World Bank Webinar Note: 'How can Pakistan leverage the promise of services-led development?'

Historically, manufacturing and agriculture have been considered as the drivers of economic growth and development while the expansion of the services sector is primarily seen as a consequence of development.¹ However, due to advances in technology, the services sector is emerging as a key driver of growth. This note explores how Pakistan can benefit from this structural transformation and leverage services to boost development via enhanced productivity, economic growth and job creation². It is based on the discussion at a webinar jointly hosted by the Consortium for Development Policy Research (CDPR) and the World Bank on 'How can Pakistan leverage the promise of services-led development?' which focused on how growth led by the service sector can help solve macro-imbalances in Pakistan by boosting productivity.

Context

Manufacturing-led development has long been the dominant model for generating economic growth in developing countries. This is interesting considering that, on average for most developing countries, the share of industry in GDP and employment has remained constant at about 20% over the past three decades indicating that all of the decline seen in the agricultural sector over the years has been off-set by the services sector.³ In the past few decades, structural transformation has boosted the services sector globally, creating employment opportunities, and generating economic growth. Labor productivity growth in the services sector has contributed to overall productivity growth in the economy in two ways; i) through labor moving from agriculture to services in a productivity enhancing way and ii) through robust intra-sector productivity growth. Improvements in the service sector appear even more stark when viewed against the backdrop of a manufacturing sector which has not been performing too well.

In 2019, the services sector accounted for an average of 55% of GDP and 45% of employment in developing economies. In 2021 services formed 61.7% of Pakistan's GDP (Figure 1)⁴. This sector got a further boost during COVID-19 as digital technologies became critical for continuation of service delivery in education, wholesale and retail trade, finance and insurance. Expansion in the

¹ https://economics.yale.edu/undergraduate/tobin/fall-2019/service-led-economic-development-case-india

² Nayyar, Gaurav, et al. "At Your Service: The Promise of Services-led Development?" 2021, https://doi.org/10.1596/978-1-4648-1671-0

³ Nayyar, Gaurav, et al. "At Your Service: The Promise of Services-led Development?" 2021, https://doi.org/10.1596/978-1-4648-1671-0

⁴ https://www.pc.gov.pk/uploads/cpec/PES_2020_21.pdf

penetration of digital technologies in Pakistan has expedited the sector's growth. Broadband penetration now stands at 49.94% of the country's population.⁵

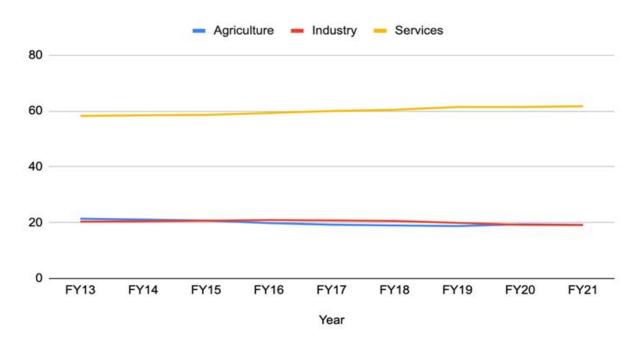


Figure 1: Sector-wise Contribution to the GDP (%)

Source: Pakistan Bureau of Statistics

Structural Changes in the Services Sector

Evidence suggests that manufacturing-led development in the past delivered the twin gains of productivity growth and large-scale job creation for the relatively unskilled. Some key characteristics that underscore manufacturing's potential to drive development are: (i) access to larger markets; (ii) the scope to augment labor with capital and technology; and (iii) linkages with other sectors (leading to economies of scale, innovation, and spillovers). The absence of these factors in traditional services led many to be pessimistic about the prospect of service-led development. However, with rapid technological change in recent years, traditional services have been transformed and new technology-enabled services have emerged. Some key changes in the services sector, challenging conventional theory are highlighted below:

i) **Expansion in scale through access to international markets**: Digitization has made services more storable, codifiable, and transferable. It has reduced the need for physical proximity between consumers and producers, which had previously limited scaling-up of many services. This

⁵ https://pta.gov.pk/assets/media/pta_annual_report_2021_01032022.pdf

transition is most visible in services like telephone and online banking, computer programming, and education services.⁶

ii) **The potential of labor-augmenting innovation:** Historically, manufacturing would link physical capital with labor which would result in productivity gains. This feature was missing in the services sector where, bar a few services, most could not augment physical capital. However, the recent emergence of intangible forms of capital (data, softwares, organizational practices, skills, organizational innovation) have seen market increases in investments over the last many years and hence, are changing the equation for the services sector where physical capital was previously less important and is opening up new doors for innovation. The commonly-held idea of the 'cost disease' of services implies that in a world of rapid technological progress, one should expect the cost of manufactured goods to fall and the cost of labor-intensive services to rise.⁷ However, in recent years, the production of some services, in particular those linked to information technologies, is characterized by value-creation based upon economies of scale (presence of fixed costs) and large productivity gains.

iii) **Productivity growth and positive spillovers**: Contrary to what conventional theories suggest, research demonstrates that services have shown dynamic productivity growth rates, while their contribution to overall productivity growth plays a more important role than was historically believed.⁸ Services have positive spillover effects; for instance, finance, telecommunications, and transport all tend to facilitate the commodity-producing sectors. Research also suggests that increases in Foriegn Direct Investment (FDI) in upstream services sectors are associated with increased productivity of firms operating in downstream sectors that use these services as inputs.⁹

⁶ Ghani, Ejaz, and Homi Kharas. 2010. "The Service Revolution." Economic Premise, issue 14, World Bank, Washington, DC.

⁷ Nayyar, Gaurav, et al. "At Your Service: The Promise of Services-led Development?" 2021, https://doi.org/10.1596/978-1-4648-1671-0

⁸ Maroto-Sánchez, Andrés, and Juan R. Cuadrado-Roura. "Is Growth of Services an Obstacle to Productivity Growth? A Comparative Analysis." Structural Change and Economic Dynamics, vol. 20, no. 4, 2009, pp. 254–265., https://doi.org/10.1016/j.strueco.2009.09.002.

⁹ Lovo, Stefania, and Gonzalo Varela. "Internationally Linked Firms, Integration Reforms and Productivity: Evidence from Pakistan." 2020, https://doi.org/10.1596/1813-9450-9349.

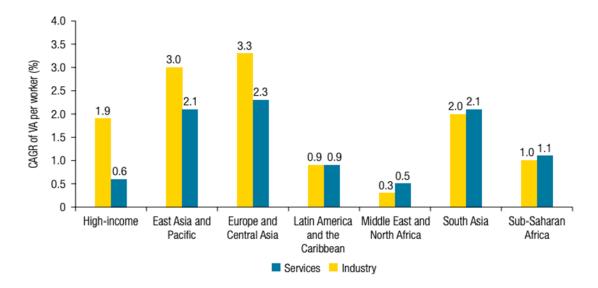


Figure 2: Growth in value-added per worker in low-to-middle income countries (LMICs) 1995-2018

Source: "At your service: the Promise of Services-led Development" (2021)

Despite significant developments in the services sector it is important to understand that this development is not experienced homogeneously across all service sub-sectors due to the varying nature of services. These services differ in; i) the extent to which they are traded internationally, ii) terms of the capital intensity iii) terms of the skills they require, iv) their linkages with other sectors. In most developing countries the largest share of services employment has been in low-skill, less modern, less-tradable service sectors (with limited productivity growth) rather than in high-skill, modern and tradable, linkage-heavy services (global innovator services¹⁰).

How Can Technology Be Leveraged to Boost Services in Pakistan?

In Pakistan, agriculture and manufacturing have traditionally been considered the leading economic sectors. Many federal government initiatives are focused on incentivising the industry such as energy subsidies for textiles and subsidies for manufacturing exporters including subsidized credit. However, the services sector remains the largest contributor to GDP.

The ICT Sub-Sector:

Within services, there has been consistent growth in IT & IT-enabled services. Micro enterprises, independent consultants and freelancers have contributed an estimated \$500 million in IT & ITeS

¹⁰ Global innovator services include ICT services, professional, scientific & technical services and financial services.

exports. IT export remittances, including telecommunication, computer and information services have surged to \$1.298 billion in 2021, in comparison to \$918 million during 2020¹¹.

However, despite its potential, the ICT sub-sector faces considerable challenges. Within computerrelated services, exports are concentrated in low-to-medium-value-added software services, which include enterprise planning, application development, and integration. There is limited activity in product development. Similarly, low-value-added services such as call centers lead the Business Process Outsourcing (BPO) segment, accounting for 90% of the export revenue in this segment.¹² Additionally, the number of firms supplying offshore services in higher-value-added segments such as banking, finance, insurance, and healthcare remain low. Pakistan's share in exports of computer-related services accounts for less than 1% of world exports.

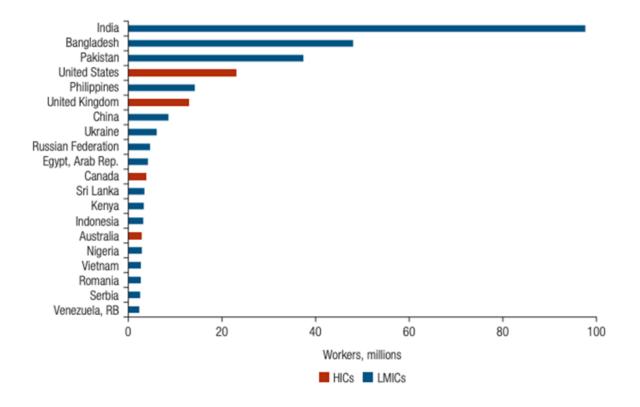


Figure 3: Supply of online freelancers, top 20 countries, June 2017-October 2020

Source: "At your service: the Promise of Services-led Development" (2021)

 ¹¹ https://moitt.gov.pk/NewsDetail/ZTliMzZkZWQtNmMxNi00NWMwLWE0ZjEtZjJIYTMwMjE0YWM2
¹² Sáez, Sebastian, Nadeem Rizwan, and Erik van der Marel. 2020. "Digital Pakistan: A Business and Trade Assessment." Report AUS0001607, World Bank, Washington, DC.

A Substitute to Manufacturing?

The services sector has the potential to boost high-value growth and while it may not create the kind of job opportunities offered by the manufacturing or agriculture sectors, the value addition from the services sector is significant. A major problem of the services sector in Pakistan is that the more productive services do not create enough jobs and the services that do create jobs are not very productive. This dichotomy is worrisome for both policymakers and economists. In this sense services are somewhat a substitute to manufacturing as historically this is exactly what the manufacturing sector did. It created jobs for a large number of low-skilled workers and these jobs became more productive overtime. However, digitization is changing this equation by improving the productivity prospects for several low skill-services. It does so by overcoming information asymmetries and other bottlenecks can be overcome. The urban economy in Pakistan has the potential to be an engine of growth, but digitization is essential to boost trade and productivity in the services sector.¹³

Due to a lack of IT service providers (global innovator services) in Pakistan there is a major lag in digitization of the government and private sector. The government is working closely with the Punjab Information Technology Board (PITB) to address this deficit. Traditionally, in the services sector there have been limited opportunities for productivity growth of low-skilled workers but recent advancement of technology and inter-sectoral linkages are shrinking the dichotomy in the service sector enabling it to play a role similar to what has previously been played by the manufacturing sector.

However, the services sector is not an alternative to the manufacturing sector, rather services are increasingly and equally more important for Pakistan to industrialize more.

Export Potential of Services

The manufacturing sector makes up the bulk of a country's exports, but it is worthwhile to explore the export potential of the services sector in terms of the magnitude of exports. The primary problem is the measurement of the magnitude of exported services.¹⁴ While the export potential of global innovator services is high when considering current direct exports, the magnitude of export of services is not comparable to the export of goods (manufacturing, agriculture, mining).¹⁵

Challenges to Service-led Development in Pakistan

The challenges to service-led development in Pakistan are two-fold; the first challenge is how to shift the composition of services away from the traditional low productivity sectors towards

¹³ https://www.gsma.com/asia-pacific/wp-content/uploads/2020/06/24253-Pakistan-report-updates-LR.pdf

¹⁴ https://www.wto.org/english/res_e/statis_e/services_training_module_e.pdf

¹⁵ https://www.sbp.org.pk/publications/export/2022/Feb/2.pdf

higher-productivity services? This remains a long process and will not occur overnight and leads to the second challenge; how to leverage technology to boost productivity of those employed in the lower-skilled, low productivity sectors? Some impediments to the growth of the services sector include:

- 1. Lack of digital literacy and highly-skilled labor supply: Investment in education infrastructure can be highly beneficial for encouraging greater technological innovation. In India, the Indian Institutes of Technology provided the early momentum. The number of engineering colleges in India increased from 246 in 1985 to more than 1,100 in 2003. The result was an increase in the number of engineers from about 59 per million (45,000 engineers) in 1985 to 405 per million (440,000 engineers) in 2003.¹⁶ However, in Pakistan there is a distinct lack of trained labor and limited training centers to bridge this gap. Moreover, given the rise in digitization, specific training is needed to help service providers navigate the e-commerce space.¹⁷
- 2. Lack of infrastructure: In Pakistan there is a persistent lack of adequate infrastructure which enables stable digital connectivity. There is a lack of low-cost, high-speed internet, especially in remote areas of Pakistan. Broadband penetration still stands at 49.4%, leaving behind most of the population without access to the internet which handicaps the extent and nature of IT related services that can be offered. Access to the internet can directly benefit the services sector. For example, in Africa, the arrival of internet cables predominantly benefited services firms, spurring market entry and boosting productivity.¹⁸
- **3.** Lack of access to technology and heavy taxation on telecom services and technologically-advanced imported gadgets: There is limited availability of affordable devices (mobile phones/ tablets etc.) Pakistan has begun manufacturing mobile phones locally but it is still a fairly nascent industry. While the industry develops, access to imported phones should not be made difficult by raising taxes/prices exorbitantly as this raises the cost of doing business manifold¹⁹ especially considering the provision of certain services require sophisticated high-quality technology which Pakistan might not have the capacity to produce at the moment. Taxing telecom and gadgets heavily can negatively impact innovation in the technology subsector, and subsequently undermine growth in the services sector.
- 4. Limited access to finance: Most start-ups have very limited access to finance. However, recently there has been a growth in the amount of investment, as seed money or venture capital, coming into Pakistan. This is primarily due to the impressive performance of

¹⁶

https://openknowledge.worldbank.org/bitstream/handle/10986/2379/658370 EPI188160 Box 365736 B0 Exporting.pdf; sequence=1

¹⁷ https://blogs.worldbank.org/endpovertyinsouthasia/accelerating-pakistan-s-structural-transformation

¹⁸ Hjort, Jonas, and Jonas Poulsen. 2019. "The Arrival of Fast Internet and Employment in Africa." American Economic Review 109 (3): 1032–79.

¹⁹ https://download1.fbr.gov.pk/Docs/2022121151057381Rateofdutyonmobile.pdf

entrepreneurs and startups in the country, especially those set up by individuals who have international experience and expertise. Unfortunately, the uncertainty associated with inconsistent policies and erratic trends of suddenly banning applications, act as a major deterrents to investment.

- 5. **Poor business environment and macroeconomic instability**: A non-conducive business environment can discourage investment in the services sector. Pakistan currently ranks 108 in the World Bank's measure of the ease of doing business, falling behind comparator countries like India, Bhutan and Nepal.²⁰ Pakistan remains on the Financial Actions Task Force (FATF)'s gray list which may discourage investment and payment platforms such as PayPal from operating in Pakistan.²¹
- 6. **Regulatory barriers**: The fintech ecosystem in the country is hobbled by threats to data security and intellectual property, which discourages entrepreneurs from venturing into the fintech environment. Moreover, ease of doing business is constrained by the need for excessive clearances²² and approvals.
- 7. Erratic Policies: The tendency to ban applications, social media platforms etc. act to disincentive investment in the IT sector in Pakistan due to the associated uncertainty.²³
- 8. **Persisting high levels of informalization:** Informality in terms of business practices, the reliance on social and political networks, and the general reluctance to engage with formal sector financial institutions also limit growth of the sector.
- 9. Weak online payment infrastructure: E-banking transactions in Pakistan registered a year on year growth of 31.1% in 2021.²⁴ Additionally, the State Bank of Pakistan also launched an online payment system in 2021 called Raast²⁵ which aims to make online transactions more affordable and attractive to consumers from different socio-economic groups. However, perceived security risks associated with online payments still discourage people from making cashless transactions.

Conclusion

There has been significant growth in the services sector but this comes with a caveat; development has not been equal across the various different sub-sectors of development. The services sector is not monolithic; it consists of very heterogeneous economic activity. It is imperative to acknowledge these differences and the fact that in most developing countries the largest share of

²⁰ https://www.doingbusiness.org/content/dam/doingBusiness/pdf/db2020/DB20-FS-SAR.pdf

²¹ https://www.reuters.com/article/us-pakistan-fatf-idUSKBN2AP2DE

²² Such as the need for a No Objection Certificate (NOC).

²³ https://www.dawn.com/news/1591357

²⁴ https://www.sbp.org.pk/PS/PDF/FiscalYear-2020-21.pdf

https://www.sbp.org.pk/dfs/Raast.html#:~:text=Raast%20is%20Pakistan's%20first%20instant,businesses%20and%2 0government%20entities%20instantaneously.

service employment is in low-skill, less modern, less-tradable service sectors with limited productivity growth rather than high-skill, modern and tradable, linkage-heavy services. In the immediate term it is important to take measures to improve the productivity of those employed in the lower-skilled, low productivity sectors while the long term goal should be to facilitate the transition of services away from the traditional low productivity sectors towards higher-productivity services. A number of operational and regulatory challenges need to be addressed to maximize the promise of service-led growth in Pakistan.