

Krueger, Anne O.

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Working Paper No. 230

# The Missing Middle

**Anne O. Krueger**

**January 2009**



**INDIAN COUNCIL FOR RESEARCH ON INTERNATIONAL ECONOMIC RELATIONS**

## Foreword

One of the myths about India's growth experience is that the services sector can provide the impetus to sustain rapid and inclusive growth. Given the size of our workforce, the numbers engaged in low productivity jobs in the informal sector and the number entering the working population, it is clear that both manufacturing and agriculture will have to play an increasing role in generating employment intensive growth. It is in this context that this paper by Professor Krueger makes an important contribution. I am sure that readers will find that its policy recommendations are sharply focused on some of the more critical issues facing the Indian economy.



**(Rajiv Kumar)**  
Director & Chief Executive

January 22, 2009

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**The Missing Middle**

Anne O. Krueger

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Though recent economic growth in India has increased productivity and living standards significantly, the need for more growth and more reform remains. Rapid growth of unskilled labor-intensive manufacturing combined with growth of productivity in agriculture is necessary to enable a more inclusive growth that raises living standards in rural areas and in non-agricultural employment of relatively unskilled labor. India's comparative advantage in services does not preclude the need for a rapid-manufacturing-growth phase of development due to the service sector's low contribution to output and its demand for educated and skilled, as opposed to unskilled, workers. The failure of manufacturing output and employment to grow more rapidly can be attributed to (1) regulations governing enterprises in the private sector and (2) regulations covering conditions of employment of labor. Reducing the barriers to entry of unskilled labor into manufacturing and relaxing some of the most restrictive labor laws would increase prospects for even faster growth than current high rates.

## THE MISSING MIDDLE<sup>1</sup>

Anne O. Krueger

### 1. Introduction

India's growth performance and economic prospects have been transformed over the past fifteen years. The number of positive developments is huge. By the beginning of the 21<sup>st</sup> century, India's rate of economic growth was already among the ten highest in the developing world. And, since 2000, growth has accelerated even further. Revised data for the year 2005-06 indicate that the growth rate exceeded 9 percent, so that the average rate of growth has been around 8 percent over the past four years. Poverty rates were already estimated to have fallen significantly in the 1990s; and the rapid growth of recent years surely has been accompanied by further reductions in absolute poverty, although data are not yet available for more recent years (see Dutt and Ravallion 2002 for a survey of the impact of growth on poverty).

India's accelerated growth rate, and with it the higher productivity of the economy and improved living standards, is a cause for celebration. After the decades prior to 1980, when growth of per capita income was little over 1 percent annually, the marked upward shift

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<sup>1</sup> Paper to be presented at India Conference, Stanford Institute for Economic Policy Research, June 7-9 2007. The research for this paper was primarily undertaken when I was a visiting professor at ICRIER in January-February 2007. I am grateful Rajiv Kumar for all his support and to Ali Mehdi for valuable research assistance. T.N. Srinivasan made extremely useful comments on an earlier draft of this paper; neither he nor ICRIER is responsible for the views expressed herein.

in the rate – to over 4 percent per annum (and 7 percent in 2005-6) has been dramatic. Observers who earlier referred to rapid growth in China and Southeast and East Asia now routinely add India to the list of rapidly growing countries. The term “BRICs” (Brazil, Russia, India and China) is often used to indicate the new and significant role these emerging economies play in the international economic system.

And, just as there can be no doubt about the successful and dramatic acceleration of growth in India, there is no question but that major reforms in economic policy, first relatively mild in the 1980s, and then much more dramatic in the 1990s, were a key ingredient for that success.<sup>2</sup>

Some believe that the reforms already undertaken have laid the basis for sustained growth, which will continue and possibly even accelerate. Certainly, there is good reason to believe that growth will continue at rates significantly above those realized in the first quarter century of growth after 1947 (see Table 1). And, noting the enormous success of Indian software, back-office-processing, and other service industries, some have even suggested that Indian growth is and will continue to be unusual in that India was, in significant part, able to “skip”, or “jump over” the usual stage that comes when the manufacturing sector’s relative importance rises in the growth process.

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<sup>2</sup> See Acharya, 2006, for an account of the reforms.

Table I. Growth of Major Macroeconomic Aggregates, 1951/52 to 2005-6

(average percent per year)

	1951/52- 1960/61	1961/62- 1970/71	1971/2- 1980/81	1981/82- 1990/91	1992/93- 2000/01	2000/01- 2005/06
Agriculture	3.1	2.5	1.8	3.6	3.2	2.1
Industry	6.3	5.5	4.1	7.1	6.4	6.9
Services	4.3	4.8	4.4	6.7	7.8	8.0
GDP (factor cost)	3.9	3.7	3.2	5.6	6.1	6.3
Per Capita GDP	2.0	1.5	0.8	3.4	4.1	4.6

Sources: Acharya, 2006, P. 182 for years to 2000/01; and Government of India, Ministry of Finance, Economic Survey 2005-2006 for 2000/01-2005/6, P. 4. The average for the 6 years is the simple average of the annual growth rates.

The purpose of this paper is to provide evidence, and argue, that stunning as India's success is, the potential – and need – is for still more reform and more rapid growth. 8 percent is a good rate of growth, but many are destined needlessly to be left behind for years to come if current trends persist: if growth in output and employment of unskilled-labor-intensive manufacturing industries remains on its current trajectory, India is at risk of bifurcating the economy, with those benefiting from growth and those left out. While services output and employment have grown rapidly, the failure of manufacturing output and employment to grow more rapidly has left too many bottled up in the rural sector. That has resulted in a slower rate of farm consolidation than might have occurred, and in slower

growth of overall labor productivity than would have taken place if the shift of low-productivity marginal farmers to unskilled-labor-intensive manufacturing jobs had been more rapid.

There is a “missing middle”: rapid growth of unskilled labor-intensive manufacturing which, combined with more rapid growth of productivity in agriculture (which would in part automatically result from more rapid shifting of workers to labor-intensive manufacturing), would enable a more inclusive growth with accelerated increases in living standards in rural areas and in non-agricultural employment of relatively unskilled labor.

While attention has naturally focused on the great Indian successes to date, the transformation started from a very low base. Huge numbers still live in poverty. Almost 60 percent of the population still resides in rural areas, and probably more than half depend on agriculture for their major source of income. Then, too, growth itself is naturally creating strains: everyone is aware of the pressures on power, transport, and other infrastructural capacity. There are urgent calls for upgrading the skills of the labor force and the quality of education at all levels. And, much as many reforms have been undertaken, there are still many remnants of the old command-and-control system.

Optimists in India rightly point to the country’s enormous potential. Among India’s important economic assets is the so-called “demographic dividend”: India’s labor force will still be rising, and the burdens of supporting the aged will not be significantly increasing for the next several decades. That stands in sharp contrast to the industrial countries, to China, and to most of East Asia. But to turn the “demographic dividend” into an actual advantage will require measures to enable the Indian economy to increase productive employment for unskilled labor at a much more rapid rate than it has done, even since the reforms.



A first section briefly reviews the overall economic performance of the Indian economy, highlighting the existence of the missing middle. A second section then examines the factors that seem to account for the failure of unskilled labor-intensive manufacturing to grow more rapidly. A final section then outlines some of the problems that would be ameliorated if unskilled labor-intensive jobs grew at rates comparable to those experienced by other labor-abundant countries in their early stages of growth.

## 2. Indian Economic Growth

When one hears discussion of India as a successful rapidly-growing emerging market today, it is hard to remember how poor people were when India attained independence. The country was 80 percent agricultural, and per capita incomes were among the lowest in the world (far below levels of most African countries). There was little industry, and it represented a small fraction of economic activity – about 13 percent in 1950/51. Savings were around 5 percent of GDP, and exports consisted almost entirely of agricultural commodities, while imports were the main source of manufactured goods both for consumption and for investment.

Indian economic growth is usually divided into several periods. Three stand out: first, the period from 1947 to about 1980, when growth was relatively slow and policies were aimed at import substitution and “self-sufficiency”, with government taking a lead role in the economy and controlling much private sector activity. The period was generally characterized by macroeconomic stability, in the sense of low inflation and fiscal discipline, although “foreign exchange shortage” and fluctuations in agricultural output due primarily to weather variations led to output volatility.

The second period, starting around 1980, macroeconomic policy became more expansionary, some controls on the economy were removed, and the growth rate accelerated.<sup>3</sup> Underlying economic policies toward the private sector and the role of government in the economy were basically unchanged, although some efforts were made to reduce the “inefficiency” of controls.

By 1991, however, the unsustainability of the 1980s policy stance became evident, as a balance of payments crisis ensued. At that time (unlike an earlier crisis in 1966), reforms were undertaken in a number of policy arenas that cumulatively have changed the overall thrust of economic policy as well as the structure and growth trajectory of the Indian economy. That third period continues to the present day, as indeed, the growth rate has accelerated over the past few years.

Table 1 gives some data. Real GDP grew between 3 and 4 percent annually from the early 1950s through the 1970s; with population growth at around 2 percent, that implied an annual rate of percapita income growth of between 1 and 2 percent. Growth then accelerated to average 5.6 percent in the decade of the 1980s and to 6.1 percent in the 1990s, if the crisis year of 1991/92 is omitted from the calculations. Growth has accelerated still further thus far in the 21<sup>st</sup> century, averaging 6.3 percent through 2005/6, with every prospect that growth in 2006/7 will raise that average still further.

Reforms have encompassed a wide range of government policies. The foreign trade regime was significantly overhauled, as virtually all quantitative restrictions on imports have

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<sup>3</sup> Virmani (2005) finds no statistically significant difference between growth rates in the 1980s and 1990s, although all observers agree that the 1980s growth, fueled as it was by large fiscal deficits and current account deficits, was unsustainable.

been removed, most tariffs have been significantly reduced,<sup>4</sup> and the exchange control regime for current account transactions has been dismantled. Monetary policy has shifted toward more reliance on incentives and prudential regulation, although there remains a considerable amount of directed credit in the system. Many controls over private sector activity have either been entirely eliminated (including requirements for multiple licenses for undertaking virtually any economic activity<sup>5</sup> – see the discussion below about the “organized sector”) or at least significantly reduced in scope, and there has been increased recognition of the role of the private sector on the part of politicians and officials.

Even small-scale reservation (SSR), a hallmark of earlier policies and one to which attention returns below, has been significantly reduced in coverage. The role of the Indian government in controlling private sector activity has been considerably reduced, and that reduction has been an important contributor to the improved overall performance of the Indian economy.

Two types of controls, however, have hardly been touched. These are the regulations governing the employment of labor in the “organized sector” of the economy and the various bureaucratic approvals that “organized” businesses must obtain. We return to these “missing

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<sup>4</sup> The highest Indian tariff is now 35 percent. This contrasts with tariffs of upwards of 200 percent (with quantitative restrictions as well) prior to the start of reforms. Nonetheless, tariffs are still high by Asian standards.

<sup>5</sup> There was even a “capacity license”, which stated the enterprise’s output “capacity”. Firms were initially prohibited from producing more than their licensed capacity, then they were permitted to produce a specified proportion over the licensed amount, and finally, the system was abandoned.

reforms” below, as those regulations undoubtedly account for a significant, if not a predominant, part of the “missing middle”.

During the first two periods, until 1991, Indian economic growth appeared to follow a fairly normal path, under which growth, while slow, was shared between the three major sectors – agriculture, industry and services – of economic activity. An overview of this pattern can be seen in Table 1. After the early years in which agriculture appeared to constitute a significant bottleneck, agriculture performed relatively well as the green revolution enabled a significant increase in agricultural productivity and output.

And, as happened in most other countries (see Table 2 for comparative data), industry grew at a rate above agriculture and services. So, while real GDP grew at around 3.5-4 percent annually, the industrial growth rate was above 5 percent. Even in the 1980s, when real GDP growth began accelerating, industrial output grew at 7.2 percent, services at 6.7 percent, and agriculture at 3.7 percent (overall growth averaged 5.6 percent during this period).

Table 2 Behavior of Sectoral Shares as Economies Grew, 1820-1992

	U.S.	France	Germany	UK	Japan	China	Russia
Share of Agriculture in GDP							
1820	70.0	n.a.	n.a.	37.6	n.a.	n.a.	n.a.
1870	50.0	49.2	49.5	22.7	70.1	n.a.	n.a.
1913	27.5	41.1	34.6	11.7	60.1	n.a.	n.a.
1950	12.9	28.3	22.2	5.1	48.3	77.0	46.0
1992	2.8	5.1	3.1	2.2	6.4	58.6	17.0
Share of Mining, Manufacturing, Construction and Utilities							
1820	15.0	n.a.	n.a.	32.9	n.a.	n.a.	n.a.
1870	24.4	27.8	28.7	42.3	n.a.	n.a.	n.a.
1913	29.7	32.3	41.1	44.1	17.5	n.a.	n.a.
1950	33.6	34.9	43.0	44.9	22.6	7.0	29.0
1992	23.3	28.1	37.8	26.2	34.6	22.0	36.0
Share of Services							
1820	15.9	n.a.	n.a.	29.5	n.a.	n.a.	n.a.
1870	25.6	23.0	21.8	35.0	n.a.	n.a.	n.a.
1912	42.8	26.6	24.3	44.2	22.4	n.a.	n.a.
1950	53.5	36.8	34.8	50.0	29.1	16.0	25.0
1992	74.0	66.8	59.1	71.6	59.0	20.0	47.0

Source: Maddison (1995), P. 39.

In the most recent period, however, the growth of services has accelerated markedly while that of the manufacturing sector has slowed from its 1981/81-1991/92 pace. With more rapid overall growth, one would have expected an acceleration of growth within the industrial sector, but instead it has lagged well behind what might have been expected. To confound matters further, the agricultural growth may have decelerated (weather fluctuations in India are still sufficiently important that it is difficult to disentangle the effects of weather vagaries from longer term trends).

Historically, all countries embarking on rapid growth have initially and for a prolonged period of time experienced an increased share of output and employment in manufacturing and other industrial activities. At first, this increased share came despite rising populations in agriculture but, as growth continued, the share of the population in agriculture declined, and later the agricultural population declined in absolute numbers as well. As the economic historian, Rondo Cameron, noted

“One of the most obvious differences between preindustrial and modern industrial societies is the greatly diminished relative role of agriculture in the latter. The counterpart of its diminished importance, however, is the increased productivity of modern agriculture...During the period of industrialization proper, extending roughly from the beginning of the eighteenth century (in Great Britain) to the first half of the twentieth century, the characteristic feature of the structural transformation of the economy was the rise of the secondary sector...observable in the proportion of both the labor force employed and the output.” (Cameron, P. 163)

Cameron notes that shifting workers from agriculture to industry was itself growth-enhancing as productivity in manufacturing was typically higher than in agriculture; simultaneously, agricultural productivity had to rise in order to release workers and that meant that average productivity in agriculture rose.

Table 2 gives data on the shares of agriculture, manufacturing, and services in other economies during their rapid growth periods. The 19<sup>th</sup> century pattern has been followed by more recent rapidly-industrializing economies. In South Korea, for example, the share of agriculture, forestry and fisheries in GNP and employment fell respectively from 43.1 and 63.4 percent in 1963 (the start of Korea's rapid growth years) to 14.9 and 34.0 percent in 1980 and 7.1 and 13.6 percent in 1994 (Moon and Sul, P. 470).

Table 3 provides evidence to the same effect for the recent growth of several Asian countries for the decades of the 1970s, 1980s and 1990s. As can be seen, even in the 1990s, the only developing Asian countries that were sufficiently advanced to experience a declining share of employment in manufacturing were Taiwan and South Korea. But the increase in the share of manufacturing employment in India was a miniscule 0.3 per cent – far below what other countries experienced during their rapid growth years.

Table 3. Change in the Sectoral Shares of employment

Country	1971-80			1980-81			1990-2000		
	Ag	Mfg	Serv.	Ag	Mfg	Serv	Ag	Mfg	Serv
R of Korea	-14.4	8.3	6.0	-17.3	5.0	12.9	-7.6	-6.7	14.5
Taiwan,China	-15.6	11.1	3.7	-6.6	1.7	8.9	-5.0	-4.1	9.2
Thailand	-1.4	0.3	1.7	-10.5	3.2	7.3	-15.3	4.3	10.2
Malaysia	-14.8	6.1	9.9	-10.4	4.6	6.6	-7.9	2.9	3.0
Philippines	-1.4	-0.7	2.1	-6.2	-0.6	6.7	-7.8	0.3	7.6
Indonesia	n.a.	n.a.	n.a.	-2.7	1.3	1.1	-9.9	2.8	7.1
India	-5.5	1.8	3.0	-4.6	0.0	3.4	-3.6	0.3	2.4

Source: Mazumdar, 2006

The estimated Indian elasticity of employment with respect to real GDP was 0.53 for 1977-78 to 1983, 0.41 for 1983 to 1993-4, and 0.15 for the period from 1993-4 to 1999-2000.<sup>6</sup> For manufacturing alone, the figures for the same periods were 0.67, 0.33, and 0.26. Indeed, in the 9<sup>th</sup> Five Year Plan, an elasticity of employment with respect to manufacturing output

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<sup>6</sup> Government of India, 2001, Table 3.1, P. 46. The elasticity of employment with respect to GNP is a descriptive statistic: it is the outcome of changes in both the supply of, and the demand for, labor. In countries (such as Japan) where the labor force is no longer growing and there is little unemployment, the elasticity of employment with respect to output must be close to zero, and productivity growth must carry the entire burden of economic growth. But, in countries with large rural populations, it is to be expected that the elasticity of employment with respect to output would be considerably higher.



of 0.25 was used, and the Task Force estimated that, going forward, the elasticity would be 0.22. With elasticities such as these, manufacturing is unlikely to make a major contribution to employment growth. Even in business services, the Task Force estimated that the elasticity of employment with respect to output was only 0.73, and would decline to 0.50 going forward.

These numbers only provide a description of the average relationship between output and employment growth. But should these averages continue to hold and if the Indian labor force grows at 2 percent annually (as it should with the “demographic dividend”), real GDP growth would have to be at least 10 percent to absorb new entrants, and even that would not enable a “normal” rate of shift of the labor force out of agriculture.

By World Bank<sup>7</sup> estimates, industrial output in India fell from 28 percent of GDP in 1990 to 27 percent of GDP in 2004. By contrast, Chinese industrial output rose from 42 to 46 percent of GDP over the same period. While there is nothing that says that the Indian economy should develop along the same lines as the Chinese, nor anything that indicates that the Chinese pattern is “optimal”, it is not more rapid growth of services in India that explains the difference: Indian services are estimated to have grown from 41 to 52 percent of GDP while Chinese services grew from 31 to 41 percent. The difference arises from the slower growth of industrial output and employment in India than in China.

Moreover, not only has manufacturing output not risen as rapidly as might have been expected, employment in the manufacturing sector has grown very slowly. This can be seen in Table 4. Industrial and manufacturing output has increased (as seen in Table 1), but it has

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<sup>7</sup> World Bank (2006), Table 4.1, pp. 194-5.

come about through increasing the capital intensity of manufacturing industry, and few additional workers have been hired. Indeed, overall industrial employment in the 1994-2000 (post reform) period grew at an average annual rate of only 0.98 percent – below the rate of growth of the labor force.

Table 4 Estimate of Total and Organized Sector Employment

Sector	Employment (millions)				Growth Rate (% per year)	
	1983	1988	1994	1999-00	1983-94	1994-2000
Population	718	790	895	1,004	2.12	1.93
Labor Force	309	349	382	406	2.05	1.03
Employment	303	324	374	397	2.04	0.98
Of which: Organized Sector Employment:						
Total	24	26	27	28	1.20	0.53
Public sector	16	18	19	19	1.52	-0.03
Private sector	8	7	8	9	0.45	1.87

Source: Government of India, Planning Commission, Report of the Task Force on Employment Opportunities, July 2001, P. 35.

Note: growth rates computed from data rounded to the nearest 10,000.

Table 5 gives additional data. Although industrial output has grown at an average annual rate of over 6 percent, employment in production activities grew at only 2.8 percent over the period since 1983, and at 2.3 percent in the years up to 2000. Although later data are sparse,

there is little to indicate that the rate of growth of employment in the industrial sector has accelerated. And the sluggish growth of employment is even more dramatic in the “organized sector”, as seen in Table 4. Enterprises with more than 10 workers are supposed to register with the government, and are regarded as the “organized sector” of the economy. The “organized sector” is subject to government regulations regarding many aspects of economic activity (including more stringent labor regulation) that do not apply to firms outside the sector. Enterprises that are not “organized” need not be “informal” if they are sufficiently small; but, in fact, it is widely thought that there are many enterprises with more than 10 workers that are not “organized”.

Table 5. Structural Changes in Employment According to  
Weekly Status

	Millions of Workers			Annual Average Percent Growth		
	1983	1993-4	1999-2000	1983-93/4	93/4-99/00	1983-2000
Total labor force	263	346	368	2.6	1.0	2.0
Ages 15-59	229	311	334	2.9	1.2	2.1
Agricultural	142	183	181	2.4	-0.2	1.5
Cultivators	79	96	90	1.8	-1.0	0.8
Other farmers	8	14	14	5.3	0.2	3.4
Ag. Laborers	49	65	69	2.7	1.1	2.1
Nonagricultural	86	122	141	3.3	2.4	3.0
Production	43	59	68	3.1	2.3	2.8
Service	10	11	14	1.5	3.6	2.3
Unpaid, self-employed	122	160	166	2.6	0.6	1.9

Source: Bhalla, P. 2.

The failure of manufacturing employment of unskilled workers to grow has, in turn, resulted in the continuing high share of rural population and agricultural employment in the total. As can be seen, the percentage point shift into services in China was about the same as in India; but Chinese agricultural employment fell much more rapidly than Indian, as manufacturing output and employment grew much more rapidly.

This phenomenon raises two questions. The first is whether the Indian pattern is simply the result of India's comparative advantage, so that India could "skip" the rapid-manufacturing-growth phase of development. The second is why Indian manufacturing employment has grown so slowly.

### 3. Indian Comparative Advantage

In principle, it is conceivable that India's comparative advantage could be such that India should skip the manufacturing phase that has accompanied other countries' economic development. The success of services, and their rapid growth, has suggested this hypothesis to many observers.

But the fact is that, despite its great success, the rapidly-growing services (finance, insurance, real estate and business services) accounted for only around 12 percent of output in 2000-2001.<sup>8</sup> Their share of employment would have been significantly smaller.

Moreover, most of the rapidly growing business services – BPO, software development and engineering, and the like – primarily employ educated and skilled workers and are unlikely to generate very much incremental demand for unskilled labor.<sup>9</sup>

In the development process historically, relatively unskilled farm workers migrated to the cities, and found initial employment in manufacturing in jobs with little skill content. The experience thus gained enabled many to "graduate" to somewhat more skilled jobs, while their children's educational attainment in the urban areas exceeded that of the migrants.

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<sup>8</sup> Ministry of Finance, Economic Survey 2003, Table h3.

<sup>9</sup> Even call centers require personnel with a good foreign language (predominantly English) and enough technical education to respond to callers' queries.

Given the vast numbers of those in low-productivity occupations in rural areas, it seems evident that growth enabling a much more rapid absorption of unskilled labor into more productive activities should be part of India's normal growth process.

In turn, the rapid development of unskilled-labor intensive manufacturing would almost surely be associated with the rapid development of export markets for part of the output. As the Chinese success has indicated, the market is there, and there is no reason to believe that Indian companies producing unskilled labor-intensive products could not compete internationally given the appropriate setting.

Most observers note that, over the next quarter century or so, India will have the advantage of a "demographic dividend". That is, at a time when much of the rest of the world (including China) will experience rapid population aging and a slowly-growing or even declining labor force, India should benefit significantly from the fact that her labor force will grow both as a percentage of the population and absolutely. By the mid-century this advantage will, on present trends, have evaporated, but in the interim it should serve to enhance India's development prospects. But, unless the factors leading to the failure of unskilled labor-intensive manufacturing output and employment to grow more rapidly are understood, and policies undertaken to change the trends significantly, the demographic dividend will instead result in more poor people left outside of the "good" industrial jobs.

#### 4. Why Manufacturing's Poor Relative Performance?

One of the problems of social science in general is that one cannot observe a "counterfactual". In particular, firms that were not started, or did not grow, cannot be seen. In consequence, much analysis of why manufacturing is "missing" must rely on experience and

lessons from other countries, and from a priori analysis of the environment in which economic activity has, or would have, taken place in India.

One of the properties of unskilled labor-intensive manufacturing seems to be that, for many products, mass production is economic: reports of Chinese factories with 10,000 workers are not uncommon, many of them undertaking similar repetitive tasks. As will be seen, India's business and labor regulation serves as a major deterrent to mass production: firms that have remained small have been rewarded, while it is not possible to produce the sorts of large quantities needed for competing internationally without being in the organized sector of the economy.

At the same time, historically it has been rare (but not unheard of) for a business to start up on a large scale. More frequently, many small entrepreneurs have started activities; a number of them are sufficiently successful to expand; and a few become large as they are enabled to learn their markets and improve productive efficiency with experience. In India's case, this consideration is important, because the provisions of the Small Scale Reservation (SSR) law provided large incentives for small scale enterprises to remain small.<sup>10</sup> At the same time, the regulations governing organized sector activities must have constituted, and

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<sup>10</sup> The SSR law was enacted in the early days of Indian planning: it listed a number of industries (over 1,000 at its peak) which were "reserved" for small-scale industries (existing producers in these industries that were larger than the legal maximum were grandfathered, but entry at large scale was prohibited. Small-scale firms in those industries were entitled to exemption from many of the legal requirements governing large-scale enterprises and to receive favorable treatment in taxes and other matters. But reservation implied that even highly successful firms could not grow. In practice, an entrepreneur could evade the law to some extent by putting names of relatives on businesses which were in fact jointly operated. Nonetheless, reservation surely inhibited the expansion of small scale firms and the development of exports of precisely the goods in which India's abundance of unskilled labor would have given her a comparative advantage. See Mohan (2001) for a full account.

almost certainly still constitute, a deterrent to expanding activities sufficiently to have to become organized.

There are two broad categories of factors that are almost certainly major contributors to the failure of manufacturing output and employment to grow more rapidly.<sup>11</sup> On one hand, there are the regulations governing enterprises in the private sector; on the other, there are regulations covering conditions of employment of labor. Each of these has no doubt contributed to the failure of unskilled labor-intensive manufacturing to grow more rapidly. And there is also very likely a strong interaction between the two: if labor regulations were less stringent, some firms would doubtless emerge and prosper that do not even begin in the current environment. But the fact of regulation of business is an added deterrent, and further reduces incentives for starting or expanding businesses.

Regulations Governing Business. In all countries, some registration is required of business activities, and regulation of some aspects of activity is deemed desirable. But when the processes for doing this are unnecessarily cumbersome or require considerable time, the effects on economic activity can be severe.

In the case of India, there is no question but that delays and unnecessary requirements raise the costs of all firms. But they are more onerous for small firms and potential new entrants, both because the costs are spread over a smaller volume of economic activity and

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<sup>11</sup> All knowledgeable observers of India will immediately protest that there is another factor, not considered here: infrastructure bottlenecks. While that has no doubt been a significant deterrent to start-ups and expansion of manufacturing activities, it is not the only one. Moreover, had the factors discussed in this section been more conducive to private economic activity, there would probably have been significantly more pressure to enhance infrastructure.



because small enterprises and potential new entrants have less experience of dealing with them.

The reforms since 1991 have reduced the burden of red tape and bureaucracy to a considerable extent, but India still ranks well down the list of countries whose regulatory climate is “business friendly”. In the World Bank’s rating of countries, India ranked 102 in 2005 and 88 in 2006 in the “ease of starting a business”. Eleven procedures to do so were necessary as of the end of 2006, while it required 35 days (down from 89 in 2004) and cost about three quarters of per capita income.<sup>12</sup> On those numbers, the World Bank ranked India 88 out of the 175 countries in terms of the difficulties of starting a business. It will be seen below that India has an unusual distribution of firms by size. One reason is surely the difficulty of starting a new business, which deters start-ups.

The very fact of multiple bureaucratic regulations and licenses surrounding economic activity was and is doubtless a negative. India’s panoply of licensing, controls and regulations certainly raised costs for existing firms, and probably disproportionately so for smaller firms and potential entrants.

No one in India doubts that the high costs of compliance with regulation are a major factor accounting for the failure of the organized sector to grow and for the large size of the unorganized sector. An indication of the extent of the difficulties (which are now far less than they were 15 years ago) may also be gleaned from the reports of the World Bank. Of 175 countries included in the World Bank’s Doing Business Report for 2006, India ranked overall 134<sup>th</sup>. This low ranking reflects a significantly less warm welcome and less friendly business

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<sup>12</sup> International Finance Corporation, “Doing Business”, 2006.

environment for firms than in most other countries. Since difficulties in doing business raise costs as well as deter foreign investment, the regulatory environment is certainly a factor accounting for at least part of the missing middle.

And, despite reforms which have certainly improved the situation, dealing with licenses is still seen as a major problem in India. Again according to the World Bank's numbers, India in 2006 ranked 155 out of 175 in the degree of difficulty businesses have in "dealing with licenses". According to the World Bank's estimates, there were 20 procedures, taking 270 days, and costing over 600 percent of per capita income for an Indian business to comply with required licensing procedures. By contrast, Korea in 2006 was ranked 28<sup>th</sup>, with 14 procedures, requiring 52 days and costing less than twice per capita income.

India ranks fairly well in investor protection (33<sup>rd</sup> of 175), but shows up poorly (173<sup>rd</sup> of 175) in contract enforcement (with an estimated 56 procedures requiring 1,420 days and costing 36 percent of the debt a creditor is trying to collect). Likewise, India ranks poorly (139<sup>th</sup> of 175) in the degree of difficulty in trading across borders. Since development of unskilled-labor-intensive manufacturing would surely involved exporting some of the output, this is especially important in assessing prospects for remedying the "missing middle", and would certainly stand as a deterrent to potential entrants to exporting labor-intensive manufactures.

Ten documents are required for export, and they take an estimated 27 days, with a cost of US\$864 per container (compared to 6 documents for China, taking 18 days, with a cost of US\$335 per container).<sup>13</sup>

In 1950, it was decreed that firms employing more than 10 workers should be in the “organized” sector of the economy. These firms would register as “organized”, and then be subject to the rules (and privileges) governing organized sector activity. These rules pertain to many things: regulations governing employment of workers (to be discussed below), provision of pensions and other social safety net items for employees, taxes, and much more. Until the reforms, firms in the organized sector had to have “capacity licenses”, indicating the maximum permissible amount of production, and their licenses indicated as well such parameters as the types of products to be produced, the number of shifts that could be operated, and so on.

While some of these restrictions have been lifted, there still remains an “organized” sector of the economy. Table 4 gives data on the size of the organized sector’s employment and its growth rate. As can be seen, total organized sector employment in 1999-2000 was only 28 million out of a labor force of 406 million, and of that total, 19 million organized sector workers were in the public sector. Only 9 million workers, less than 3 percent of the labor force were in the organized private sector! Moreover, the organized sector had experienced employment growth of just over a half a percent annually from 1994-2000. To be sure, part

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<sup>13</sup> In some cases, India’s procedures have been streamlined, but so have procedures in other countries. For example, the time to export in India fell from 36 to 27 days between 2003 and 2006, but in China it fell from 20 to 18 days.

of that slow growth was attributable to a slight decline in public sector employment, but even in the organized private sector, employment grew at a rate of only 1.87 percent annually.

Of course, there are many firms with more than 10 employees that have not registered as organized. In some instances, they operate as one larger firm and do not register; in other cases, factories have office doors with different names on each one in order to keep under the limit of ten! It is apparently not uncommon for the ground floor of a building to have several dozen doors, each with the name of a firm on it, all firms producing the same good and owned by members of the same family.<sup>14</sup>

For some purposes, the fact that firms remain in the informal sector may not be important. However, if a producer wanted to export (or even to explore whether he could profitably export on a large scale), the necessary size and the required paperwork would almost certainly require being “organized”. The fact that the hurdles to being organized, and the costs of compliance with existing regulations governing organized activity, leave so many in the unorganized sector is itself evidence that requirements are a deterrent to the development of many things, but perhaps especially unskilled labor-intensive manufactures (which can, probably in most cases less economically, be produced at smaller scale).

This is reflected in the size distribution of firms in India: in the 1980s, over 40 percent of manufacturing employment was reported in firms with 5-9 workers, and almost another 30 percent in firms with more than 500 workers. Enterprises with 10-49, 50-99, 100-199, and

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<sup>14</sup> World Bank, 2006a, P. 122.

200-499 workers each employed less than 10 percent of manufacturing workers. By contrast, Korea and Malaysia reported fewer than 5 percent of manufacturing employees in firms with 5-9 workers, and over 20 percent in firms with 10-40 employees.<sup>15</sup> Although these data are from the 1980s, all the evidence, including the failure of organized sector employment to grow, points to the conclusion that the requirements for achieving organized sector status serve as a major deterrent to firms' expansion, unless they can do so and remain outside its purview. While for many purposes that is probably possible, it surely puts a very high hurdle for labor-intensive activities, especially as exporting is virtually impossible without undertaking the paperwork that would require organized sector status.

#### Small-Scale Reservation

As already indicated, in an attempt to protect small-scale enterprises the GOI enacted a Small Scale Reservation (SSR) law which reserved a large number (over 1,000 at its peak) of manufacturing activities to small scale enterprises. These activities were the ones generally thought to be intensive in the use of unskilled labor. In activities designed as SSR, larger firms were enjoined from entering production (although existing firms were grandfathered and could continue) and a number of measures were enacted to provide subsidies and tax advantages to SS firms.

Since expansion would entail the loss of these subsidies and advantages, another barrier to successful development of the unskilled-labor-intensive industries was erected. Whatever

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<sup>15</sup> World Bank, 2006a, P. 122.

the intent of the measure, it effectively precluded the rapid growth of these industries, as they could not remain small and enter into competition in international markets.

In the cases of very rapidly growing countries in the past half century, rapid growth of output and employment in unskilled labor-intensive manufacturing has been a major engine of growth. It has been possible because firms could expand production and employment not only to supply the domestic market, but also to export part of their output. Those exports were profitable because of countries' comparative advantage in unskilled labor-intensive activities and commensurately low costs (relative to higher-wage, more advanced economies), and that in turn spurred output expansion, learning, and productivity growth.

With India's abundant supply of unskilled labor, able entrepreneurs and historical track record in industries such as textiles and clothing, footwear, and other labor-intensive industries, one would have expected rapid expansion and exports from these industries. But growth has been small relative to that experienced by other countries. Small-scale reservation, combined with the difficulties of becoming "organized" surely accounts for some of the missing middle.

For exporting firms need to be of sufficient size to be able to invest in learning about foreign markets, learning the appropriate quality control and other procedures, and meeting foreigners' needs with respect to standardization, quality, and timely delivery. For firms under reservation, the uncertainties (and the rewards) of the export market would have remained unknown, and investigating them would, in most cases, have required the abandonment of the (certain) special privileges received by SSR firms before they could have

expanded and learned enough about the (uncertain) international market to be reasonably confident of success.

While it is certainly true that firms found ways to combine operations while retaining access to the privileges of SSR in some cases, those ways would, in the first place, have raised costs for them. In addition, the paperwork, formalities, and requirements of exporting would generally have required sufficient scale that SSR status would have precluded it.<sup>16</sup>

The GOI began removing SSR status from unskilled labor-intensive industries in 2003. From over 1,000 items reserved for SS, there now remain 308 such items (as of February 2007). It is early days for the newly released economic activities to form a judgment of how much of an impetus this will give to expansion of output of goods that are intensive unskilled labor using in the production process. One would have to surmise that many small firms have been small for so long that significant expansion is not contemplated. However, other new entrants may emerge and grow, and India's size distribution of firms may become more normal over time.

### Labor Market Regulation

Taken together, the requirements for being "organized", the difficulties of doing business if organized, and the privileges accorded to SSR, surely explain a lot of the "missing middle". But, regulations governing the employment of labor surely play a role as well. As stated by the World Bank,

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<sup>16</sup> See Rakesh Mohan (2001) for a thorough analysis of the effects of SSR.

“Restrictive labor laws thus end up creating a bias to protect the already employed formal sector workers at the expense of creating more and better jobs for workers outside the formal manufacturing sector or encouraging firms to enter the formal sector. These laws create massive inequality. They divide a tiny enclave of relatively better-paid salaried formal sector workers, who have good job security and benefits, from the vast majority of informal or unorganized sector workers, who work for much lower wages and with little or no social protection...” (World Bank, 2006b, P. 123).

It is difficult, if not impossible, for an enterprise to fire workers, either for cause or because they are no longer needed. The law gives unions very strong bargaining power, and is reported to be a significant deterrent to hiring unskilled workers if machines can do the job. Requirements for workers’ health and pensions further increase the hurdles.

Output and investment have grown in the organized sector of the Indian economy, but employment has not, at least until very recently.<sup>17</sup> Even for those firms which are in the organized sector, it seems to be a deliberate choice to avoid hiring more workers. This suggests that the requirements of labor laws that affect the organized sector are onerous.<sup>18</sup>

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<sup>17</sup> Data are available only with a lag. Even then, there is considerable uncertainty as to the interpretation of the data. See Srinivasan (2006).

<sup>18</sup> Several economists with whom I spoke protested that “but Indian firms have learned to live with these laws and do not complain”. That is of course true of those firms which are organized and have survived. But their failure to expand employment, and the failure of other firms to emerge, surely suggests that incentives for hiring unskilled labor are less attractive than they might be.



Differences in productivity between the informal and formal sectors are estimated to be large. The World Bank reports that Mazumdar has estimated the labor productivity of informal sector firms to be about one-fifth that of the formal sector. To the extent that this results from capital-deepening in the formal sector, as would seem to be the case given the failure of employment to grow, it would suggest that an alternative growth path, with a higher labor-capital ratio, would have benefited those workers who would have obtained employment, firms, and exports, and enabled a higher level of output.

From all reports, firms in the unorganized sector of the economy largely escape the effects of labor regulations. Wages in the unorganized sector are significantly below those in the organized sector, although the World Bank reports that there is little evidence of any significant difference in wages between urban and rural informal workers. The distortion in the labor market would appear to be between the organized sector and the rest, and not between urban and rural.<sup>19</sup>

## 5. Conclusions

India's success from 1991 to date has contrasted sharply with the sluggish earlier performance of the economy, and there is much with which to be pleased. One cannot, however, completely escape the worry that that success may lull policy makers into complacency, and deter them from undertaking further reforms that could bring millions out of low-productivity agriculture into unskilled-labor intensive manufacturing and related

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<sup>19</sup> World Bank 2006b, P. 123.

activities. The rapid growth of that sector would enable even more rapid growth than has been achieved up until now. While such a development would increase the demands placed on Indian infrastructure, those needs would be important in any event. Moreover, were the nonagricultural employment numbers to increase more rapidly, that would immediately imply a more rapid rate of increase in labor productivity in agriculture, although measures would need to be taken to raise agricultural productivity in any event.<sup>20</sup>

Given the demographic dividend that India can expect over the next several decades, measures to enable the more rapid absorption of unskilled labor into the manufacturing sector are urgently needed. The evident place to begin is with a reduction in the barriers to entry to unskilled labor manufacturing, and a relaxation of some of the most restrictive labor laws.

Should India be successful in the development of competitive, exporting, unskilled labor-intensive-activities, prospects for a rate of growth even more rapid than that of the past four years would be greatly enhanced.

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<sup>20</sup> It is beyond the scope of this essay, but there are plausible reasons to believe that Indian agriculture's comparative advantage should lie in labor-intensive crops – such as vegetables – and less in the land intensive grains that constitute the major agricultural outputs at the present time. This, too, would increase living standards in rural areas.

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