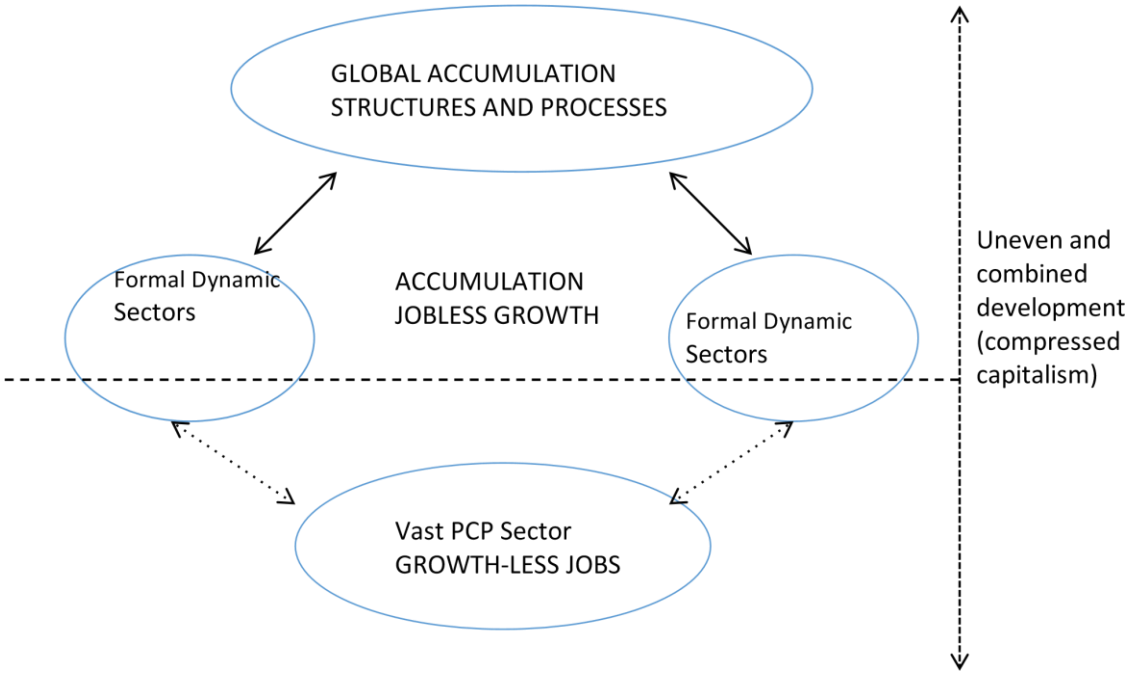
The first leg is the process of primitive accumulation (PA) as understood in the classical Marxist understanding of capitalism, that is, the alienation of peasants from land. PA in India and many other LCCs is incomplete and ongoing. In this dynamic, alienation in the first instance is the beginning of the formation of an industrial proletariat engaged in production and the beginning of what has come to be a durable but contested capital-labor divide. In the interim before a fully formed industrial proletariat comes into being, capitalist trajectories in history show the formation of a petty commodity producer (PCP) sector, which comprises a collection of producers that own their tools, produce for the market, often rely on family labor, and remain small. PCP is the second leg under compressed capitalism.

In the classic transformation process under capitalist expansion, the PCP largely disappears while peasants uprooted from their land are transformed as a fully formed proletariat. But such is the not the case in India and in other LCCs since primitive accumulation is incomplete and the PCP sector is persistently large. Instead the emergence of precarious jobs in the informal sector is routine and symptomatic of an opposite phenomenon, which could be labelled "growth-less" jobs, meaning the informal sector is the massive repository of poor quality jobs. Employment may be on the rise but it occurs in a sector that can hardly be considered a paragon of capitalist economic dynamism. Because of their small size, limited technology, capital-short, and scarcity of skilled labor the informal sector suffers from low productivity and thus low output growth. By and large dynamic capital accumulation is not a feature of the informal sector, although there are successful segments and individual enterprises that prefer to remain unorganized for various reasons, including tax and regulatory evasion. Most of the employment in the informal sector entails desperate coping mechanism in the absence of more secure, better-paid, formal sector jobs. One could surmise that if this is the sector that is persistent then there is little expectation for growth in decent jobs (Sahu 2010) unless the formal sector takes off dramatically.

The third leg is the advanced capitalist sectors in LCCs, namely selected industries and service providers in the formal sector, where output growth can be expected. The reorganization of the global economy away from the "core" economies of the triad to East and Southeast Asia plus China, India, Brazil, and Russia more recently indicates that there is capitalist development outside of the ACCs. Much of this late capitalist development has been state-initiated, state-supported, and state-facilitated. In India and other larger LCCs state-sponsored import-substitution industrialization has been a typical strategy to nurture domestic capitalism and escape from economic backwardness. The class compromise between nascent capitalists and powerful non-capitalist classes provided a limited space for radical economic transformation. The import substitution industrialization program in India of the 1950s and 1960s was a partnership between the state and capital. Such industrialization ultimately worked in favor of strengthening capital, and while there were countervailing forces that favored segments of organized labor, the employment effects of such industrialization had a limited impact due to the capital-intensive nature of investment (D'Costa 2015). This was found to be the case in Latin America as well, which contrary to expectations of employment through such industrialization a large urban, informal sector engaged in petty commodity production was created (Gilbert and Gugler 1992: 100). However, with adjustments, learning by doing, and strategic responses to global capitalist imperatives these LCC businesses have come of age and in specific areas are globally competitive like many of their ACC counterparts.

In Figure 1 the basic mechanisms of uneven development that produce jobless growth are outlined. First, the structural link between the informal sector and formal sectors is presented. Second, this is complemented by the weak, though not absent, links between the informal sector and the global economy. Third, the relatively strong links between the formal sectors and the world economy ensure economic dynamism. These multiple links of varying strengths ensure accumulation in the formal sector within a loop that also includes the informal sector but which does not itself experience output expansion through productivity growth. Jobless growth is the result of dynamic capital accumulation, which rests on a business strategy that contributes to rising capital intensity and automation even when plentiful labor is available.

Figure 1: Jobless Growth in the Context of Uneven Development



With India's economic reforms riding the wave of neoliberalism initiated earlier in the US and the UK and followed by much of the world, Indian businesses are also expected to pursue similar accumulation strategies to those of their OECD counterparts. Structural power globally has shifted considerably in favor of capital away from workers and the marginalized, to specific *global centers* of accumulation in *both* rich and poor countries (Hoogvelt 2001, author's emphasis). Hiring practices such as contract, temporary, and part-time workers to reduce costs as well as leveraging capital-intensive technologies to enhance efficiency and competitiveness have effectively stalled formal sector jobs and put Indian workers on the defensive. Contemporary joblessness and underemployment in the informal sector is now routine. Even the public sector, once considered a model employer, is shedding jobs through attrition and downsizing. As it will be shown in the next section jobless growth is a result of both the inability to create adequate, meaningful employment (the qualitative dimension, or growth-less jobs) and the ability to create jobs that are also circumscribed by the skill and technology bias of the modern sector, which has a dampening effect (the quantitative dimension) in an otherwise expansive capitalist system. In this context, jobless growth is a result of the immediate factors influencing business strategy and the structural relationship between the formal and informal sectors, with the latter facilitating accumulation by the former.

3. Establishing Jobless Growth

In this paper the technical definition of jobless growth, that is low employment elasticity, is accepted. However, rather than see this as a short-term aberration of employment being delinked from economic growth, I see it increasingly as a permanent structural feature of contemporary capitalism. While national economies may exhibit specific characteristics that underpin jobless growth, I offer a more generalized explanation of this phenomenon using a political economy framework of uneven capitalist development. I argue that it is the shift in the power structure between capital and labor in favor of the former explains jobless growth. However, before analyzing how structural power is exercised by capital the lagging employment growth behind economic growth is contextualized.

As early as the decades of 1970s and 1980s when jobless growth was not yet an established global phenomenon, India was already showing signs of it. For example, GDP growth increased from 3.5 to 5.3% whereas employment growth fell from 2.82 to 1.55 between 1973-78 and 1983-1987/88 (Planning Commission in Datt 1994: 421). In the 1990s, employment elasticity was a mere 0.2 in the large manufacturing sector compared to 0.5 in the small manufacturing sector and 1.0 in construction (Datt 1994: 421). The 1980s was a period of considerable economic reforms introduced by Rajiv Gandhi. Overall growth as well as in specific sectors growth rates were high but the impact on employment was limited. Reforms were largely confined to liberalization, which encouraged imports of consumer and capital goods thus strengthening the power of capital and urban classes. Between 1981 and 1991 employment elasticity in manufacturing was only 0.19 (Datt 1994: 422). This low employment elasticity, it should be noted, referred to a period when full-blown economic reforms of 1991 had not taken place. Economic reforms designed to unfetter business from government regulations was aimed at inducing more growth, while employment growth was simply assumed, generated either directly in those sectors that expanded or indirectly through trickle-down mechanisms.

However, as the data indicates jobless growth was very much a phenomenon of the post-reform period as well. Kannan and Raveendran (2009) analyze the employment elasticity for a number of industries in manufacturing. They find that net employment created over a period of twenty-four years, between 1981-82 and 2004-05 was 1.35 million or "just 0.3% of the workforce in the economy…" (Kannan and Raveendran 2009: 83). Table 1 reproduces their analysis of employment elasticity in the pre-reform and post-reform period by industries.

Table 1: Output and Employment Growth and Employment Elasticities (1981-82 to 2004-05)

A. Employment creating growth			
	Growth in Gross Value Added (% per year)	*Growth in Employment (% per year)*	*Employment Elasticity*
Wearing apparel	15.5	0.71	0.64
Leather tanning	6.93	3.54	0.51
Paper, paper products	3.84	1.24	0.32
Rubber, plastics	11.28	3.96	0.35
Furniture, manufactures	8.06	5.37	0.67
Total of A	*8.64*	*2.26*	*0.26*
B. Job displacing growth			
Textiles	4.96	-0.53	-0.11
Wood, wood products	0.09	-1.57	-16.55
Publishing, printing	0.35	-1.44	-4.07
Basic metals	7.13	-0.09	-0.01
Other transport	6.79	-2.44	-0.36
Total of B	*6.05*	*-0.45*	*-0.07*
All manufactures	*7.41*	*0.78*	*0.10*

Source: Annual Survey of Industries in Kannan and Raveendran 2009:84.

While not too much can be read into the employment elasticity data disaggregated by manufacturing industries, some broad generalizations could be made. For example, there were 16 employment-creating growth industries from 1981-82 to 1991-92 (in the pre-reform period) whereas in the post-reform period of 1992-93 to 2004-05 there were only 12 such industries. Tobacco products; basic metals; machinery and equipment; office, accounting, and computing machinery; electrical machinery and apparatus; and radio, TV, and communication equipment,

which were under the employment-creating sectors fell under "employment-displacing growth" sectors. At the same time food products and beverages moved up the list to employment-creating group in the post-reform period. Since both deregulation and liberalization were integral to the 1991 economic reforms the capital-intensive sectors such as base metals and various kinds of machinery and equipment became job displacing. This is probably due to increased competition compelling greater import of such products to align Indian businesses according to best industry practices.

Labor-intensive sectors such as food products experienced an employment boost because open markets meant internationally branded products were more widely available in India through foreign direct investment, whereas other labor-intensive sectors such as apparel and leather tanning in which India has cost advantages did not grow as fast as in the pre-reform period. This could have been due to greater competition from other low-wage economies such as China and Bangladesh, which enjoyed either greater global market access or had the economies of scale to handle large markets flexibly. In the post-reform period medical, precision, and optical instruments and motor vehicles, trailers, etc. were high growth sectors compared to the pre-reform period. While medical instrument growth is hard to explain without additional information, the expansion of the automotive sector was largely due to Japanese investments and subsequently by multinational and domestic firms in the auto-parts industry in the context of a growing middle class (D'Costa 2005). Predictably the employment elasticities have been higher in those labor intensive sectors that expanded under reforms, namely, apparel and leather tanning, while most of the capital equipment manufacturing sectors have contributed little, if any, to employment growth. This could be attributed to the liberalization of imports of capital equipment, which was until then a highly-protected sector that had fallen behind the global technological frontier.

Jobless growth is further evident in the second half of the decade of 2000s (Table 2). Compared to GDP growth the net increase in employment was negative in agriculture and manufacturing and sectors with respective losses of 21.1 and 3.7 million jobs from 2004-05 to 2009-10, whereas sectoral GDP growth has been estimated at 4.1 and 10.5% respectively (National Sample Survey Organisation in Thomas 2012: 41). It may be pointed that in 2011-12 nearly 49% of India's workforce was engaged in agriculture and related activities (NSSO Data in D'Costa 2015). The services sector, which in labor-abundant countries offers low-cost services has experienced substantial growth in India. In the period 2004-05 to 2009-10, the services and construction sectors added nearly 31 million jobs (Table 2). It is estimated that roughly one

million new employment seekers enter the Indian labor market every month. The construction sector has created plentiful jobs, albeit low wage and precarious since employment is terminated after the construction projects are completed.

There are at least three ways of interpreting services employment growth: one there is competitive advantage due to availability of low-cost labor, two, growth is residual in the PCP sector since manufacturing is unable to formally absorb labor, and three, services contribution to GDP has been due to specific competitive advantages in high-value services due to the availability of high-skilled, tertiary educated technical professionals. The software and information technology-driven services sector has been a major contributor to GDP growth, which has been a product of past state intervention in tertiary technical education, infrastructural support, and explicit export promotion strategy (D'Costa 2004). However, labor absorption is expected to be limited in this high-value services sector, given India's overall level of development, the size of the workforce, and the skill and education bias of this sector. As Table 2 shows net jobs added in finance, real estate, and business services (which includes software and IT services) was only 2.3 million over the 2004-05 to 2009-10 period, whereas GDP contribution of this sector was 13.4% in the same period, the highest for any sector during this period (Thomas 2012: 41).

Table 2: Net Increase in Sectoral Employment and GDP Growth (2004-05 to 2009-10)

	Net Increase in Employment (millions)	Growth of GDP (%)
Agriculture, etc.	21.1	4.1
Mining and quarrying	0.4	
Manufacturing	-3.7	10.5
Electricity, gas, water	0.0	
Services and construction	25.0	10.5
Construction	18.1	9.6
Trade, hotels, transport, communication	3.9	10.5
Finance, real estate, business services	2.3	13.4
Community, social, and personal services	0.7	8.0
Total employment/GDP	1.2	8.6

Source: NSSO in Thomas (2012): 41.

4. Explaining Jobless Growth in India

There has been a number short analytical pieces published mainly in the *Economic and Political Weekly* (for example, Thomas 2012, Kannan and Raveendran 2009) and others (Raj S.N. and Sen 2016, Thomas 2013, NCEUS 2009). While all these studies rely on National Sample Survey Organisation (NSSO) or Annual Survey of India (ASI) statistics to interpret the nature of growth and employment and their various forms of disaggregation in terms of the formal (organized) and informal (unorganized) sectors, the focus is especially on the manufacturing sector. While there are hints as well as explicit references to the workings of global capitalism, most of these studies are confined to explaining jobless growth or analyzing the informal sector as a separate silo or as a purely national phenomenon. There is little attempt to relate jobless growth as part of the workings of global capitalism.

The poor output and productivity performance of the vast informal manufacturing sector is attributed to the small scale of operations often using non-wage labor in an unregulated environment. Based on this assessment, various policy interventions are pro-offered, which tend to be confined to supply side factors such as access to credit, electricity, imparting skills and training, and so on (Thomas 2013: 684-687). While such policies in favor of the informal sector manufacturing are not misplaced, the implication is that should these policies succeed informal firms are anticipated to join the formal sector. It is not clear what the product composition likely to be if that is the case and what the nature of competition might be between the small informal enterprises, recently graduated small formal enterprises, and the larger firms within the formal sector. Whether these small firms would be competitive enough to challenge the labor-intensive manufacturing of East and Southeast Asia is also not known. In any case what is missing from this assessment and policy prescriptions are some of the structural aspects of late capitalist development in India as well as the structural imperatives of contemporary global capitalism that reproduce and sustain the widening gap between the formal and informal sector, with the former contributing to jobless growth, while the latter more tentatively contributing to growth-less jobs. In the next section I briefly revisit the nature of contemporary capitalism to demonstrate the capital bias in today's global economy as seen in the case of India.

4.1 The Nature of Contemporary Capitalism in India

As I have indicated uneven and combined development characterizes India's limited economic and social transformation. This is best captured by compressed capitalism, a specific form in

which early processes of primitive accumulation remain unfinished (a lagging element) for various reasons (see D'Costa and Chakraborty 2017), while contemporary processes of modern industrialization and technological developments (a leapfrogging element) though globally dynamic are inadequate to address India's employment challenges. Straddling these two elements is a third, namely, the petty commodity sector (a persistent element) that is counter-intuitively expansionary in terms of employment. The growth of the PCP sector as presented earlier arises from an incomplete or stalled primitive accumulation process and a limited but advanced capitalist sector promoted by the state. Low productivity of agriculture, prevalence of subsistence farmers and landless workers, limited agriculture-industry linkages and job opportunities, and the unresolved pressure to acquire land for non-agricultural purposes have contributed to a stalled agricultural sector with substantial underemployment in the countryside. Dispossession of land, through the exercise of state's eminent domain prerogative and market-based coerced or voluntary sale entails a steady stream of migrants to urban areas. Relatedly, the limited job opportunities in industry ushered in by India's capital-intensive heavy industrialization program and continued more recently since the economic reforms by India's formal private sector have added to the burgeoning PCP in urban areas.

The lagging, leading, and persistent sectors comprise pronounced uneven and combined development, which has been exacerbated further with India's tilt toward greater market forces and international integration. By no means the shift toward deregulation and liberalization has been all together unfavorable, far from it. New opportunities; increased access to global markets; and inflows of capital and technology have pushed India to a higher growth trajectory. It is not surprising that when closed markets become more open businesses typically find more opportunities. However, like low hanging fruit, the initial growth spurt through liberalization is not necessarily sustainable. For example, the high economic growth in the early 2000s was driven by easy credit and debt-financed consumption (Chandrasekhar 2007). Overall macroeconomic demand is constrained given the low incomes found in the vast PCP sector. There is no easy resolution to this except for sustained reforms and massive investments in both economic and social infrastructure. The solution also depends on the health of the world economy, meaning, the carrying capacity of the world economy in terms of economic output. Thus far India has been able to take advantage of its deregulation and growing participation in the world economy in terms of growth but has only made a small dent in its employment needs. Whatever the reasons for growth, as we will see below employment seems to be unhinging from growth to produce jobless growth. The global cheapening of capital and business strategies favoring capital-intensive production contribute to the employment problem in India.

4.2 Capital-bias and Employment

Growth without employment is an unusual, if not outright implausible, development for low-income, labor-abundant economies since it is anticipated that the abundant resource would be deployed more extensively and intensively in the growth process. However, the presence of jobless growth suggests that there are other forces at work that discourage more employment-generating investment. Or to put it another way, there are factors that encourage capital and technology-intensive employment. Three possible interrelated explanations are that capital is cheap, that production is increasingly biased toward using capital-intensive technology, and capital as a social relationship is on the offensive keeping labor at bay, which is structurally possible by the persistence of the PCP sector, which depresses wage growth. The fourth explanation is counter-intuitive since petty commodity producers are small operators and therefore generate far more employment, including disguised, per unit of investment than their formal, corporate counterparts. Yet, the very existence of the PCP is that there is a reservoir of reserved army of labor to draw on that structurally keeps the cost of direct labor as well as cost of services low.

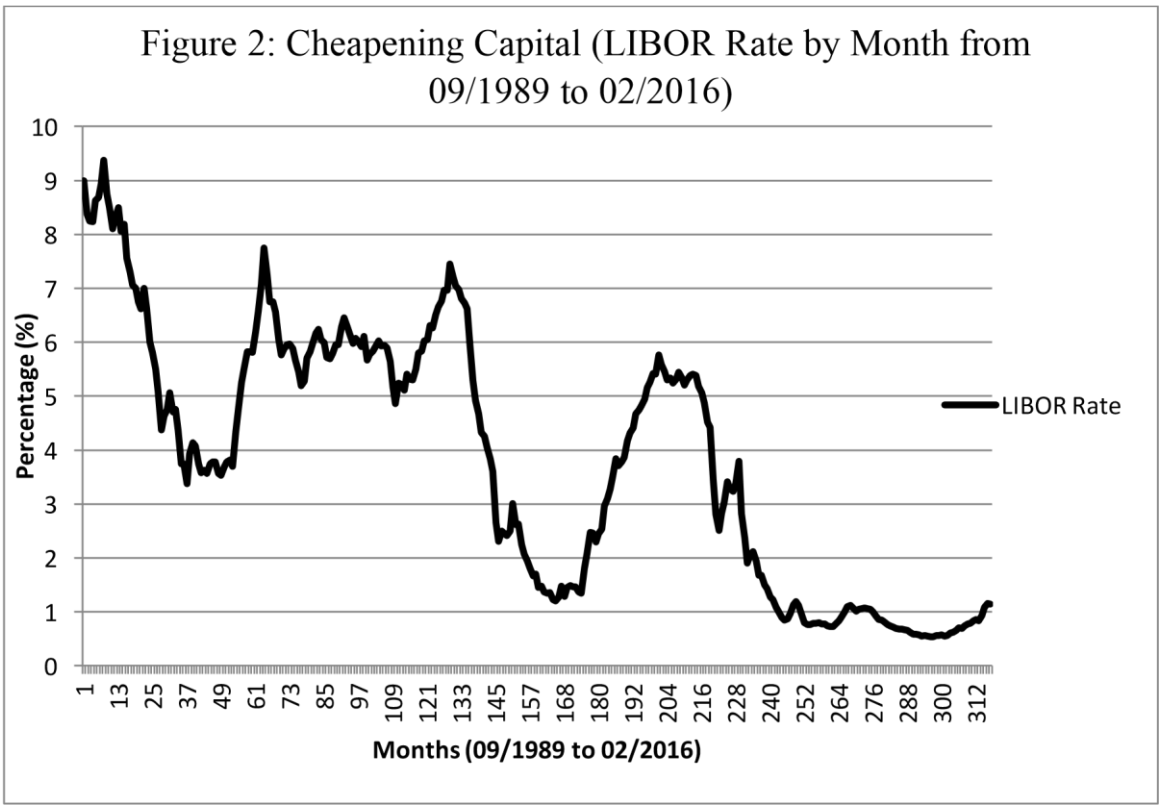
4.2.1. Cheapening and Mobility of Capital

Structurally capital has been cheapened through the relentless pursuit of accumulation at the global level. With globalization driven by technology and deregulation and the emergence of new markets due to changes in policy regimes with increasing maturity of domestic capitalists, the world capitalist economy has witnessed unprecedented expansion of productive capacity. Employment has expanded along with productive capacity in recent decades as witnessed by Chinese industrialization accompanied by the massive migration of rural labor to urban centers. This is an extensive form of employment when "surplus" labor in the countryside is drawn into labor-absorbing export-driven industrialization. By the 1980s late industrializers of East Asia especially Japan and South Korea were experiencing tight labor markets thereby compelling businesses to adopt more capital-intensive production methods and find cheaper locations such as China to manufacture. However, even China was reported to have reached a Lewisian turning point with emerging labor shortages (Cai 2008).[6]

[6] In a situation like this wages are expected to rise and they did in China. However, for India the story is not so clear-cut since surplus labor continued to persist in the PCP sector. One would expect wages to remain depressed and they did relative to the price of capital (Kannan and Raveendran 2009) although globally the cost

Not coincidentally the advanced capitalist countries especially the US and Western Europe had also restructured their economies away from manufacturing to services to resolve the relative scarcity of labor due to high wages. Services growth also included growth in finance capital, facilitated by huge capital surpluses in the post-1973 era of oil producing countries. Global lending and borrowing and subsequent banking deregulation in the US and elsewhere contributed to a volatile but unprecedented growth in the volume of financial transactions. As a result, the sheer magnitude of capital available in the world economy has cheapened its price. This is evident from Figure 2 where the London Interbank Bank Offered Rate (LIBOR) has experienced a secular decline. In macroeconomic terms capital has become highly mobile thus encouraging investments and the adoption of capital- and technology-intensive production of goods and services generally.

Figure 2: The Secular Decline in the London Interbank Offered Rate



There are several implications of the declining cost of capital. First, the intrinsic character of capital mobility is heightened with greater international inflows and outflows of capital. For example, in 1985 outflows of foreign direct investment (FDI) was $53.3 billion with 98% from

of capital has been coming down. The puzzle of course is why firms become capital-intensive when wage growth is absent.

the rich countries (UNCTAD 1991: 10). By 1987 the figure for total outward FDI was $196.1 billion of which $187.1 billion came from the rich countries. The figure jumped to $307.3 billion in 1998, $621 billion in 2001, and $1.354 trillion in 2014. Second, the availability of investible funds meant that international mergers and acquisitions would become more commonplace, echoing the Marxist process of capitalist expansion through concentration and centralization of capital. In 2014 the total value of international M&As totalled $900 billion, considerably higher than the average of $775 billion from 2010 to 2014 (UNCTAD 2015: 10). The net result of the expansion of the global economy accompanied by geographical and structural shifts has been a massive increase in the stock and international flows of capital.

Third, the relative abundance of capital suggests greater incentives to use capital for economic activities. Competition resulting in and from international economic integration reinforces the deployment of new technologies for efficiency, quality, and market niches, which dampens employment growth. Ironically, the expanding services sector, which is labor intensive, is also becoming increasingly skill intensive. India is often credited with the rapid expansion of the services sector, particularly tradable IT and business services. However, as it was pointed earlier there are quantitative limitations on employment in these rapidly expanding sectors as these jobs demand tertiary, mostly technical education, and specific types of professional skills. In addition, services are also subject to competition and thus firms are compelled to introduce automation and various IT-enabled processes. Thus, in a labor-abundant economy high value services sector expansion suggests jobless growth since most cannot enter this sector without a college or a technical degree (D'Costa 2003, 2011).

4.2.2. Deregulation and Rising Capital- and Skill-intensity of Industry and Tradable Services

It is not difficult to surmise that in this vortex of capitalist expansion in which capital is cheapened its use likely to be abundant. Consequently, the structural power balance between labor and capital is likely to shift against labor amidst growing insecurity of workers. This tendency is further reinforced with explicit policy regimes favoring economic growth and competitiveness by gradually dismantling legal clauses that had ensured some job security for workers. Since the 1991 major economic reforms, the Indian manufacturing sector has adjusted to the forces of the world economy. Some businesses have risen to the occasion to meet international competition and engage with the world market, others have remained content with the large growing domestic market. In both cases, however, Indian businesses have responded

in ways that are little different from capital elsewhere, mainly, to ensure its reproduction. Just as firms in the advanced capitalist countries have resorted to labor flexibility by introducing a host of hiring practices that put labor on the defensive, Indian businesses, despite abundant labor, have begun similar practices. The rise of contract workers in lieu of permanent ones, the casualization of workers through part time and temporary work in the formal sector are concrete manifestations of this flexibility and job insecurity. I present some evidence on the increasing capital intensity of production and changing hiring practices to indirectly indicate the growing vulnerability of workers.

In a recent report (National Institute of Science and Technology and Development Studies 2011), a government of India science and technology research organization covered in detail India's changing industrial landscape from an innovation and productivity angles. One major finding, corroborated by others, was the increasing capital intensity of production (Table 3). This is evident from the differential growth rates of output, ordinary workers, and capital labor ratio between 1998-2010. While not all industry groups exhibited lower employment growth rates relative to output and fixed capital, in fact in some industries the growth in ordinary employment exceeded growth in fixed capital, the broader picture is clear. There was not a single industry group that exhibited higher growth in employment relative to output growth. For all industries the respective growth rates were 3.5 and 9.0. Similarly, the capital-labor ratio also shows a rising tendency between 1998 and 2010, albeit on the whole just marginally: from 0.39 to 0.46. Again, the disaggregated picture is somewhat mixed but specific industry groups such as petroleum (from 0.36 to 0.65), automobiles (from 0.41 to 0.52), and medical and optical instruments (from 0.41 to 0.67) show significant increase in capital labor ratios. It may be pointed out that both petroleum products and automobile industries while capital intensive by definition, are becoming export-oriented and thus subject to scale economies and best industry practices. The rising intensity is also indicative of capital substituting for labor.

Table 3: Growth rates of output, value added, labour and capital by industry groups: 19982010

Industry Groups	Output	Ordinary Worker	Fixed Capital
Food products and beverages	7.9	3.4	4.6
Textiles	7.4	4.1	3.0
Leather	7.8	7.2	6.7
Wood and wood products	12.1	1.9	4.8
Paper and paper products	7.4	3.5	2.9
Coke and refined petroleum	14.5	5.4	8.7
Rubber and plastic	10.0	5.8	6.3
Other non-metallic mineral products	9.2	4.1	3.6
Basic metals	14.8	4.7	6.6
Fabricated metal products	14.9	8.7	5.5
Electrical machinery	12.6	6.4	4.1
Radio, TV. Communications equipment	8.6	2.9	2.6
Motor Vehicles	15.2	7.8	7.9
Other transport equipment	8.2	2.6	3.0
All industries	9.0	3.5	3.7

Source: Das, P. Productivity, Growth and Structural Change in Indian Manufacturing Industries: 1998-2010, in Science and Technology and Industry Report, National Institute of Science and Technology and Development Studies, New Delhi (unpublished report).

Notes: Growth rates calculated by fitting log linear trend and expressed in percentage. Sectors with statistically insignificant growth rates are omitted, while those included are less than the 1% level significance.

Although profitability increased in most manufacturing sectors productivity growth did not. Barring a few industries the increase in productivity was marginal indicating either the inefficient use of capital or alternatively capital spending was targeted to reduce workers and through substitution and indirectly put labor on the defensive, especially in a labor-abundant market where jobless growth has been accompanied by various types of insecure work.

Furthermore, India's integration into the world economy has also increased the use of imported inputs thereby undercutting domestic backward linkages and employment therein (Biswas 2011: 74). The trend in India has been the rise in both contractual and regular forms of employment with output growth but less than proportionately, with a growing share of contractual labor (Jamalpuriya and Chaudhury 2011: 79). From 2000-01 2009-10 the share of regular labor to total labor declined from 79.5% to 67.4% (ibid: 79). Even the Indian government has been shedding workers from its public-sector enterprises (see Economic Survey, Government of India, 2015: A55). Between 2006 and 2012 the total public sector shrank by 4.2 million employees and the private sector, which had employed less than the public sector earlier, expanded by 3.17 million employees in the same period, making net job addition negative for the formal sector. The private sector expansion may seem like a healthy development but it may be pointed out that the Indian economy expanded by 7.8% per annum during the 11th Five Year Plan (2007-2012) (Economic Survey, Government of India, 2015: A4). Overall then India is moving toward contract and casual work, making employment increasingly precarious, which is not that dissimilar from advanced capitalist countries.

One area in which India has done exceptionally well is tradable services. These include mainly IT and software services. Compared to construction and non-tradable services IT and software services are high value and very much visible in the global economy. There are few countries that can match India's project capabilities in large, customized IT-based enterprise solutions. However, though labor intensive this sector cannot absorb too many people since the basic requirements are typically a college degree and particularly a technical one at the bachelor's level. While India produces large numbers of engineers and other STEM graduates it pales into insignificance when compared to the total workforce. For example, the total number of people employed in 2009-10 was estimated to be about 460 million, of which only 8% had a college degree (Thomas 2012: 44). The IT industry was estimated to employ about 3.5 million though the gross value of output produced is estimated at roughly $150 billion representing 9.5% of GDP (NASSCOM 2016). It is a sector that clearly generates jobs but its revenue earning capacity far outstrips the number of jobs created because it is education and skill-intensive. In this sense the Indian IT industry, notwithstanding its stellar performance, suffers from low employment elasticity and therefore cannot be seen to drive employment.

The global forces in this sector are strongly at work mainly from the demand side. Two-thirds of India's IT output is exported totaling nearly $100 billion. With demand constraints in the domestic market capturing export markets is an appropriate response on the part of the Indian

IT business. The US market absorbs nearly 60% of India's exports and is the major driver of the sector in India in terms of demand, business practices, patterns of remuneration and compensation, and innovation. However, it is evident that the good jobs that it creates are nowhere near enough to satisfy the annual entry of young workers entering the workforce annually, which is approximately 12 million. Where plentiful employment is created is in the non-tradable services such as construction and trade, hotels, transport and communications. Yet, even these, except for the construction sector witnessed deceleration in employment in the second half of the 2000s (Thomas 2012: 46). Furthermore, many of these services are in the PCP sector, which is characterized by self-employment and casual work, two attributes that reveal increasing precariousness.

4.3. Capital-Labor Conflict in the Context of Persistent PCP

Jobless growth is a result of increasing capital intensity in the formal manufacturing sector and skill- and education intensity in the dynamic services sector. Hence, the petty commodity producer sector acts as the vast last resort absorber of workers unable to enter the formal sector. Most jobs tend to be precarious, low-wage, and insecure. The paradox is that growth in employment in this sector is likely to be greater than growth in output thus creating an unusual phenomenon of *growth-less jobs*. For example, in the competitive internationalized sectors such as the Indian auto industry the number of enterprises and those employed in the unorganized sector increased over the 1994-95 and 2005-06 period but the number of employees per enterprise and value added has been virtually stagnant (Narayan and Vashist 2008, 24). Both the increase in the number of firms of total output reflects linear expansion of the PCP segment of the automotive industry and it is symptomatic of the absence of dynamic accumulation in the smaller, informal, supplier firms.

Since the enterprises in this sector tend to be owner-operated using family labor or kinship networks or hire a few employees, if at all, typically their scale of operations is small, many categorized as "tiny" with low turnover or profitability, and limited use of technologies, many without electricity (see Ministry of Labor and Employment, Government of India 2002: 604-605). Unlike the formal sector where rising capital intensity, automation, changing hiring practices, and skill and education requirements are contributing to excess labor supply, the PCP remains a low road to accumulation. This sector is plagued by low productivity, which suggests that it is not going away any time soon by becoming more formal (notwithstanding the policies to help it become so).

Analytically, the PCP cannot be viewed as independent of the formal sector (Gilbert and Gugler 1992: 100). It acts as a buffer to formal labor markets, which tends to depress the general wage level by acting as a reserve army of labor. Workers and owners in this sector include small-scale operators and petty capitalists in food processing, garments, shoes, and household goods, self-employed "footloose" vendors, and contract, casual, wage workers. PCP and the formal sectors are not compartmentalized as is often conveyed rather there is a symbiotic but asymmetric relationship between them. PCP persists due to the inadequate scale of accumulation, an agrarian crisis compelling rural residents to migrate, and the sustained demand for low-cost production and urban services by the formal sector. It suggests that contemporary capitalism as it operates in India in the larger global system reproduces the PCP rather than dissolve it, as it should with growth.

The persistence of PCP is evident in the growing class of workers that fall under the unorganized sector. In the two surveys undertaken by the National Sample Survey Organisation (NSSO) in 2004-05 and 2011-12, informal employment was 91.9 and 92.7% of total respectively (Table 4). Aside from the fact that less than 1 job for every 100 is informal, high economic growth has done little to reduce the size of the informal employment. Quite the contrary, informal employment share increased. What is striking is still the high share of informal employment within the organized sector, even though the share fell from 54.6 to 48%. If informal employment in the organized sector fell, while informal employment in the unorganized sector remained virtually unchanged then we can infer that there was informal employment growth but one that is characterized by precarious jobs

Table 4: The Persistence of the Informal Sector (% Employment)

	Organized		Unorganized		Total	
	2011-12	*2004-05*	*2011-12*	*2004-05*	*2011-12*	*2004-05*
Formal	45.4	52.0	0.4	0.3	8.1	7.3
Informal	54.6	48.0	99.6	99.7	91.9	92.7
Total	17.3	13.0	82.7	87.0	100.0	100.0

Source: Niti Aayog in Economic Survey 2014-15, p. 136.

The PCP sector provides cheap labor, cheap inputs, and purchases both inputs and finished goods from the formal sector. In this sense notwithstanding the production conditions in the

informal sector it is tied to the formal sector in various ways. These links ought to be growth inducing since the formal sector is doing reasonably well, output-wise. As domestic and multinational firms fine-tune their production and outsourcing arrangements, the cost-competitive PCP sector is integrated into the circuits of capital and global value chains, thus indicating that PCP is part of contemporary capitalism. For example, the heavily internationalized IT service sector in India, through trickle-down effects has also generated informal workers such as domestic help, security guards, gardeners, and drivers under a contract system in a formal setting. The multiplier effect of the IT industry shows that for every job created in the IT industry eight others are created in the non-IT spheres (NASSCOMDeloitte 2008). Irrespective of whether this is an accurate multiplier, the point remains that formal growth contributes far more to informal growth. While these service jobs are better than no jobs, the structural aspect of the reproduction of the PCP in the wider capitalist economy is firmly maintained suggesting that late capitalism displays very different trajectories under growth conditions.

Under a deregulated economic environment there is no compulsion in India or anywhere for that matter to introduce additional costs on current structures of accumulation for fear of losing their competitive edge, although the politics of wage bargaining and relative labor scarcities in specific sectors could reduce the power of capital. That said the PCP sector sustains the accumulation-oriented formal sector through its flexibility. Workers in vast slums across the developing world support accumulation with low cost production (Davis 2006). For example, self-employment through subcontracting is linked to the formal market in the textile and garment industries in India, whose output is often sold under international brand names (Samaddar 2009: 40). For all practical purposes then PCP is neither a source of capital accumulation nor a provider of secure jobs but structurally it enables the formal sector to capitalize on low cost of labor and other inputs.

The place of the informal sector in the wider capitalist system is not unique to India or other developing countries. Increasingly even the OECD economies exhibit the presence of informality not in the sense of being unregulated but rather in terms of the precariousness of jobs. With some exceptions, most OECD countries between 2007-14 have experienced an increase in part-time and temporary work (OECD 2015). This tendency for wage compression due to increasing contingent workforce has been accompanied by worsening inequality. For example, income shares in the US for the top ten percent was 49.9% in 2014 compared to 40% in 1992 (Saez 2015). While inequality has been established by differential rates of return to

capital and labor or rate of growth of capital and income (Piketty 2014), the growing contingent workforce acts to put workers on the defensive in the ACC formal sector. At the same time the informal sector in LCCs becomes a structural precondition for ensuring accumulation in the formal sector globally without itself experiencing dynamic accumulation.

5. Conclusion

This paper examined jobless growth in India in recent times. Going beyond the technical aspects of jobless growth this paper situated the problem as part of uneven and combined development, specified as compressed capitalism. It is the lateness to industrialization and globalization that contributes to the difficulties of transforming surplus labor into relative scarcity. Global competition, cheapening capital, and business strategy of ensuring market viability drive costs down, particularly the share accruing to labor. The rising capital intensity in Indian industries and accompanying joblessness is a direct outcome of this. The growing informalization of the formal sector through contract, part-time, and temporary (casual) work suggests that jobless growth is also political, whereby capital in a deregulated environment drives a wedge between it and labor on a stronger footing. Structurally jobless growth can be also seen working indirectly via the PCP sector. The PCP acts to absorb people who cannot make it to the formal sector. Agrarian crisis and the limited ability of the urban industrial sector to create meaningful jobs gives rise to the vast PCP sector, which is effectively non-accumulating. Yet there is a tenuous relationship between the informal and formal, with the former providing cheap inputs, including labor and in a limited way acting as a market for the latter. The problem is structurally a low-cost PCP is crucial for the formal sector even though a dynamic PCP could widen and deepen the market for goods and services of the formal sector.

In the end the classical transition anticipated from successful primitive accumulation to capitalist industrial expansion appears to have come to a dead end since jobs growth everywhere is selective and in India is heavily circumscribed by its specific form of articulation with the global economy. Notwithstanding the opportunities, the world market offers India's formal sector such as growth and the promise of growth, it is unable to generate high volume of quality jobs due to capital and skill bias, while the informal sector continues to reproduce itself with low quality jobs without experiencing substantial economic dynamism. The paradox is that there is a high growth economy characterized by high and rising incomes for the upwardly mobile middle classes and an increasing technological complexity in the structure of production, thereby limiting employment and widening income gaps.

By some estimate India's working age population is expected to grow by 125 million over the next decade (Economist 2013).[7] How India is expected to absorb and accommodate them is anyone's guess, given the persistence of the PCP sector. State intervention, planning, and high economic growth do not appear to make a dent in what Sanyal (2007: 249) calls a "dark space". Capitalist dynamics at the global level also do not portend a favorable future.

[7] Economist 2013. Wasting Time: India's Demographic Challenge, May 11, 2013, http://www.economist.com/news/briefing/21577373-india-will-soon-have-fifth-worldsworking-age-population-it-urgently-needs-provide, Accessed 10/14/2014.

References

Aronowitz, S. and DiFazio, W. (2010). The Jobless Future, Minneapolis: University of Minnesota Press.

Banerjee, N. (2004). Unraveling the Informal Sector, *Labour, Capital and Society*, 37 (1/2): 2845.

Bardhan, P. (2006). The Political Economy of Development in India. Delhi: Oxford University Press.

Biswas, P.K. (2011). Exports, Imports and Contracting of Registered Manufacturing Units (2009-10), in NISTADS, Science & Technology (S&T) and Industry, New Delhi: NISTADS (unpublished report).

Burger, J.D. and Schwartz, J.S. (2015). Productive Recessions and Jobless Recoveries, *Contemporary Economic Policy*, 33 (4): 636-648.

Cai, F. (2008). Approaching a Triumphal Span: How Far Is China Towards its Lewisian Turning Point? UNU-WIDER, Helsinki, Research Paper No. 2008/09.

Castells, M., and A. Portes. (1989). World Underneath: The Origins, Dynamics, and Effects of the Informal Economy, in A. Portes, M. Castells, and L.A. Benton (eds.), The Informal Economy: Studies in Advanced and Developing Countries, Baltimore: Johns Hopkins University Press, pp. 11–40.

Chakraborty, A. (2015). Reforming Labour Markets in States: Revisiting the Futility Thesis, *Economic and Political Weekly*, L (20): 52-57.

Chandrasekhar, C.P. (2007). Unravelling India's Growth Transitions", *Frontline*, 24 (18): 8-21.

Chowdhury, S. (2011). Employment in India: What Does the Latest Data Show? *Economic and Political Weekly*, XLVI (32): 23-26.

D'Costa, A.P. (2003) Uneven and Combined Development: Understanding India's Software Exports, *World Development*, 13 (1): 211-226.

D'Costa, A. P. (2004). "The Indian Software Industry in the Global Division of Labor" in D'Costa, A.P. and Sridharan, E. (eds.) *India in the Global Software Industry: Innovation, Firm Strategies and Development* (Basingstoke: Palgrave Macmillan), 1-26.

D'Costa, A.P. (2005). The Long March to Capitalism: *Embourgeoisment, Internationalization, and Industrial Transformation in India*, Basingstoke: Palgrave Macmillan.

D'Costa, A. P. (2011). "Geography, Uneven Development and Distributive Justice: The Political Economy of IT Growth in India." *Cambridge Journal of Regions, Economy and Society*, 4 (2): 237–51.

D'Costa, A. P., and Bagchi, A. K. (2012). "Transformation and Development: A Critical Introduction to India and China." In Bagchi, A. K. and D'Costa, A. P. (eds.), *Transformation and Development: the Political Economy of Transition in India and China* New Delhi: Oxford University Press (pp. 1–38).

D'Costa, A.P. (2014). "Compressed Capitalism and Development: Primitive Accumulation, Petty Commodity Production, and Capitalist Maturity in India and China," *Critical Asian Studies*, 6 (2): 317-344.

D'Costa, A.P. (2015). Compressed Capitalism, Employment, and the Structural Limits of the State, Paper presented at the 2nd Interdisciplinary Conference on Contemporary India "Instruments of Intervention: Capitalist Development and the Remolding of the Indian State", University of Melbourne and Institute of Development Studies, Kolkata, IDSK December 1011, 2015.

D'Costa, A.P. (2016). "Compressed Capitalism and the Fate of Indian Development," in Sita Venkateswar and Sekhar Bandyopadhyay (eds.) *Globalization, Economy and Challenges of Development In Contemporary India*, New Delhi: Springer, pp. .

D'Costa, A.P. and Chakrabarti, A. (Editors) (2017). *The Land Question in India: State, Dispossession, and Capitalist Transition* (Oxford: Oxford University Press.

Damodaran, S. (2015). The Chimera of Inclusive Growth: Informality, Poverty and Inequality in India in the Post-Reform Period, *Development and Change*, 46 (5): 1213-1224.

Datt, R. (1994). Jobless Growth: Implications of New Economic Policies, Indian Journal of Industrial Relations, 29 (4): 407-427. Davis, M. (2006), *Planet of Slums*, London: Verso.

Economic Survey, Government of India, (2015). Economic Survey 2014-15, New Delhi: Ministry of Finance, http://indiabudget.nic.in/survey.asp, Accessed 03/05/2016.

Ford, M. (2015). The Rise of the Robots: Technology and the Threat of a Jobless Future, New York: Basic Books.

Gilbert, A. and Gugler, J. (1992). *Cities, Poverty and Development: Urbanization in the Third World*, Oxford: Oxford University Press.

Gopalan, R. and Singhi, M.C. (2015). Services Growth in India, *Economic and Political Weekly*, L (41): 81-87.

Harriss-White, B. (2014). Labour and Petty Production, *Development and Change*, 45 (5): 9811000.

Hoogvelt, A. (2001). Globalisation and the Postcolonial World: The New Political Economy of Development, Baltimore, MD: Johns Hopkins University Press.

Jamalpuriya, A. and Chaudhury, A. (2011). Contractual Labour in the Indian Manufacturing Industries, in NISTADS, Science & Technology (S&T) and Industry, New Delhi: NISTADS (unpublished report).

Kannan, K.P. and Raveendran, G. (2009). Growth Sans Employment: A Quarter Century of Jobless Growth in India's Organised Manufacturing, *Economic and Political Weekly*, 44 (10): 80-91.

Ministry of Labour and Employment, Government of India 2002. "Second Report of the National Commission on Labour 2002." Delhi: Ministry of Labour and Employment.

Nagaraj, R. (2007). "Are Labour Regulations Holding up India's Growth and Exports? A Review of Analysis and Evidence." Paper Prepared for National Commission for Enterprises in the Unorganised Sector (NCEUS), New Delhi.

Narayan, G. B. and Vashist, P. (2008). "Determinants of Competitiveness of the Indian Auto Industry." Indian Council for Research of International Economic Relations, Working Paper No. 201 (January).

NASSCOM (2016). Indian IT-BPM Overview, http://www.nasscom.in/indian-itbpo-industry, Accessed 03/13/2016.

NASSCOM-Deloitte (2008). Indian IT/ITES Industry: Impacting Economy and Society 200708, New Delhi: NASSCOM Foundation.

National Commission for Enterprises in the Unorganised Sector (NCEUS) (2009). *The Challenge of Employment in India: An Informal Economy Perspective, Volume I Main Report*. New Delhi: National Commission for Enterprises in the Unorganised Sector, Government of India.

National Institute of Science and Technology and Development Studies (2011). Science & Technology (S&T) and Industry, New Delhi: NISTADS (unpublished report).

New York Times (1935). Industry Adopts Planks for New Deal War, New York: New York Times, December 6, 1935.

OECD 2015. OECD Employment Outlook (2015), OECD Publishing, Paris.

Piketty, T. (2014). *Capital in the Twenty-first Century*, Cambridge, MA: Harvard University Press.

Rifkin, J. (1995). End of Work: The Decline of the Global Labor Force and the Dawn of the Post-Market Era, New York: Putnam and Sons.

Saez, E. (2015). Striking it Richer: The Evolution of Top Incomes in the United States (Updated with 2014 preliminary estimates), UC Berkeley, June 25, 2015, http://eml.berkeley.edu/~saez/saez-UStopincomes-2014.pdf, Accessed 03/14/2016.

Sahu, P.P. (2010). Subcontracting in India's Unorganized Manufacturing Sector: A Mode of Adoption or Exploitation?, *Journal of South Asian Development*, 5 (1): 53-83.

Samaddar, R. (2009). "Primitive Accumulation and Some Aspects of Work and Life in India in the Early Part of the Twenty First Century." *Economic and Political Weekly*, XLIV (18): 33– 42.

Sanyal, K. (2007). *Rethinking Capitalist Development: Primitive Accumulation, Governmentality and Post-Colonial Capitalism*, New Delhi: Routledge India.

Summers, L. (2015). Persistent Jobless Growth: Top 10 Trends, in Outlook on the Global Agenda 2015, World Economic Forum, http://www3.weforum.org/docs/GAC14/WEF_GAC14_OutlookGlobalAgenda_Report.pdf, Accessed 02/15/2016.

Thomas, J.J. (2012). India's Labour Market During the 2000s: Surveying the Changes, *Economic and Political Weekly*, XLVII (51): 39-51.

Thomas, J.J. (2013). Explaining the 'Jobless' Growth in Indian Manufacturing, *Journal of the Asia Pacific Economy* 18 (4): 673-692.

UNCTAD (1991). World Investment Report 2015 – The Triad in Foreign Direct Investment, Geneva: UNCTAD, http://unctad.org/en/pages/PublicationArchive.aspx?publicationid=622, Accessed 03/12/2016.

UNCTAD (2015). World Investment Report 2015 - Reforming International Investment Governance, Geneva: UNCTAD, http://unctad.org/en/pages/PublicationWebflyer.aspx?publicationid=1245, Accessed 03/12/2016.