Examining the role of Service Sector in Karnataka's economic growth and learning policy lessons

A Policy Brief

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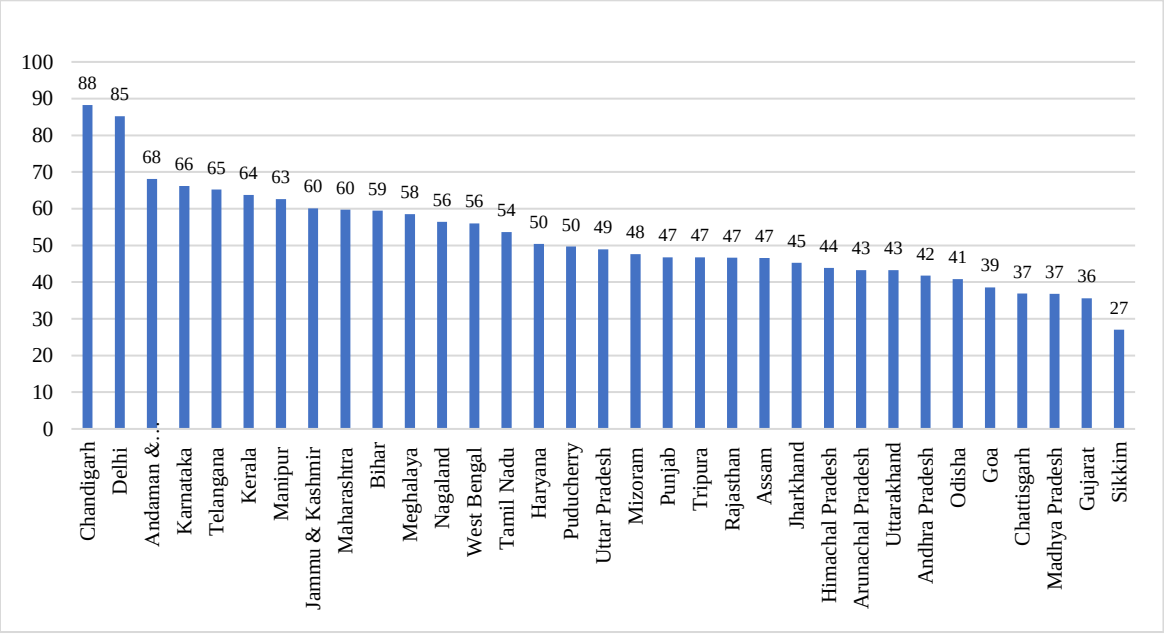
1. Background

India has experienced unprecedented growth of trade and services sector and their contributions to the national Gross Domestic Product in the post globalised phase of the 1990s has attracted attention in the academic and policy circles. Between 1970 and 2014, services constituted one-fourth of the world trade and increasingly services are becoming an important component of global production (Loungani, P et.al 2017). It grew from being 38.6% of the GDP in 1980s to 55.39% in 2020. The sector is internationally fuelled by the modern services: finance, insurance, real estate and banking (FIRB) and transport, storage and communication services (Eichengreen & Gupta 2011).

The India growth story was facilitated due to many national and international factors like the LPG (Liberalisation, Privatisation, Globalisation) reforms in India in the 1990s, easing of tariffs, incentivisation of the 'knowledge economy' through a new tax regime and improvement of global value chains and outsourcing (Pazhayathodi, 2010; Ghani, & Kharas, 2010, Banga, 2005; Banga & Goldar, 2007). The emergence and growth of the IT sector at the global level made the Indian service sector grow its share rapidly and acquire the global brand identity (Mattoo, Rathindran & Subramanian, 2001; Eichengreen & Gupta, 2011; Choudhury, 2014, Mukherjee, A. (2013).

Figure 1: Shares of Service Sector in Indian States: Gross Value Added (GVA) in 2019-20



Source: Economic Survey 2019-20, Government of India

2. The Present Research

This research is aimed at understanding the role of 'service economy' in Karnataka and explore the policy implications for the future. We examine the role of the service sector in Karnataka using parameters of growth, employment, stability and sustainability of this growth and its vulnerabilities to shocks evidenced through available data while also analysing the role of the state's policies and the interlinkages with the pattern that emerges from the analysis of data and policies. Services sector are also very heterogeneous when compared to the agricultural or industries sectors, hence, sub-sectors examination is also being done in this study.

3. A review of Karnataka's Service Sector related Policies

Karnataka has been an early starter in terms of attracting private sector investment for the IT, Biotech and BPO (Business Processes Outsourcing) industries and it was the first state to set up a Software Technology Park in its capital, Bangalore, in 1997. In addition to being s the state with the 4th highest share of services sector as a percentage of its GSDP, Karnataka is also one of the highest recipients of FDIs (Foreign Direct Investment) in the country, to the tune of USD 38,410 million (from 2007-08 to November 2020) and also one of the largest exporters of software in India.

The reform policies initiated by the Indian government in 1991 including export-import policy, technology upgradation and fiscal policy, and other reforms were comprehensive and sought to tackle the structural rigidities in the economy. The SEZ (Special Economic Zone) policy came about as an initiative of the EXIM policy statement of 1997-2002 for transformation of the earlier EPZs. Karnataka too offered incentives such as exemption from entry tax, stamp duty, registration charges, and reduction in tax on supply of petroleum products to SEZs, electricity tax exemption to SEZs and some capital investment subsidy. The Karnataka i4 Policy was instrumental in development of the technology innovation ecosystem leading to establishment of a number of Research & Development (R&D) centres of big multinational corporations.

Karnataka is known as the Biotech Capital of India (Ram, P. 2014). The Millennium Biotechnology Policy-II in 2009 was adopted to harness the benefits of the biotechnology industry for the common citizens by offering numerous fiscal incentives like investment promotion subsidy, waiver of conversion fine, subsidy for effluent treatment plants (ETPs), interest-free loan on VAT, anchor unit subsidy, interest subsidy, and financial support towards patent registration, standardization, water conservation, and energy conservation. Special commitment was made in this policy in the area of biofuels (Ram, P. 2014). All these paid back in the form of revenue generation; in 2014, Karnataka was contributing to 26 percent of India's biotech revenues and the biotech export revenues contribution of Karnataka was $530 million. The third Karnataka Biotech Policy for the period 2017-22, aims to encourage investments in new technology platforms of life sciences. As of 2019-20, Karnataka occupies more than one

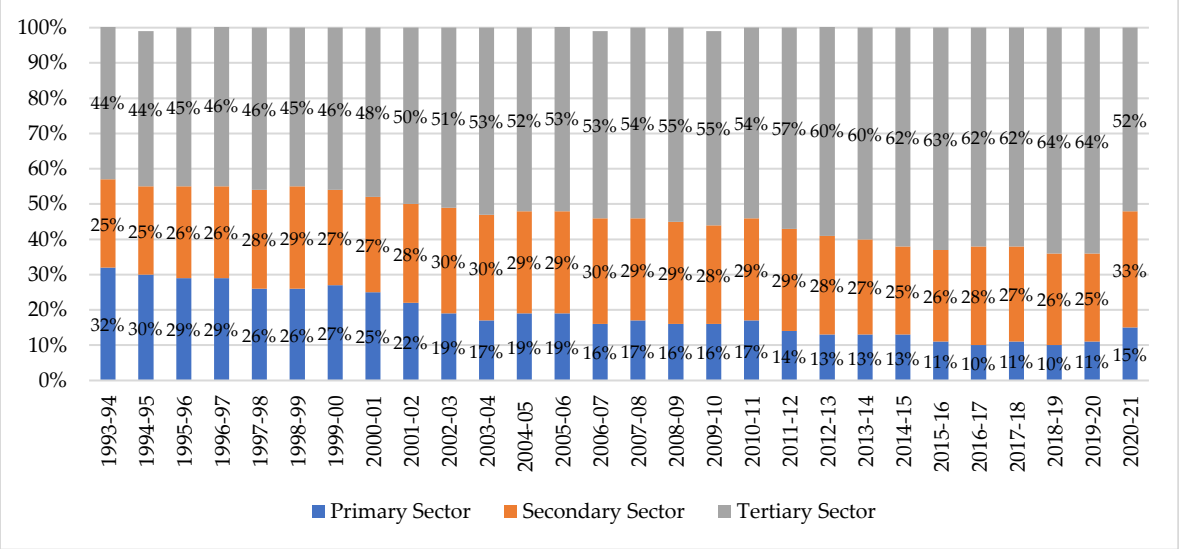
third of India's Bio-Economy at USD 22.6 Billion and this contributes to nearly 9.3% of the state's economic output signifying its importance in the state's economy (DES, GoK, 2020).

India has provided the space for innovations in the post reforms era with one of the biggest IT giants in the world today, Infosys, being a startup at one point in time. Karnataka had introduced its own Startup Policy (2015-2020) even before the Government of India came up with the Startup India scheme in 2016. This was also because of the recognition of Karnataka, especially Bangalore, as 'the only Indian city to be ranked within the best twenty startup eco systems across the world- by the Global Startup Ecosystem Ranking Report 2015. The Karnataka government's 2021-22 budget also announced multiple policy initiatives including setting up of a new venture capital fund of Rs.100 crore to support new and emerging technology institutes. The State Government has also set up the Centre of Excellence – Data Science and Artificial Intelligence in partnership with the National Association of Software and Service Companies (NASSCOM). With the emergence of Artificial Intelligence, Machine Learning and Big Data as critical key areas for future, the state is all set to provide the right impetus for enabling Karnataka to become a favoured destination among entrepreneurs which encourages the new technology world.

4. GSDP contribution and sectoral growth rates: a historical analysis

We carried out the analyses for the GSDP for the years 1993-94 and 2019-20 with a special focus on the Services Sector in the 2011-12 prices. The figure shows that the share of the primary sector in the GSDP has reduced from 23% in 1993-94 to 11% in 2011-12, secondary sector remains the same at around 25% and the services sector has increased its share from 44% to 64% (Figure 2).

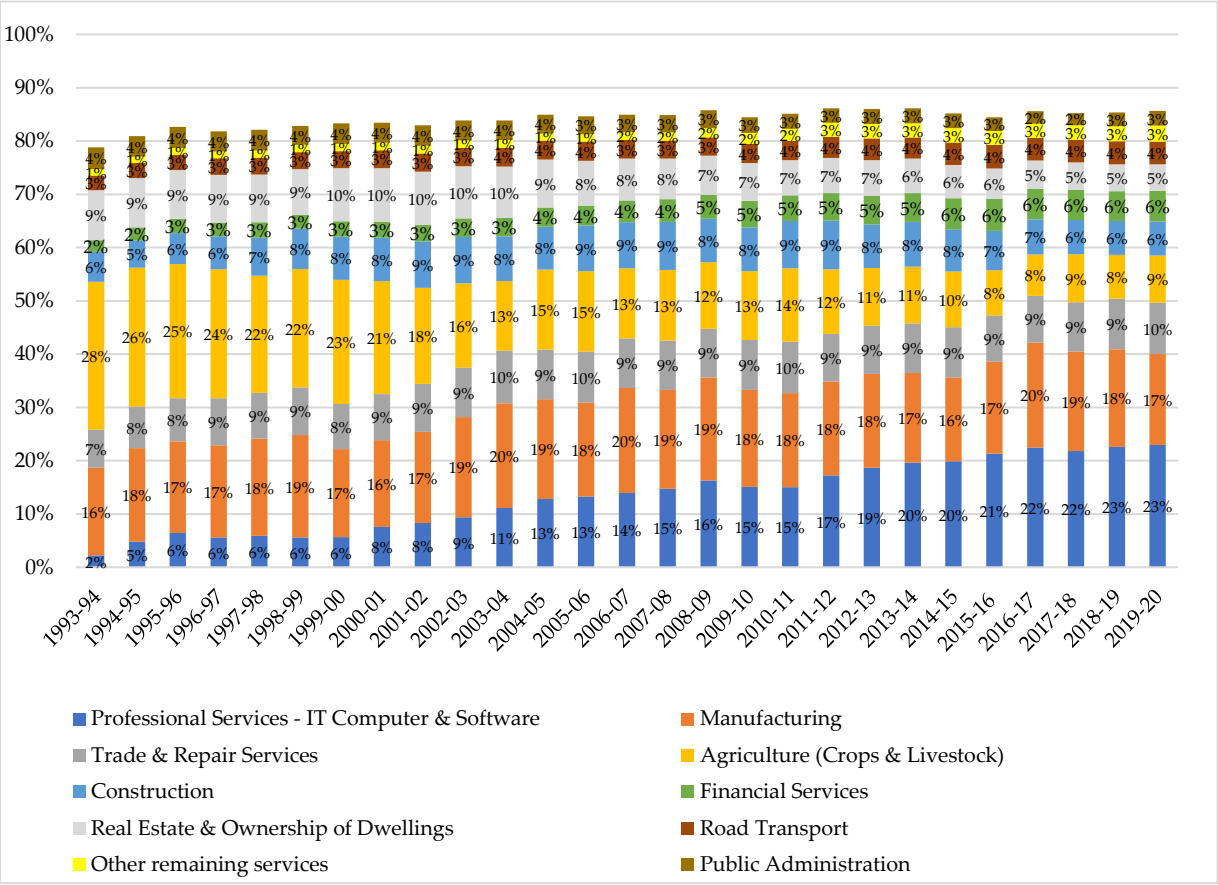
Figure 2: Shares of Aggregate Sectoral GSDP from 1993-94 to 2019-20 for Karnataka



Source: Author's calculations using DES data

Among the services sub-sectors, Construction (6-8%), Trade (8-10%), Road Transport (3- 4%), Public Administration (4%), Education (2-3%) and Health (1-2%) have shown consistency in contribution to GSDP, Financial Services has seen a positive increase in its contribution from 2% to 6% and IT, Computer & Software that have seen the highest growth in its share from 2% to 23% in the contribution/size to GSDP. Professional Services – IT & Computer Software, Real Estate & Ownership of Dwellings and Trade are the top contributors to the Services sector share.

Figure 3: Share of top 10 sectors by GSDP in Karnataka



Source: Author's calculations using DES Data

In terms of growth, Karnataka grew at an average level of 6% between 1993-94 to 2019-20. The Services sector witnessed a higher than average growth rate during the three decades. We further analyse the growth rates for the five periods to mark significant policy developments that is expected to have brought some structural changes and consequent growth effects, those are: 1993-94 to 2003-04 (post liberalisation effect), 2003-04 to 2007-08 (Boom period), 2007-08 to 2012-13 (post-crisis period), 2012-13 to 2016-17 (pre-GST and Demonetisation), 2016-17 to 2019-20 (GST and Post Demonetisation).

Post liberalisation period (1993-94 to 2003-04): IT and Computer Software has seen the highest growth rate per annum (24%) followed by Communication (21%), Agriculture (Crops & Livestock) saw a negative growth rate of 2% per annum.

Boom Period (2003-04 to 2007-08): ITES saw the highest growth rate per annum (45%) followed by Private Communication (24%), IT & Computer Software (19%), Financial Services & Mining (16%), and Construction (13%). In this period, public communication saw a trend very different from private communication when compared to other periods where they performed similarly.

Post Crisis period (2007-08 to 2012-13): Karnataka too experienced the effects of the global financial crisis with declining growth rates, however, Fishing, Health, Education, Other remaining services, Storage and Forestry saw an increase in growth during this period. It is noteworthy and social service sectors saw a higher growth though other sectors underwent drastic decline. The dependence on the outsourcing of activities by multinational companies got affected due to global financial crisis and impacted the growth of these sectors in Karnataka with reduced demand for manufacturing and agricultural goods.

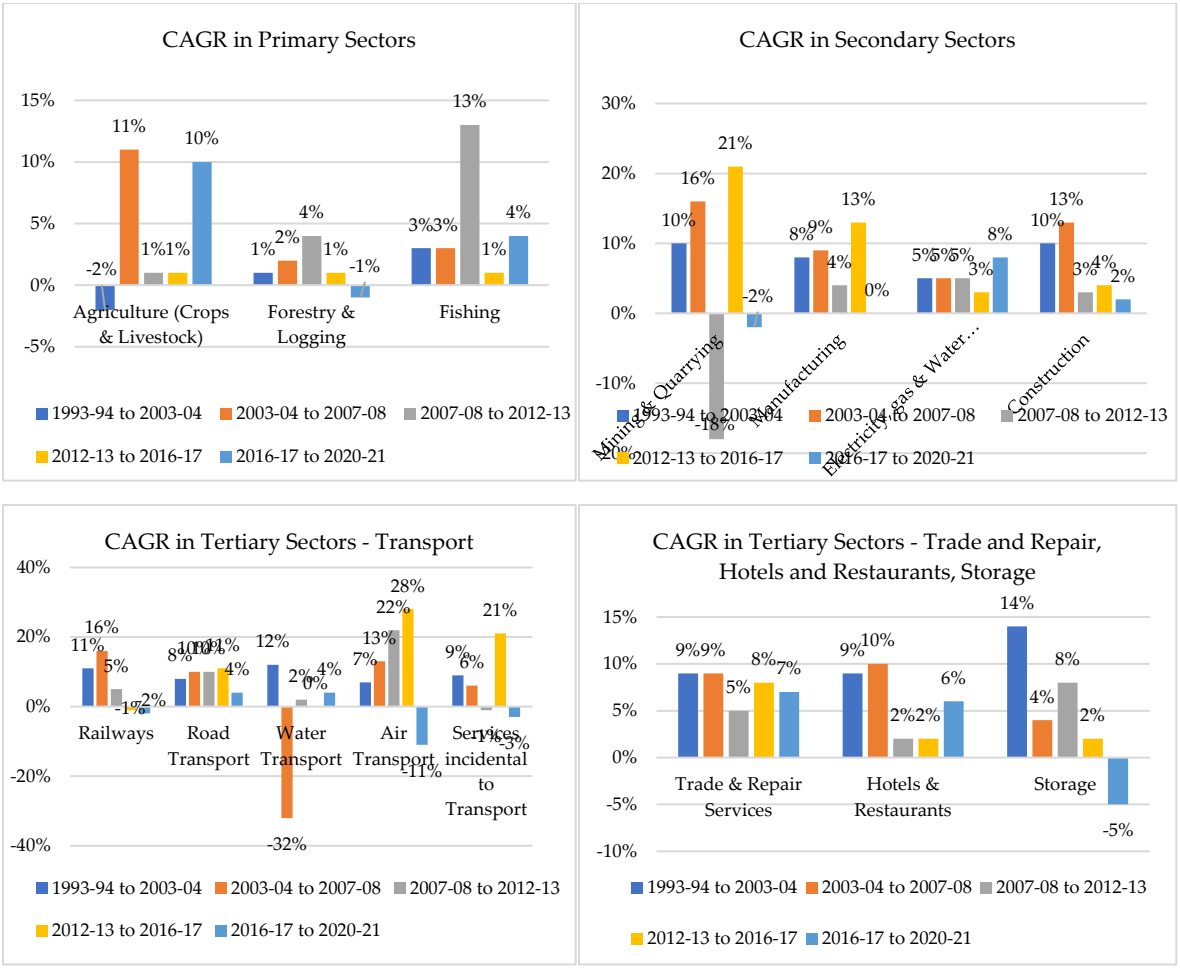
Pre-GST and Demonetisation (2012-13 to 2016-17):

In this phase of the post financial crisis era, we witness Business Consultancy (26%) , ITES (22%) and IT & Computer related software (15%) respectively having higher growth rate per annum relative to other sectors.

GST and post-Demonetisation (2016-17 to 2020-21):

Alongside the world economy slowing down and declining demand, with demonetisation being enacted, we have witnessed 100% decline in growth rate of Professional Services be it Business Consultancy, IT, & ITES, followed by Communication with negative growth per annum of 5%. It is interesting to see that during this period, Public Administration, Education & Health and Agriculture have survived the game and have shown a growth of 10% per annum. However, it is also important to add that the last financial year of this period also experienced the first wave of Covid-19 pandemic, leading to lockdowns and economic slowdown, especially in trade and manufacturing.

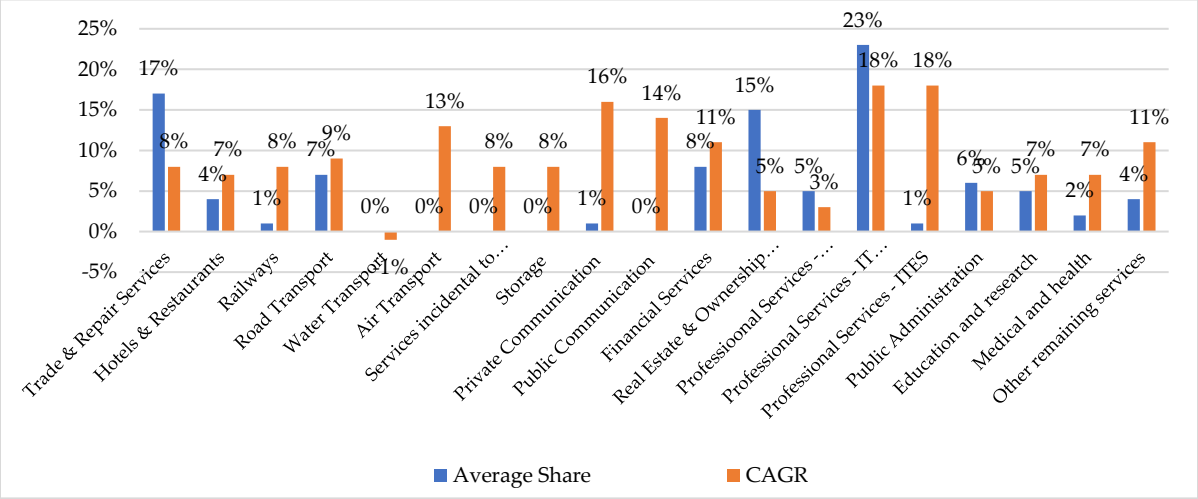
Figure 4: CAGR across all Sectors for Five Time Period



Source: Author's calculations using State SDP data from DES

A clear pattern emerges where export driven service sub-sectors drive the growth rates when the global economy is moving upwards, and the vice-versa when the global economy is experiencing decline and uncertainties, making the state susceptible to volatilities. Sectors registering lower but consistent growth rates are largely dependent on domestic demand and partly includes public services, making those less vulnerable to global cycles making those less vulnerable to global cycles and are big employers. This implies that the state needs to maintain this balance between policies that promote sectors that are low-growth but stable, and those that are high-growth but volatile.

Figure 5: Growth Rates and Sectoral Shares in GVA for the Services sub-sectors, 1992-93 to 2019-20



Source: Author's calculations

Among the services subsectors, Trade's share is high at 17% but it has grown on an average of only 8% per annum, Real Estate has a share of 15% and it has grown on an average of 5%, Professional Services-IT & Computer related Software with a share of 23% has grown at 18% (Figure 5). Despite the fast growth rate for the Professional Services-IT & Computer Software, their average share in value addition has remained less than that for primary sector and manufacturing, implying the continued importance of the primary and secondary sectors for the state economy.

5. Productivity and employment

The adoption of service sector growth as an engine of economic growth has provoked a lot of debate within the economics discourse regarding its long-term sustainability and low productivity (Joshi, 2004; Banga, 2005). The increasing trend of the service sector share in total employment conformed to the real decline in the number of jobs in the goods producing sector.

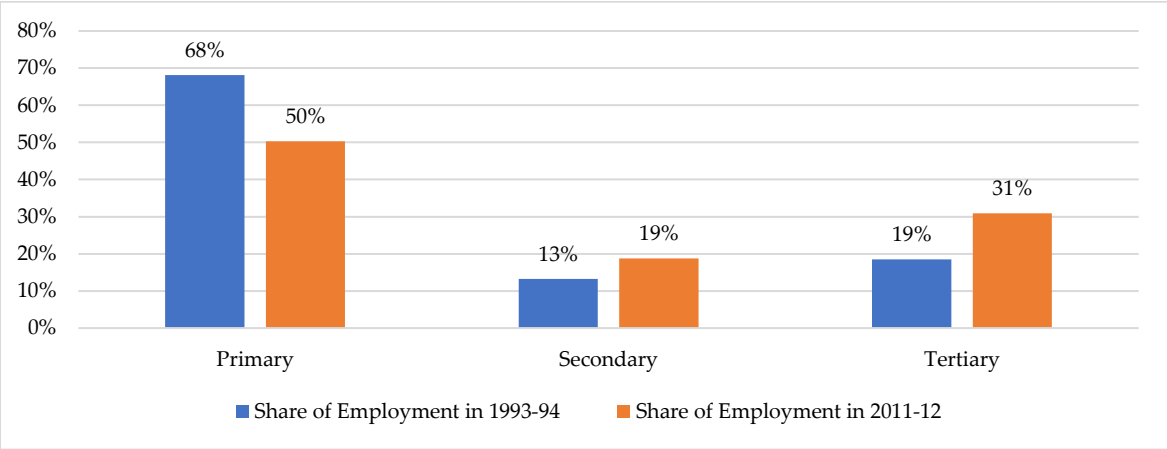
A 'new' research also claims that effect of an expansion of the service sector depends on which services are expanding – an expansion dominated by the more labour-intensive services having a negative effect on growth and capital-intensive services having a positive impact on growth (Maroto-Sanchez, 2012). During the decades of 1950s, 60s and 70s, trade, hotels and restaurants, transportation and public administration grew at a faster rate whereas in 1980s in was dominated by Banking and Insurance. The decade of 1990s and 2000's up until 2010, the growth of service sector is driven by communication (21.54%), and Banking and Insurance (11.05%) (Mukherjee, 2015).

The employment potential of the service sector, however, has been a contested issue in India with the intersectoral linkages in 1993-94 showing that the industry activities are 70% direct services-intensive and therefore service sector growth is indeed growth inducing, but this has

happened only through forward linkages which is less effective. Employment elasticity of the tertiary sector has fallen from 0.66 in 1981-90 to 0.24 in 2001-04 (Pattanaik, F., &Nayak, N. C.,2011), and slow rise in employment services is due to higher labour productivity of highly skilled labour reinforced by technological improvement. There are doubts on the sustainability aspect of the service sector growth's trajectory of India given its emphasis on technology being capital biased and import intensive. The employment is also skill biased with as very few high skilled employees getting a real wage rise, and it still primarily employs low wage, low skilled population, resulting in deskilling (Gatta, Boushey & Appelbaum, 2009).

Labour market outcomes are critical to economic policy evaluations as it ensures social and economic justice. The NSS Employment and Unemployment Surveys were analysed to see the share and growth of employment in Karnataka. Construction sector employs the largest share of the casual workers, this went up from 25% in 1993-94 to 98% in 2011-12, Manufacturing sector continues to employ the higher proportion of regular salaried workers since 1993-94 (20-25%) followed by public administration. Crops continues to have largest proportion of self employed in the economy, followed by livestock, trade and manufacturing, seen during all time periods. The growth in services sector employment is not in proportion with its rise in the GSVA share (Figure 6).

Figure 6: Share of employment across two time periods (1993-94, 2011-12)



Source: Author's calculations using NSS employment surveys

There is higher informalisation of labour with 'new' industries, and sectors like Communication, Public Administration, Education, Professional Services, Electricity, Gas & Water Supply, Education, Health, Financial Services have a larger share of their workers employed as regular salaried while Hotels and Restaurants have only around 30 to 35% of the workers as regular salaried. Mining has seen a consistent decline in regular salaried share of workers, while Construction sector employs workers mostly as casual workers. It is startling that the average employment growth has been merely one percent per annum at the aggregate level in Karnataka during this period (1993-94 – 2011-12).

Sectors with highest average employment growth rates included Real Estate (20%), Professional activities (9%), Services Incidental to transport, followed by Hotels & Restaurants (7%), Education, Construction & Road Transport (6%), Medical & Health (5%). Public Administration, Forestry and Mining has seen a negative growth rates. Manufacturing has seen only 1% growth in employment while Crops has seen nearly zero percent growth. Overall, there has just been a 1% growth in employment.

6. Service Sector, Equality and Sustainability

Though service sector has the largest share of employment within the total organised sector employment, it is largely dominated by public sector, and therefore, a large part of the employment is in unorganised sector comes with limited job security (Dasgupta & Singh, 2006; Mukherjee, 2015). Crops, Manufacturing and Trade continues to be the principal economic activity that people engage in Karnataka. In Crops, 57% have principal activity (PS) only while 32% have been involved in both principal and subsidiary activity. (PS+SS.) Workers in regular salaried jobs are the ones who are involved in one principal economic activity, followed by self-employed whereas casual workers are generally the ones who have involved in both PS + SS and this shows the precarity of the nature of employment.

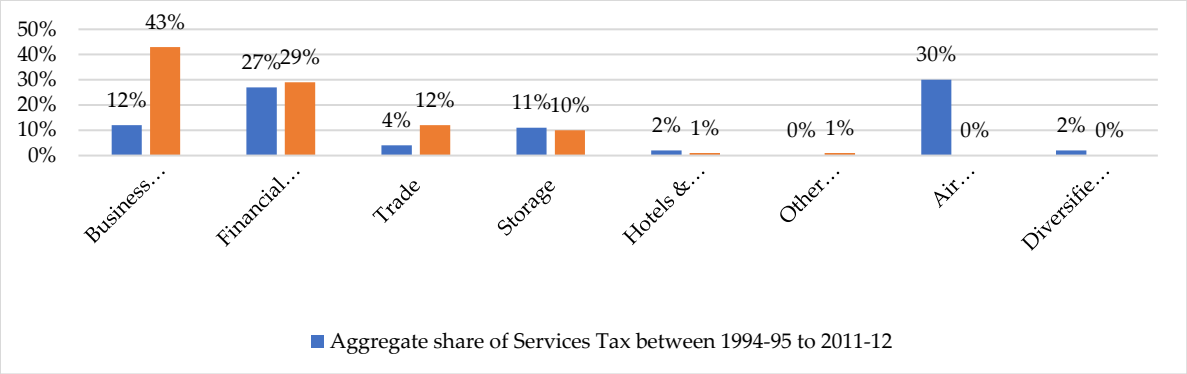
7. Services Sector and government revenue

Share of tax revenues indicate the health of a state's finances. Direct taxes are progressive as the ensure distribution of wealth through the medium of public policies and schemes benefitting such classes. Indirect taxes are borne equally by all classes, although this is balanced by keeping essential goods out of its ambit. The share of state's own tax revenue in the total revenue receipts was about 66.7 % in 2020-21(Revised Estimates-RE). The Goods and Services tax was one of the main sources of tax revenue comprising about 27.7% of revenue receipts in 2020-21(RE). We also analysed other taxes for the state including services tax, corporate taxes etc, for the period from 1991 to 2020 using the sample data collected from CMIE Prowess.

7.1 Services Tax

For Karnataka, the top sectors contributing to the services tax include Business Consultancy, Financial Services, Trade, Storage and Hotels and Restaurants. The share of business consultancy, largely representing IT and IT based services, in total service tax collected has increased more than three and a half times between two time periods: 1994-95 to 201-12 and 2012-13 to 2016-17, and that of trade increased three times during the same period. Policy measures such as tax holidays and incentives given to the IT sector to boost investments in the state, exports being exempt from tax could have kept the services tax collected from this sector lower than what it could have been.

Figure 7: Aggregate share of service tax collected by sectors



Source: Author's calculations using CMIE Data on services taxes collected between 1994-95 to 2019-20

7.2 Goods and Services Tax (GST)

The GST was introduced in July 2017 as a one rate, one nation, one tax system which subsumed many other taxes like the Sales Tax, VAT, Services Tax etc., into a single system of taxation. The early trends in GST data showed that the top three sectors which contribute to the average GST growth between 2018 and 2020 include Manufacturing (63%), Trade (19%) and Financial Services (12%). The Financial Services sector contributed to about 34% of the share in GST in 2019-20.

7.3 Sales Tax

The manufacturing sector contributes highest to the sales tax, although it has shown a consistent decline in average annual growth rates during different time periods as shown in the table below. From a high of 152% average annual growth rate during India's high growth period, it declined to a mere 66% average annual growth rate between 2008-2013 which is the period coinciding with the global sub-prime crisis and financial crisis.

Table 1: Average Annual Growth Rate in Sales tax across sub-sectors

Time Period	Manufacturing	Trade	Financial Services	Hotels & Restaurants	Total
1991 - 2004	102%	113%	124%		114%
2004 - 2008	152%	171%	69%	105%	111%
2008 - 2013	66%	33%	59%	122%	61%
2013 - 2017	71%	517%	82%	164%	137%
All	94%	120%	92%	123%	103%

Source: Author's calculations using CMIE data

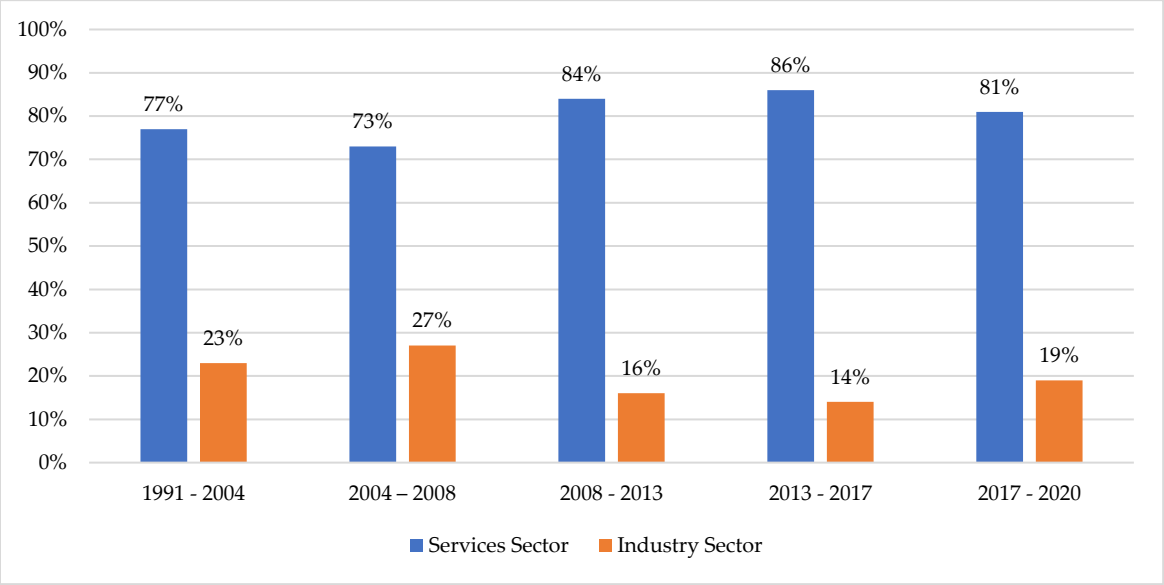
7.4 Value Added Tax (VAT) Collections

VAT was introduced in India in 2005. The manufacturing sector contributed to about 51% of the total VAT collected in the state on an average, between 2012-13 and 2016-17 just before GST was introduced in India. Forty nine percent of the remaining VAT came from the services sector, of which, trade contributed 33% and the financial services contributed 8%. The IT Services contributed just 2% of the total VAT collected in the state while the GSDP from IT and ITeS was 24%. This could be attributed to the high number of IT software and services which is produced in Karnataka is actually exported and exports are exempt from tax. The other reason could also be the high number of tax holidays given by the state governments in the form of creating of SEZs to boost the IT infrastructure investment in the state.

7.5 Corporate Taxes

India has seen a change in corporate tax rates, with mostly reduction in rates, and was 25.17% in 2019. Such tax cuts can cost the government exchequer heavily and hence, it is important to take such measures after thorough scrutiny. Services sector contributes maximum to the taxes and its share has been increasing from 77% between 1991 to 2004 to about 81% between 2017 and 2020. The other sectors contributing maximum to the corporate taxes include Financial Services, IT Computer Software and Manufacturing. Hence, although the contribution through services tax from the services sector is not significant, they are contributing to the corporate tax collections.

Figure 8: Share of Corporate Taxes by Sectors



Source: Author's calculations using CMIE data

8. Conclusions and Policy Implications

The economic development of a society has to be an integrated and interlinked system that takes into account the social and political wellbeing of a society. The economic and social goals go hand in hand. Similarly, it is important that short terms policy responses are in tandem with long term policy goals to avoid any incongruity. In the same way, policies linked with micro-economic initiatives must push the economy be in the same direction as the macro-economic policy goals are. In other words, we are arguing for a balance and congruity in micro-macro, economic-social, and economic growth and equality goals. The recent pandemic experience as well as the global recession experiences clearly taught us to realise the importance of the economy not being over-dependent on any one sector, as different sectors and industries have different kinds of resilience to diverse forms of crises. Our conclusions use these facts as the backdrop to arrive at policy suggestions.

Growth and State Income

The service sector share in the GSDP is 64% in 2019-20, seeing a dramatic increase from 44% in 1993-94. Within the service sector subsectors, export driven sectors drive the growth process with Professional Services – IT & ITES, Communication, and Financial Services to have shown highest growth rates for the 30 year period, reflective of the fact that service sector's growth has contributed significantly in high economic growth trajectory of the state's economy.

However, they have also shown volatility: for instance, the GSDP of the tertiary sector in Karnataka which grew by 9.8% in 2008-2009 grew only by 2.1% in 2009-10. The downturn in the US economy due to the sub-prime crisis partially affected India too. However, we also saw that although the sector was impacted, the IT-ITES industry showed resilience and tenacity in managing even under unpredictable circumstances and displaying the viability of India's fundamental value proposition. Even in times like the pandemic, unlike tourism and retail sub-sectors, knowledge based and skill dependent sub-sectors, such as IT is less susceptible to physical closures, and options of working remotely have been able to keep the economy going. Hence, it makes sense for the state to push for further growth of these services sector.

During the pandemic, we also saw that though the manufacturing sector suffered a setback mainly due to supply chain disruptions and reduced demand, the primary sector however sustained the effects on the economy and lockdown due to pandemic, mainly because the rural economy was not affected vastly by the first wave of the pandemic in 2020, aided by a good monsoon. This also means that though the share of the primary sector in growth has reduced over the years, it is important to nurture the sector for its resilience to such shocks.

Coming back to service sector, especially IT and ITeS, our analysis showed that its contribution to revenue is largely through corporate taxes and foreign exchange earnings –

both these sources are controlled by the Government of India. While the state such as Karnataka bears the potential revenue loss by providing incentives to such industries, the nature of the federal finance is such that the state does not benefit fully from these. That makes it pertinent for the state to raise these issues with the Finance Commission to be able to include criteria that would ensure greater transfer of central revenue collection to states like Karnataka.

Expansion of employment opportunities

On employment front, it is a cause for concern that services sector growth in value addition has not reflected the same trajectory in employment growth. Hence, it is essential to have a growth orientation that ensures creation of employment opportunities which provides decent wage, job security and social security. The kind of service sector growth Karnataka is witnessing is capital intensive, import intensive and also skill intensive. High productivity also obviously means less employment. This means while service sector has the potential to help the economy move towards more skill-based employment, this also means the number of jobs created through this route remains low.

Service sector in Karnataka can also be credited to have pushed other sectors such as construction, which has contributed to employment creation opportunities as well. However, much of this employment has remained in the informal sector and the state needs to initiate policies that would make the jobs in this sector less precarious. Karnataka also has a large presence of the textile industry which is export intensive contributing to about 20% of the national production and 3% of the total employment in the state, and in the manufacturing sector in particular, it contributes to a little more than one-fourth of the employment. The state has already adapted a forward -looking in terms of adapting the latest emerging technologies using advanced production technologies resulting in smart value chains (Textile Policy 2019-2024).

The primary sector, with its reduced share in the value addition, still employs a large workforce, although this is not seen as very gainful employment. The primary sector workforce still consists of a majority of small and marginal farmers who also work as labourers on other farms. So, initiatives should be taken, to first of all skill them with the latest technologies and innovations in farming, create rural industries with well-established supply chain and marketing facilities such that value addition of farm produce can happen at the local level ensuring skilling of farm labour in multiple activities and creating viable employment opportunities due to structural changes of transition from primary to the other sectors and also ensuring a more meaningful distribution of income among the actual growers of the crop.

Sustainability of growth, employment and income

Sustainability is also dynamic as new trends crop up in the world economy. It becomes imperative to look out for such new sectors which offer potentials to changing needs of the world. Artificial Intelligence is one such area and with Karnataka having such a high number of engineering graduates every year, we have to create a more skilled workforce which can provide services to the rest of the world. The world is now talking about the fourth industrial revolution with a whole new dimension to manufacturing processes integrating the use of smart technology and Internet-of-Things. This also means that sectoral divides are slowly collapsing.

Also, although a lot of processes are moving towards automation with this revolution, one has to be mindful of the demographic dividend and huge labour force which is a key feature of our economy and any process that we want to adapt at the end of the day, should keep its people in mind, and work with them, and for their development and overall welfare. Economic development should be seen both from a perspective of not just employment creation but also higher productivity and incomes for its sustainability, through quality job creation, economic diversification and investment strategies and labour market activation to include more vulnerable groups (ILO, 2021). Suitable skill development is critical both for employment generation and for sustaining the pace of growth, and moving the economy towards greater formality. However, the recent dilution of labour laws by the Karnataka Government (Srivatsa, SS. 2020), which were strongly opposed by the trade unions where it would largely exempt industries from not following basic labour rights and further make working conditions worse for the labour class by claiming to ease regulations would only further exacerbate the existing inequalities among its citizens.

Reduction of inequalities and enhancement of capabilities

The development of the services sector, especially the IT sector has led to the growth in demand for ancillary services and development of infrastructure, but this has not been balanced and largely centred in the IT hub of Bangalore. This has two connotations: one, the regional imbalance where the growth pattern favours Bengaluru, and now the state government is taking necessary measures to develop the tier-2 cities; and two, the government's investment in infrastructure as well as public finance policies have focused much more on attracting the capital investment in Bengaluru and much less on the fact that this growth has also meant large scale immigration of working class to the city to work in the ancillary sectors who also need better civic amenities and access to public services. It is perhaps time to rethink about creating processes so that the IT & ITES services from that have benefitted from relaxations in taxation is also made accountable for investment in areas that make the state a more equitable destination. Clearly drafted public private partnerships in sectors such as health, education and housing with a clear responsibility on the private also for resource contribution as well may be the way forward.

In order to address the issue of inequality, it is also important to link the policies for enhancement of capabilities of people through public investment on skills, education, health and living conditions to enable their participation in a dynamic economic growth process to the public finance policies for the promotion of particular sectors. For instance, to encourage young men and women from marginalised communities to reap the benefits for the growth of service sector, the skill development policies as well as labour market regulations need to be especially targeted to break the caste, gender and location specific barriers and also be comprehensive, rather than tokenistic and largely status quoist (Maithreyi, R., Prabha, K,Iyer, A., Prasad R S.,& Jha, J. (2019).

In addition to having policies that keep a balance between sectors so as to make the economy less susceptible to diverse kinds of shocks, because of their varying nature of resilience, it is also important to have a balance between short term and long term, as well as micro and macro-economic goals. For instance, while recognising the important role of agriculture, IT, ITeS and AI in maintaining the economic growth even in the times of pandemic is critical in the short run, it is also pertinent to address the woes of manufacturing sector by all means to save livelihoods in the short run and promote creation of employment in the long run. Similarly, while fiscal balance is an important macroeconomic goal in the long run, in present circumstances when the economy is suffering because of the lack of demand for goods and services, it becomes important to have microeconomic measures like basic income support schemes, food distribution, and relief from loan payments. These can not only help mitigate the immediate economic impact of the pandemic but also revive the economy by pushing the demand for goods and services that are to be produced and traded, and in turn reviving both manufacturing and service sectors, and also perhaps helping agriculture sustain its place.

Policy Suggestions

1. **Balancing growth across sectors**
   While the Government of Karnataka is already adopting policies which are trying to impact the growth of all sectors, it is important to realise that this is well-justified on grounds of their diverse contributions in terms of growth and employment, and varied nature of resilience that they bring in for different kinds of shocks including global slowdown and pandemic.
2. **Negotiating devolution formula with Finance Commission**
   The Government of Karnataka must make (i) a case to the Reserve Bank of India to generate data for state wise contributions in terms of export/foreign exchange earnings, and (ii) another case to Finance Commission in future for developing the criteria for devolution of resources in a manner that it also incentivises states that make higher contribution to corporate taxes.

3. **Development of inclusive skill enhancement policies**
   The state needs to review its investment and policies on skill enhancement to make it more equitable rather than promoting skill education in a manner that it does not help much in breaking the inequality and social capital barriers of caste, caste, location, language and gender. A separate exercise can be undertaken for this purpose by linking dynamic growth patterns that each sector is experiencing and making the education and skill development much more oriented towards focusing on developing capabilities of life-long learning or earning to re-learn and deeper critical skills of easy adaptation.
4. **Development of urban infrastructure for the urban poor and migrant workers**
   The giant service sectors that have grown as a result of the push it received from the IT and ITeS sectors such as the construction sector must also contribute to a more balanced development of the state, especially its urban infrastructure for all strata of population including the poor, especially the working class and migrant labour. The judicious use of money received through construction cess for the welfare of working-class people can also help in the process. The fact that the state fares poorly in poor's access to urban housing, sanitation and other public services[1] needs to change, and carefully drafted public-private partnership projects can play a role there. Such initiatives can also help in addressing the issue of pollution and long-term sustainability of urban spaces and lives.
5. **Partial wage subsidy scheme**
   The government also needs to consider maintaining a balance between demand and supply side interventions, especially in the wake of the pandemic. One way could be to think of partial wage subsidy to those sectors such as retail and hospitality industry in service sectors that have been really hit hard and have also led to loss of livelihoods and income. Partial wage subsidy would help the employers in avoiding retrenchment while also ensuring the liquidity flow in the market to create demand for other goods and services, which is a major need of the hour.

[1] CBPS Migration study, forthcoming.

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