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Synergies in India's Service Sector Growth and Economic Development: An Assessment

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FOURTH Lecture (ONLINE) Under the Endowment in Honour of Professor Gopal K. Kadekodi, Former Honorary Professor, Centre for Multi-disciplinary Development Research (CMDR), Dharwad.

By Shashanka Bhide

Introduction

I would like to thank CMDR for inviting me to deliver this fourth Gopal Kadekodi endowment lecture. This is indeed a great honour for me to be invited for this prestigious event. First, a few words about my association with Prof. Kadekodi. He has always been an inspiration both professionally and as a friend. His infectious enthusiasm for any new work and in fact any new idea has always been a great encouragement for me, and I am sure for all his colleagues and students. We had established a close relationship when he was at the Institute of Economic Growth in Delhi and then when we were both at the Institute of social and Economic Change, Bengaluru. His deep interest in multi-disciplinary approaches to social concerns and interest in addressing real world development issues were always unique. He has always been encouraging colleagues to do better and do more. I have been a beneficiary of his friendship, scholarship and leadership.

When I had to choose a topic for today's lecture, there was only one that struck me as a possibility. Professor Nayantara Nayak agreed that a talk on 'India's Services Sector Growth' would be appropriate. While indeed recognising that economic growth is insufficient to achieve the development agenda, I believe that its role as an engine of development remains extremely relevant. It is the question of strategies of growth, in terms of its nature, composition and distribution that will be crucial in meeting the development agenda. Understanding the implications of economic growth is necessary to ensure achieving development agenda. Both economic growth and development are too broad topics, and I can only share some thoughts on a very limited aspect of each. I would like to focus today on the sector-wise composition of growth that India has experienced and its implications.

I must say that the main reason why I felt this would be a reasonable topic for my paper is because of an opportunity I had to understand some of the issues relating to the growth of India's services sector when I co-edited a book on the subject with Profs. V.N. Balasubramanyam from Lancaster Business School and K.L. Krishna, formerly with Delhi School of Economics. There was of course a workshop and conference held at Madras Institute of Development Studies, Chennai, which preceded the book, providing an invaluable occasion to learn more. This is the anchor for today's talk.

Framework for assessment

The subject of the rise of India's services growth and its many aspects has attracted wide attention and the work of many renowned economists especially in the last two decades has shed light on explanations for this growth and what it means to the development agenda. International comparisons and historical changes have enriched our understanding. I mention here only a few of the comprehensive contributions of Gordon and Gupta (2003), Eichengreen and Gupta (2010), Kochhar et al (2015) and Nayyar (2017). My job is essentially to point to the key features of this work.

The growth of services in the economy is a reflection of the rise of 'connectedness', across people, regions within the nation and across nations; at an instant of time and over time. The role of technological innovations has been a 'game changer' in this transformation. Services have connected people across even the most remote corners geographically. Services that once required personal proximate presence of presence of the sellers and buyers, now more often can do without this requirement. What adds a new dimension to the discussion of services at this specific juncture is of course the ***Covid pandemic*** that has caused so much distress and death, and ravaged economies around the world. Has the rise of services lent a hand of safety and resilience to the economy? Or has it also been a source of weakness?

To provide a framework for analysis, I would like to begin with a rudimentary specification of the services sector in a short-term macroeconomic model developed at NCAER in the 1980s. It was one of the non-agricultural sectors, in which level of supply was determined by demand. The output supply curve of the sector was flat. The demand of course was determined by the final consumption expenditure and intermediate use. The private consumption expenditure was affected by household income levels. IT services were yet to make a mark and all the communications revolution happened only much later. Public administration services and the financial sector services were the major drivers of the sector. Construction was a part of the 'industry', rather than services. In the discussion on Indian macroeconomic models, the imminent role of services as 'drivers' of overall economic growth was not so common.

The basic specification was one of a 'commodity balance equation', where the output of the services sector was expressed as

$$Q\_SER = ?_i\, a_{ij}\, Q_j + FCE_{ser} + GCF_{ser} + X_{ser} - M_{ser}$$

Where,

Q_SER = Output of the services sector

Q_i = output of the ith sector in the economy including Q_{ser}

FCE_{ser} = Final consumption expenditure on services

GCF_{ser} = Gross capital formation that is obtained from the services sector

X_{ser} = Export of services

M_{ser} = Import of services

The role of services is highlighted here both as the final output (desired to meet the consumer needs and intermediate needs (as inputs by the various production sector of the economy).

So, what led to the rise of services in the Indian economy? Was it the change in the consumption pattern- domestic or external - in favour of services in a dramatically different way than before? Was it the relatively faster and cheaper supply side response that made output levels rise quickly enough to sustain the rising demand? Was it the technology change that made services become more critical inputs in the production process of many other commodities? The interlinkages between sources of supply (sub-sectors of services) and sources of demand are illustrated in Table 1.

There are many ways in which progress of the economy is examined and its evolution in terms of its ‘structure’ or its ‘structural transformation’ is reflected. In the distant past, the Five Year Plans set the targets for economic growth and articulated strategies for their realisation. In many ways, the expectations were modest, given the scale of requirements of development. The strategies were constrained by resources, political ideologies and gradual approach of the strategies to address changes that may then unfold. The present goal of 5 trillion dollar economy by 2024-25 would have placed India's per capita income at about $3400 from $2100 in 2019. The drivers of this growth clearly included services besides increased emphasis on manufacturing.

While the commodity flows allow us to think about the factors that affect supply and demand linkages, it is also necessary to recognise the role of changes in policies and technology that affect the parameters of the supply and demand conditions. For instance, industrial policy framework in which there were constraints on private corporate investments in specific sectors and sub-sectors of the economy, tax policies specific to the sectors would affect the investment flows to the productive sectors. Tax policies towards consumption goods would also affect consumption pattern. Even beyond these broader macroeconomic factors, supply and demand for the output of a sector in the economy would also be affected by technology developments not only within the economy but across the world.

Table 1. Accounting for Service Sector Growth

Demand components of Services	The Supply Side: Services Sub- sectors					Policy changes/ Technology changes Trade policy reforms, Tax : reforms, Industrial Policy reforms, Access to technology
	Transport: Travel/ Freight	Communication	Trade/ storage	Financial	Social services	
Pvt Consumption	Income growth and distribution + regional economic integration	Income growth and distribution	Income growth	Income growth and distribution	Income growth and distribution + Public policies	
Govt Consumption	Expanding government expenditure	Expanding govt expenditure	Expanding govt expenditure	Expanding govt expenditure	Expanding govt expenditure	
Investment demand (services as part of investment inputs)	Rising role of services as inputs					
Intermediate consumption (software/ Business processes)	Rise of services as inputs					
Exports	Integration with global markets					
Imports	Integration with global markets					
Policy changes/ Technology changes: Trade policy reforms, Tax reforms, Industrial Policy reforms, Access to technology						

The Information and Communication Technology (ICT) applications have steadily made inroads into every aspect of the economy, not only in India but across all economies in the world. Improved operational efficiency in production and management of firms has affected the demand for these services sharply. Digitalisation is now a term used to reflect efficient and reliable information processing and communication process in all walks of life.

Analytically, specification of the supply side was inadequate if not missing in the framework that was adopted in the macroeconomic model noted above. A number of econometric models have specified sub-sectors of services with features of either supply determined demand or demand determined output. Krishna et al (2016) provide a specification that leads to decomposition of output growth of services into contributions of input change and productivity, based on a production function,

$$Y_{??} = ??(K_{??}, L_{??}, E_{??}, M_{??}, S_{??}, A_{??})$$

Where Y is the gross output of sector j, K is capital input, L is labor input, E is energy input, M is material input, S is services input, and A is an indicator of technology, in sector j. The output and input levels change over time. Services are explicitly inputs as well as outputs. Clearly, empirical estimates of the parameters of production function and the historical data would provide an assessment of the contribution of inputs and productivity to output growth in different sectors. The framework would also enable an assessment of the extent to which services growth has been affected by input growth and productivity growth, and the extent to which services have affected output growth in the other sectors. Explanations of the rapid growth of services sector output in the Indian context from different perspectives have been of considerable importance in understanding both the drivers of growth, implications and sustainability of growth.

Two other analytical approaches to understanding the sources of output growth in a sector or in the various sectors of the economy are (a) stochastic frontier approach based on varying coefficients production function, that recognises the contribution of Technical Efficiency of the firms and Total Factor Productivity (TFP) as a determinant of productivity not only in a static sense but also in a dynamic framework, illustrated by Kalirajan and Shand (1992) and (b) the Computable General Equilibrium (CGE) models that examine both supply and demand side factors influencing output levels particularly incorporating external linkages of the economy (Chadha, 2001 and Chadha, Pohit and Pratap, 2019).

Some of the alternative ways in which the heterogeneous services have been classified in the analysis of this sector are: traditional and modern services, market and non-market sectors, and the way in which the National Accounts are presented. We have adopted the NAS classification for discussion in this paper.

Expansion of Services Sector in the Indian Economy

The explanations of economic transformation, from an agrarian economy to a service dominated economy articulated by Kuznets have been succinctly summarised by Balasubramanam and Balasubramainyam (2021), how agricultural productivity improvements lead to both a push for demand for manufactured products and make cheap labour available to expand manufacturing and how the resulting higher income levels the demand for services would take the transformation process further. It is, however, the role of technology revolutions shaping the economy that has influenced the transformations in unpredictable ways than the simple rules.

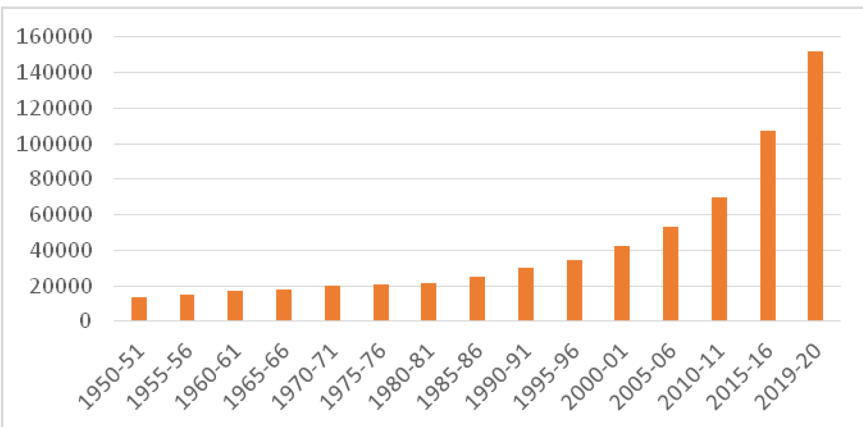
As Rangarajan (2017) notes, 'in the same way technology benefitted industrial revolution, the present services revolution is marked by the technology changes in information processing and communications'. The manner in which information is processed, goods are transported and services are delivered has become so much faster leading to the enormous growth of services.

An important feature of technology innovations in the IT and communication sectors is the ability of technology-enabled services to improve productivity in the other sectors. Manufacturing or agriculture or other sectors within services could move up the competitive scale with the adoption of new technologies. Among the factors leading to services growth, it is not just the production and distribution of goods, but the need to improve the quality and reach of high quality services in the education and health that cannot be over-emphasised. Benefits of improvement in human capital from the improved education and health services to the economy are evident in all the advanced economies today. This impact of absorption of new technologies in various sectors of the economy on services as much as it would benefit technology adapters.

An assessment of the service sector growth at this juncture may also be relevant in the context of India's approaching its 75th anniversary of independence from the two-centuries of colonial rule, celebration of '***Azadi ka Ámrit Mahotsav***'. It has indeed been a journey of many challenges, successes and failures in the face of huge expectations. From a conscious and persistent emphasis on industrialisation to create employment, overcome poverty, effecting a 'green revolution' to overcome hunger and achieve food security and numerous social and economic programs to accelerate economic growth and distribute benefits of growth, the key feature of 'services growth revolution' has been its steady and sustained nature over three decades. Adoption of technological innovations particularly in the financial services has led to the expansion of these services to unprecedented levels although there is much work that is left to be done to improve access not only in a technical sense but also in terms of financial literacy. The continued push to infrastructure development in the transport and energy sectors would make more efficient means of services such as transportation and communication available across the country with consequent benefits of economic growth.

The Chart 1 reflects the rise in the per capita income- as a key measure of economic performance- since the country became a republic. As has been well recognised, the acceleration in the income since the mid -1980s has been sustained in the subsequent period, with some setbacks, in response to both the domestic conditions and external environment.

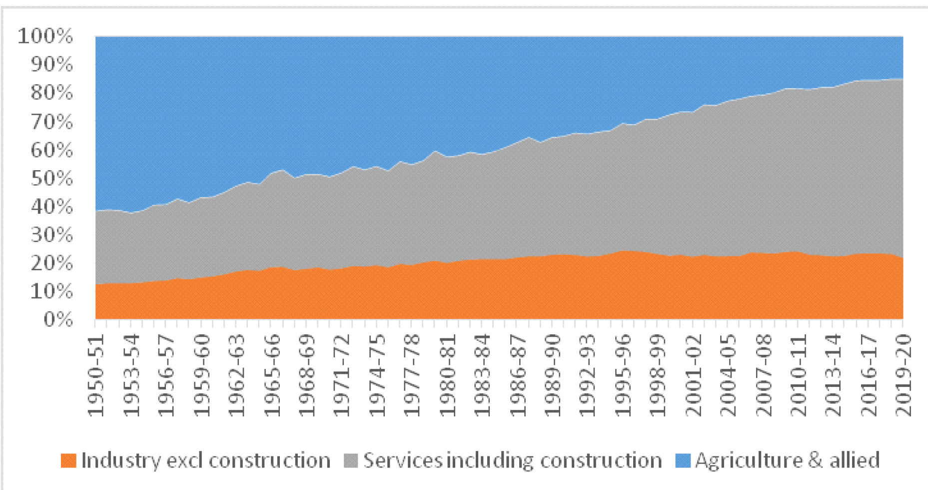
Chart 1. India's Per Capita Income Growth (Rs, in 2011-12 prices)



Data Source: Ministry of Statistics and Programme Implementation

Transformation in the economy that became so palpable with the beginning of the decade of 1990s was certainly not sudden. However, the growth pattern that emerged with the services becoming more dominant than manufacturing, was a surprise. It was expected that manufacturing, with its employment potential and trade opportunities, would be the driver of growth in the economy. From agriculture to industry and then services was the evolution pattern of the economies of the advanced countries. The economic transformation is highlighted in Chart 2 in which the shrinking of the share of gross value added from the agriculture & allied sector and the rise of services is seen to be steady through the period 1950-51 to 2019-20. The industrial sector excluding construction shows slight improvement of its share in GVA over the 70 years but at a pace far slower than services.

Chart 2. Agriculture gives way to Services: shares in GVA%



Data Source: Ministry of Statistics and Programme Implementation

Relative to the average for the years from 1950-51 to 1954-55, GVA in 2014-15 to 2018-19, was 5.7 times in the case of agriculture and allied sectors, 41.8 times in the case of industry (including construction) and 56.6 times in the case of services. The GVA across all sectors rose by 21 times during the same period. Put differently, share of agriculture and allied sectors in total GVA declined from 61.6% in 1950-54 to 16.1% in 2015-19. For services, including construction the increase was from 25.5% to 65.9% in the same period. If we consider these five-year periods between 1950-51 and 2019-20 the changes in the structure of the economy have been steady in the case of agriculture and services. In the case of industry, the changes have not been uniform after 1990-91, showing slight decline in its GVA share. Services have therefore been the dominant drivers of economic growth, especially from the second half of the decade of the 1980s as the share of services began to exceed the share of both industry and agriculture then onwards. In other words, the rise of services in the economy as its dominant component has been in evidence for more than 30 years.

Services are indeed a diverse or heterogeneous group of items and difficult to define in some cases, especially as many of the processes are intrinsic to the products produced in other primary or secondary sectors. But, even when we consider a ‘residual’ definition, with services being those items of consumption or production that are not considered as primary or secondary goods, the heterogeneity remains substantial. In the National Accounts, several major categories of tertiary activities or services, are specified. In Table 1, we have presented the average shares of these major categories in the GVA of the services sector over the decades since 1950-51. To highlight the recent trends, we have also presented average shares during 5-year intervals since 2004-05.

Table 1. Decade-wise Average Share of Sub-sectors of Services

Period	Trade, Hotels and Restaurants	Transport and Storage	Communication/ Services related to Broadcasting	Finance, real estate, Ownership of dwellings and Professional Services	Public Administration Services and Defence, and Other Personal Services	Construction	All
1950s	17.3	6.4	0.5	36.4	22.3	17.1	100.0
1960s	18.4	7.1	0.6	30.3	22.7	20.9	100.0
1970s	18.7	8.0	0.8	28.7	24.3	19.7	100.0
1980s	18.7	8.7	0.8	31.2	23.8	16.9	100.0
1990s	18.3	8.2	1.1	36.1	21.9	14.5	100.0
2000s	19.0	8.2	2.6	35.5	20.1	14.7	100.0
2010s	19.9	8.3	2.8	34.3	20.7	14.1	100.0
Recent Sub-periods							
2004-2008	19.2	8.4	2.8	35.0	19.2	15.5	100.0
2009-2013	18.7	8.5	2.8	33.3	21.3	15.5	100.0
2014-2019	20.6	8.1	2.8	35.0	20.4	13.2	100.0

Data Source: Ministry of Statistics and Programme Implementation

From the 1990s, the only categories to show distinctly increasing trend in the share of GVA are (1) Trade, Hotels and Restaurants and (2) Communications and Services related to Broadcasting. In the case of transportation, while there is an increase upto the 1980s, since then the shares have remained stagnant. In the case of trade, hotels and restaurants, dominated by wholesale and retail trade, the rise in output share may be linked to the increasing overall consumption demand, rising urbanisation that may have led to increased reliance on markets for consumption and in the case of Communication and Services related to broadcasting, the sharp increase is clearly related to the communications revolution in the country led by the telecommunications, a story of both an advent of new technology- mobile telephony- and policy reforms that allowed private sector participation in the sector. Communications have turned out to be quite intrinsic to economic activities across all production sectors as much as an item of consumption.

The trends in shares do not reveal the pattern of growth performance of the sub-sectors over time. Stable shares may only mean that growth across sectors is uniform across sectors, irrespective of the magnitude of the pace. In Table 2, we have summarised the average growth rates of the major sub-sectors of services. From the 1980s, growth accelerated in most of the sub-sectors, with some fluctuations. The growth in the services, therefore, has been nearly across the board and for the sector as a whole, average decadal growth rate has doubled compared to the period of 1970s. Decadal annual average growth rates have exceeded 8 per cent in one more decades since the 1980s, with the services related to Communications and Broadcasting registering 14-15% growth during the 1990s and 2000s. In the case of construction, 2009-10 onwards, there has been deceleration in growth.

Table 2. Decade-wise Average Year on Year Growth Rates of GVA (constant prices) of Sub-sectors of Services: %

Period	Trade, Hotels and Resta urants	Trans port and Sto-rage	Communi cation/ Services related to Broad casting	Finance, real estate, Ownership of dwellings and Professional Services	Public Administration Services and Defence, and Other Personal Services	Construction	All
1950s	4.85	5.40	6.76	2.79	3.48	5.76	3.93
1960s	5.18	5.56	6.78	3.09	5.62	7.18	5.04
1970s	4.31	5.59	6.59	3.87	4.36	1.95	3.79
1980s	5.93	6.14	5.88	8.30	6.02	4.83	6.49
1990s	7.48	6.29	14.44	8.08	6.39	5.63	7.13
2000s	7.03	8.54	15.10	6.67	7.46	9.48	7.59
2010s	9.76	6.55	6.49	7.66	7.07	4.86	7.39
Recent Sub-periods							
2004-2008	7.10	9.04	7.39	7.49	8.55	11.44	8.29
2009-2013	8.17	7.62	9.91	7.31	7.81	5.81	7.37
2014-2019	9.96	5.99	5.99	7.76	7.97	4.39	7.57

Data Source: Ministry of Statistics and Programme Implementation

The distinct feature of growth of India's service sector has been the rise of 'modern services', IT and Communications. While share of Communications and Services related to broadcasting increased manifold, it still remains a small sector of services. Its share in GVA of the Services sector has remained less than 3 per cent for the period of 2010s and the subsequent decade. The IT services are embedded in the broader group of Finance and REODPRSER. We present the pattern of growth reflected in the changes in shares of sub-sectors of FINREODPRS in Table 3. The rise in Computer and related services (IT services) in the sub-sector is sharp even in the latest decade and a half. Administrative support to business services also rose sharply. In other words, the churn within services has continued. It is not only the new services are becoming prominent but their role as inputs in other sectors is also evident.

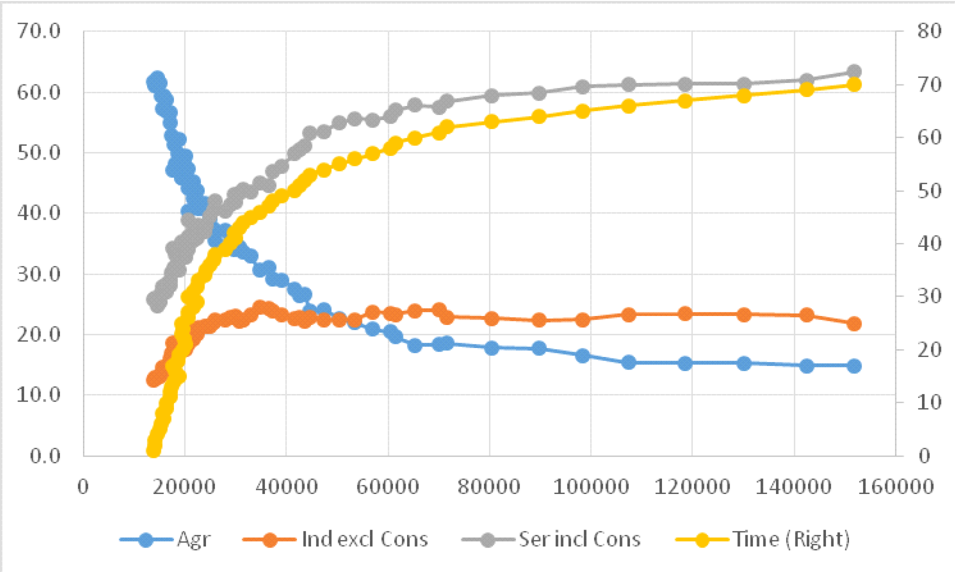
Table 3. Average Shares of Gross Value Added for selected sub-sectors

Sl. No.	Sub-sectors	2011-12 to 2013-14	2017-18 to 2019-20
1	**Financial Services**	**31.12**	**27.93**
2	**REODPRSER**	**68.88**	**72.07**
2.1	Real estate	3.34	3.35
2.2	ODW	35.00	27.11
2.3	IT and Computer related services	16.21	23.40
2.4	Professional, Scientific and R&D	1.65	1.86
2.5	Admin support	12.67	16.34
	Total (1+2)	**100.0**	**100.0**

Data Source: Ministry of Statistics and Programme Implementation.

We may now consider some dimensions of service sector growth with implications to its sustainability. First, the correlation between income growth and the structure of the economy. The rise of per capita income over the years (Chart 1) and the rising share of services in output (Chart 2) point to a positive correlation. This is presented in Chart 3.

Chart 3. Changing composition of the economy and per capita income: Shares of sectors in GVA (%), Per Capita Income (Rs in 2011-12 prices) and Time (years on Right Axis)

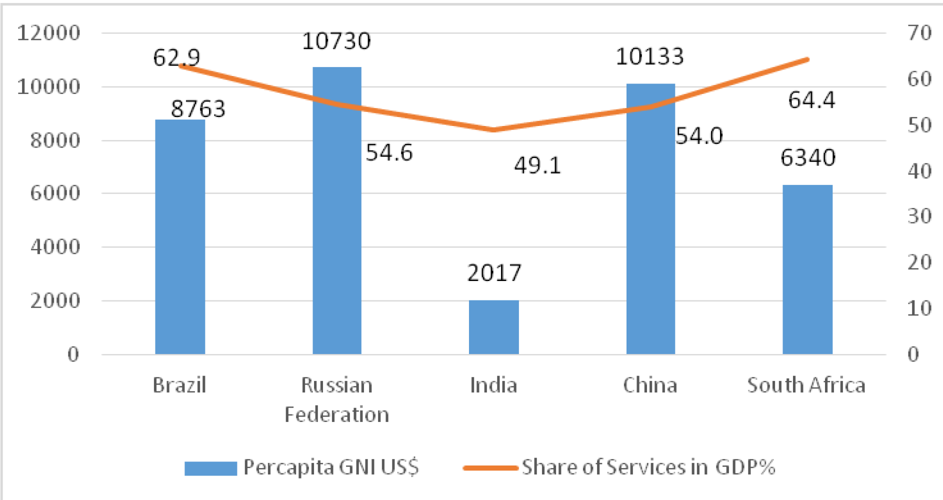


Source: Based on data from the Ministry of Statistics and Programme Implementation.

It took 45 years since 1950-51 for the per capita income to double from Rs 20,000 to Rs 40,000. But it was also during this period that a significant transformation of the economy had also taken place. In the remaining 25 years of this period till 2019-20, per capita income had more than tripled but the pace of transformation was slower. It is, therefore, the changes taking place within the broad sector of services that seem to have the income implications than the changes at the aggregate level.

The second is the international perspective. Based on a selected group of countries- the Brics shows that India's per capita GDP is well below the other Brics economies and the share of service sector in the overall economy is below the levels of the other Brics economies. The distinctive feature about India's case among the Bricks economies is that despite the much smaller per capita income, the share of services in GDP is relatively closer to the Brics members. Secondly, the distinction is also from the fact that it is the export of modern services has been a marker of India's services growth.

Chart 4. Services share in GDP (%) and Per Capita Income (US$) in Brazil, Russian federation, India, China and South Africa: 2019



Source: Based on data from the DataBank of the World Bank.

It is also important to understand how the states have shared the growth of services. As may be expected, there is variation in the share of services in the state domestic product, or state level GVA. A review of the pattern only for five of the southern states points to the differences. If we exclude construction from the services, the variation is narrowed down but still significant. It is useful to examine if the variation more closely to understand the barriers for the expansion of services at the sub-national level.

Table 4. Share of Services in GSDP across Selected States (%): 2019-20

State	Including Construction	Excluding Construction
Andhra Pradesh	53.97	47.34
Telangana	69.74	65.47
Karnataka	74.59	69.48
Tamil Nadu	67.79	58.04
Kerala	81.21	69.64

Source: Based on data from the Ministry of Statistics and Programme Implementation.

Employment Dimension

Growth of services dominating India's overall economic growth has attracted much attention in respect of its implications to employment. Do the services create adequate employment in an economy in which employment generation is the most crucial challenge? Does the services sector 'absorb' work force, provide quality employment?

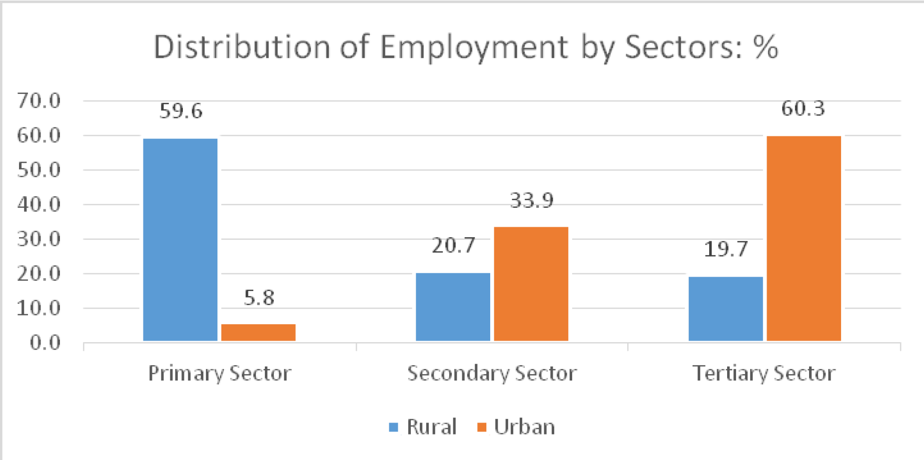
The Periodic Labour Force Surveys are now an important source of information on employment both on quarterly and annual basis. The findings for the recent years point to the challenges. The average distribution of employment (usual status: principal + subsidiary status) for 2017-18 to 2019-20 puts the focus on these challenges. While the share of services, *excluding* construction in output or GVA now exceeds 55% the share of employment at the national level is only 31%. The primary sector (agriculture & allied sectors) accounted for 44% of employment although its share in GVA was less than 15%. The output of services has expanded replacing agriculture and allied sectors contribution, but it has not been able to absorb employment proportionately.

The survey findings also point to another striking feature of the employment across sectors. Employment in the rural areas is dominated by primary sector and services dominate the urban areas. Secondary and tertiary sectors contribute nearly the same level of employment in the rural areas and the secondary sector contributes a third of employment in the urban areas. Jobs created by the tertiary sector are, therefore, mainly in the urban areas. There is a need to explore this aspect of employment at a more disaggregated level in view of the implications of dominance of services in urban jobs. How can rural workers take the benefit of growing opportunities in the tertiary sector?

Chart 5. Distribution of Employment by Sector in Rural + Urban Areas: %

Data source: EPW Research Foundation Time Series. Employment module, based on Periodic Labour Force Surveys by Labour Bureau, Government of India

Chart 6. Distribution of Employment by Sector in Rural and Urban Areas: %



Data source: EPW Research Foundation Time Series. Employment module, based on Periodic Labour Force Surveys by Labour Bureau, Government of India.

The policy challenges of meeting the employment requirements in terms of both the number of jobs and the quality of jobs have been persistent. The faster pace of changes in the skills required given the changes in technology in different sectors has made the task even more challenging. The relatively low elasticity of employment with respect to output is also an added challenge. Ramaswamy (2021) provides an assessment of the employment that could be generated by the service sector. Even with the significant pace of output growth between 2011-12 and 2020, the share of services in total employment generated is not expected to increase substantially. Faster expansion of service sector output is likely to happen in sub-sectors that require highly skilled labour.

The employment and productivity issues have been highlighted by other studies as well. Pais (2021) points to the lower share of employment accounted by the sectors that show high output growth. Again, the issue is about the potential for increasing the output of the sectors in which productivity is higher so that more labour is employed in such sectors.

Services Exports

An important feature of the services sector for India has been its emergence as an export. In 1993, India's service exports were just above $5 billion. By 2000, they had crossed $15 billion, by 2010, well above $100 billion and by 2018, above $200 billion. In 2014-15, Service exports were 50% of export of goods. By 2019-20, the ratio reached 68%. The dynamism is service exports is evident. Computer services and business services accounted for 64% of service exports in 2019-20. The foothold India has achieved as an exporter of services exports, particularly the IT and IT enabled services, has been possible through a number of factors, those that drove the production and sales and a policy environment that was positive towards the growth of this nascent sector. The demand for India's exports has remained both because of the price advantage Indian exports offered and the scale of supply system that quickly developed in the country. There have been concerns related to the geographically concentrated nature of demand and the non-tariff barriers to services trade that began to emerge in the importing countries. Sustaining service exports is crucial to India because of the high quality jobs they have provided and the catching up of technology that has become possible because of the need for this sector to be globally competitive.

Concluding Remarks

Transformation that is taking place in India's economy, especially over the last three decades, in which service sector has emerged as the dominant sector in terms of its output share presents both benefits and challenges. That the sector's faster pace of output growth has been possible both because of the sector's ability to carve out a niche for itself in a fast growing and technologically advanced segment and also policies that provided a relatively favourable business environment. India may now be entering a phase in which the services, especially the 'modern services' will be increasingly important inputs in the production and operational processes of all the sectors of the economy. Digitalisation has opened up opportunities for scaling up operations of the firms. The opportunities for smaller firms to take advantage of the new technology- intensive mechanisms for operations would require effective access to such mechanisms.

The Covid pandemic that continues to inflict impact the lives, businesses and livelihoods has affected all sectors in the economy including services. The services such as tourism, travel, accommodation, restaurants, trade and entertainment have suffered from much reduced business opportunities, both as a consequence of restraints on consumption expenditure and restrictions on operations to control the spread of the pandemic. One part of the services, IT and IT enabled services provided much needed channels of communication and transactions when the traditional channels became less feasible. These services, along with health services, have also been critical now in coordinating the efforts of vaccination against the new infections. Education services, however inadequately, kept the links alive between the students and the teachers. The pandemic experience has shown the need for strengthening the health and education sectors. It has also shown the advantages technology-enabled operations. Adoption of these processes in practice will place much greater demands on skilled labour.

The development agenda of providing universal access to health, education, shelter and livelihood will require expansion of services sector.

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