

DYNAMIC GROWTH IN INDIA: TOWARD SERVICE SECTOR

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Abstract

A pronounced shift in the sectoral composition of output (and employment) towards the services sector was initiated in India in earlier decades, but its pace has accelerated in the post-reforms period. The above average growth rate of the services sector that this implies has also been accompanied by an increase in the growth rate of aggregate output in the 1990s. Yet the growth within the services sector has not been uniform, e.g., the growth of business services has been much more rapid than, say community services and personal services. The paper attempts to explain, in a preliminary way, the increase in the so-called premature dominance of the services sector in India. It also attempts to explain why the dominance of services sector characterized by low productivity growth can also lead to high aggregate growth in the economy. There are two important differences between the developed and developing countries like India vis-à-vis the increasing importance of the services sector in their economies. First, as is believed in many quarters, the observed growth in the services sector of countries like India has been attained at an earlier stage of development than would be predicted by time-series and cross-section. Secondly, and more importantly, the 'premature' dominance of the services sector has been attained in countries like India in the context of an increasing and not a falling aggregate growth rate. The increase in the dominance of the services sector witnessed in the 1970s in the developed countries at the cost of manufacturing (a phenomenon dubbed as de-industrialization), was accompanied by a deceleration in their growth rates. The paper makes use of available literature to explain these differences.

Keywords: *de-industrialization, services in India, post-reforms period, Services Sector Growth, Indian economy, agricultural sector*

Introduction

The paper suggests, in a preliminary way, that the observed shift towards services in India can be understood with reference to the classical explanation of structural change in terms of sector elasticity of demand and productivity changes through use of models like those propounded by Sundrum (1990). Reference has been made to sector productivity changes in the economy, though it is acknowledged that there is not a sufficient consensus on the direction of change of manufacturing sector productivity in the post-reforms period. The paper also looks at some of the explanations for deindustrialization offered in the context of developed countries.

Structural Transformation of the Indian Economy: Services Sector Growth

The decade-wise growth rate of services sector over the last five decades has always been above the growth rate of aggregate output in the Indian economy. With the acceleration of the aggregate growth rate over the last two decades, there has been a corresponding increase in the growth rate of the services sector. The decade-wise growth rate of the manufacturing sector has also been above the average for the economy, but the difference has reduced in recent decades, the growth rate of the manufacturing sector in the last decade (1991-2000) being only marginally above the aggregate average. The growth

rate in the agricultural sector, on the other hand, has been consistently below the aggregate growth rate in all the decades (Table 1A). This of course implies that whereas the importance of the services sector in the national output has consistently increased that of the agricultural sector has declined over the years. The manufacturing sector output has by and large stabilised as a percentage of the aggregate output (Table 1B). In the computation of the above tables Agriculture includes agriculture, forestry and fishing.

Table 1A: Decadal Sectoral Growth Rates in India -1951 to 2000

| Sector: | (Per cent per annum) | | | |
|---------------|----------------------|-----------------|----------|--------------------|
| | Agriculture + | Manufacturing + | Services | GDP at Factor Cost |
| Decade | | | | |
| 1951-60 | 2.68 | 5.78 | 4.10 | 3.62 |
| 1961-70 | 1.50 | 5.49 | 4.49 | 3.23 |
| 1971-80 | 1.72 | 4.45 | 4.55 | 3.39 |
| 1981-90 | 2.91 | 6.46 | 6.63 | 5.24 |
| 1991-00 | 3.27 | 6.27 | 7.66 | 6.02 |

Table 1B: Decadal Sectoral Composition of Output in India - 1951 to 2000

| Sector: | (Per cent of GDP) | | | |
|---------------|-------------------|-----------------|----------|--------------------|
| | Agriculture + | Manufacturing + | Services | GDP at Factor Cost |
| Decade | | | | |
| 1951-60 | 55.96 | 16.12 | 28.29 | 100.00 |
| 1961-70 | 47.56 | 21.18 | 31.45 | 100.00 |
| 1971-80 | 42.59 | 22.83 | 34.47 | 100.00 |
| 1981-90 | 36.06 | 25.13 | 38.80 | 100.00 |
| 1991-00 | 28.71 | 27.14 | 44.15 | 100.00 |

Services includes the five sub-sectors on trade, hotels and restaurant; transport, storage and communications; finance, insurance, real estate and business services; public administration and defence; and the other services part of the community, social and personal services (consisting largely of personal services). The remaining sectors are all included in Manufacturing, i.e., this sector also includes mining apart from the utilities and construction sectors. Taking decade-wise averages, of course, smoothen the data and muffles some of the stark conclusions. Annual data shows that the services sector output has reached nearly half and agriculture output has reduced to a less than a quarter of the aggregate output in recent years. In terms of sector composition, the services sector always dominated the manufacturing sector in India. It overtook the dominant agriculture sector in the mid-eighties when it attained the level of 38 per cent of the aggregate output. The manufacturing sector too overtook the agricultural sector in the mid-nineties by producing around 28 per cent of the domestic product, yet there are clear indications in the annual data that the percentage of output produced in this sector could actually decline in the near future. The services sector is clearly attaining the dominant position that was once

reserved for the agricultural sector. Growth seems to have by-passed the manufacturing sector in India.

It is of interest to examine the composition of growth in the services sector in recent years. Table 2A shows the sub-sector growth rates and Table 2B shows the corresponding changes in the composition of output within the services sector. In terms of the arguments that will be used in subsequent sections, it is important to distinguish between the services sub-sectors that cater to final demand and those that provide intermediate inputs to production sectors. It is of course true that many of the sub-sectors cater to both final and intermediate demand. Thus transportation services are used for carrying both passengers and cargo. Yet it is possible to say with certainty that the output of certain sectors is put more to intermediate than to final use, just as the reverse can be said to hold with certainty in other cases: business services are more for intermediate use and personal services are for final use.

Table 2A: Decadal Growth Rates of Services Sub-Sectors in India - 1951 to 2000

| Sub-Sector: | (Per cent per annum) | | | | | |
|---------------|----------------------|-------------|-------------------|------|---------------------|----------|
| | Trade + | Transport + | Business Services | PAD | Personal Services + | Services |
| Decade | | | | | | |
| 1951-60 | 4.98 | 5.58 | 3.01 | 5.03 | 2.82 | 4.10 |
| 1961-70 | 4.36 | 5.37 | 3.06 | 7.37 | 3.90 | 4.49 |
| 1971-80 | 4.81 | 6.20 | 4.35 | 4.81 | 2.75 | 4.55 |
| 1981-90 | 5.71 | 5.63 | 9.53 | 7.11 | 5.40 | 6.63 |
| 1991-00 | 8.08 | 7.82 | 8.43 | 6.02 | 6.80 | 7.66 |

Table 2B: Decadal Sectoral Composition of Services Outputs in India - 1951 to 2000

| Sub-Sector: | (Per cent of Services GDP) | | | | | |
|---------------|----------------------------|-------------|-------------------|-------|---------------------|----------|
| | Trade + | Transport + | Business Services | PAD | Personal Services + | Services |
| Decade | | | | | | |
| 1951-60 | 31.96 | 12.43 | 22.96 | 9.26 | 23.38 | 100.00 |
| 1961-70 | 34.06 | 14.14 | 19.42 | 11.56 | 20.81 | 100.00 |
| 1971-80 | 33.51 | 15.71 | 18.41 | 13.68 | 18.69 | 100.00 |
| 1981-90 | 32.25 | 16.17 | 20.76 | 14.54 | 16.28 | 100.00 |
| 1991-00 | 30.84 | 15.53 | 26.09 | 12.65 | 14.89 | 100.00 |

Source for Tables 1A, 1B, 2A and 2B: Computed from the EPW Research Foundation (2002), *National Accounts Statistics*, Mumbai.

An examination of the data (Tables 2A & 2B) suggests that the growth in the services sector in recent years (in the eighties and nineties) has clearly been more in the sub-sectors providing intermediate inputs rather than in the sub-sectors catering to final demand. Thus in the decade 1991-2000, business services increased at the annual average rate of 8.43 per cent, which was clearly above the aggregate service sector GDP growth

rate of 7.66 per cent. The GDP growth rate in the personal services plus sector, on the other hand was 6.80 per cent, i.e., below the average growth rate of the services sector.

Over the longer period of five decades, the percentage of GDP produced in the business services sub-sector initially declined from nearly 23 per cent in the 1st decade (1951-60) to 18.5 per cent in the 3rd decade (1971-80), but subsequently increased to over 26 per cent in the decade 1991-2000. There has also been, by and large, a consistent increase in the percentage of output produced in the transport, communications and storage subsector from 12.50 per cent in the decade 1951-60 to 15.50 in the decade 1991-2000. These two sub sectors are clearly more important as providers of intermediate inputs to production sectors.

As an aside, it should be noted that, contrary to the popular belief, the spectacular growth in the services sector cannot be explained away by the Fifth Pay Commission phenomenon. The percentage of output produced in public administration and defence increased in the initial decades from 9.25 per cent of services sector output to over 13.5 per cent, but has actually declined in recent decades to 12.65 per cent. Even within the 1990-2000 decade the relative increase in the public administration, defence and other services part of the S sector is marginal - from 12.03% in the first half of 1990s to less than 12.30% in the second half. Undoubtedly the burden on the government budget in nominal terms has increased due to the pay revision causing its own share of problems, but in real terms the relative growth of the services sector cannot be explained by the growth of public administration and defence. The proportion of services sector output produced in the personal services plus sub-sector, on the other hand, declined consistently from 23.50 per cent in the 1st decade, 1951-60, to less than 15 per cent in the last decade, 1991-2000. It is the trade, transport, storage, communication, financing, insurance, real estate and business services sectors within the S-sector that has picked up most of the relative growth in that sector. The growth of the services sector GDP is clearly accompanied by a change in the structure of output produced in the services sector - from sub-sectors catering to final demand to sub-sectors providing intermediate inputs.

Towards an Explanation of the Services Sector Growth in India: Is the Growth Premature?

It is believed in some quarters that the growth of the services sector in countries like India that are at relatively low levels of development is premature. The conclusions arrived at through inter-country analysis are cross checked with the results derived from the examination of long-term changes in those (developed) countries where sufficient time series data are available. The time series samples are hence much smaller. And though there is a positive correlation between income level and the share of services sector in employment, there is no evidence of a systematic variation in the importance of the service sector in national product over levels of income. This suggests that, historically, different countries can exhibit dominance of the services sector at different levels of income. It is thus clear that, at least so far as the output share, if not the employment share, of the

services sector is concerned, the pattern of development is not as consistent as in the case of the output and employment shares of agriculture and manufacturing. Countries can exhibit dominance of the service sector at different stages in their development. Part of the explanation for this is in the fact that different countries exhibit different sector elasticities of demand and different sector productivity growth rates in stages of their development. The transformation of an economy is explained by productivity increases on the supply side and income elasticities on the demand side. The demand for services increases much more only at higher levels of income. The so-called paradox in our case is that the demand for services seems to have increased even before we have reached the status of membership in the middle-income group of countries.

Models like Sundrum (1990) can however be used to show that reallocation of labour from one sector to another and changing patterns of output shares depend on sectoral elasticities and productivity growths. Higher the elasticity of demand for the output of a sector and lower the productivity growth rate in the sector, larger the shift of resources into the sector as development proceeds. If productivity growth were to be high in a sector with increasing demand for its output, the higher output required could be produced with a smaller resource shift to the sector. However, if productivity growth is low, larger shift of resources to the sector is necessary to meet the increasing demand for its output if the income elasticity of demand for its output is high.

De-industrialization, Services Sector Growth and Deceleration of Aggregate Growth in the Developed Countries

The decade of seventies witnessed an accelerated pace of relative decrease in the output of (and employment in) the manufacturing sector and a corresponding increase in the output of the services sector - a phenomenon dubbed as de-industrialisation. Even before de industrialisation set in, the aggregate growth rate in the developed countries had started declining. The fact that services sector productivity growth is lower than that in manufactures implies, on the one hand, that resources have to shift to the services sector to provide high enough output to satisfy the demand generated in accordance with high income elasticity for the sector. On the other hand, it implies that the aggregate productivity growth and hence income growth of the economy gravitates towards the increasingly dominating service sector productivity growth. Since the latter is low, the growth rate inevitably declines. Employment is assumed to be constant. Aggregate incomes rise (because of productivity growth in cars) and consequently demand increases (assumed to be at the same rate in both sectors). The production of cars can also increase in spite of a decrease in labour allocation because of the assumed increase in productivity. The aggregate productivity growth, however, decreases and the standard of living can be shown to fall in the model. The aggregate productivity decreases because it is the weighted average of sector productivities with employment shares as weights: the weight of the zero productivity growth sector increases over time. Given fixed employment, a decrease in

aggregate productivity implies a decrease in growth rate of income. The relative price and hence the proportion of expenditure on haircuts increases asymptotically over time implying a fall in the standard of living. It would be tempting to explain the relative decline of the manufacturing sector in the Indian economy in the immediate past with reference to the opening up of the economy to manufacturing imports. This is evident with respect to the cautious opening up that we are undertaking on the capital account.

An Emergence of High Aggregate Growth in India in the context of Service Sector Growth

An important question in this context is: 'Can the high growth rate of the services sector contribute to the observed aggregate growth rate?' The question is not being posed in a statistical sense. Statistically, the aggregate will grow at a higher rate if its dominating part (services sector) grows at a high rate. The question is: 'Given that the productivity growth is generally accepted to be low in the services sector, can we escape the Baumol conclusion that the aggregate productivity (and output growth) will ultimately gravitate to the low productivity growth rate of the services sector?' To answer the question in positive, Oulton (1999) considers a model with two outputs, cars and business services. Cars are produced using labour and business services, whereas business services are produced using only labour. Note that the final demand service sector (haircuts) of the Baumol model has been replaced in Oulton's model clearly indicates that services sector growth can contribute to overall growth if the growth is in sectors providing intermediate inputs to the producing sectors, even if the productivity growth is lower in services than in manufacturing. This is precisely the kind of growth that is being observed in the services sector of the Indian economy as was shown in the first section.

As a final point, it should be made clear that the growth in services sector that we are speaking of is not of the kind where excess labour is disguised employed. Demands of competitiveness in the context of an open economy, of course, require the use of labour saving technical progress in the manufacturing sector. If there is no such genuine increase in the demand for the output of the service sector, it will have to be concluded that the transferred labour is surviving in the service sector as disguised unemployed. That would be a far cry from authentic development. It should be noted though that a hypothesis of disguised unemployment in the service sector could explain in this context the higher share of the services sector in employment, but perhaps not the higher share in output that is being observed. Examination of data on the share of services in national output suggests that there is a widespread increase in the shares of a range of service sub-sectors spanning from the technologically sophisticated sub-sectors to the not-so-sophisticated ones. This growth in the services sector is not only providing the necessary jobs that are not available in the manufacturing sector, but is also contributing to the overall growth.

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