

Special Section 2: Performance of ICT Exports of Pakistan

Official ICT exports of Pakistan touched US\$ 1 billion for the first time ever in FY18 (**Figure S2.1**). While Pakistanis have begun to figure prominently in electronic freelancing lately, it was the sharp increase in consultancy services provided by the country's ICT firms that has dominated the export trend over the last couple of years. This section analyzes in detail the dynamics of ICT exports, and highlights the challenges faced by the firms and individuals in increasing their share in the growing business process management (BPM) and micro-works global market.

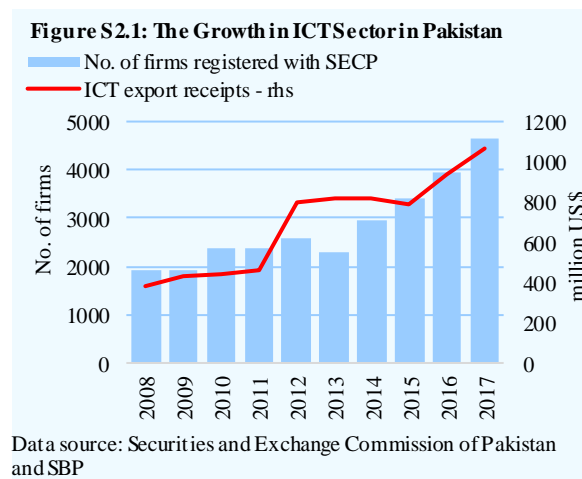


Table S2.1: Pakistan's Exports of Telecommunication, Computer & Services*
million US dollars

	FY13	FY14	FY15	FY16	FY17	FY18	Q1-FY18	Q1-FY19
Total (1 + 2 + 3)	802.9	816.6	821.2	788.6	939.5	1,065.0	254.0	250.6
<i>of which</i>								
1. Computer services	293.0	330.0	458.6	492.8	572.2	726.0	163.5	180.8
Computer software	212.8	225.1	322.7	286.6	264.4	320.2	62.8	69.7
Software consultancy	42.0	63.8	81.5	139.2	227.3	287.7	74.7	80.2
Other computer	33.5	39.3	52.6	64.2	76.4	118.2	26.0	30.9
2. Telecom services	508.6	485.7	361.3	294.3	365.8	335.4	90.0	69.4
Telecom	471.1	445.6	300.7	221.4	282.9	231.4	67.8	46.0
Call centers	37.5	40.1	60.6	72.8	82.9	104.0	22.2	23.5
3. Information services	1.3	0.9	1.3	1.5	1.6	3.5	0.5	0.3

* as per BPM6-Extended Balance of Payments Services Classification (EBOPS 2010)

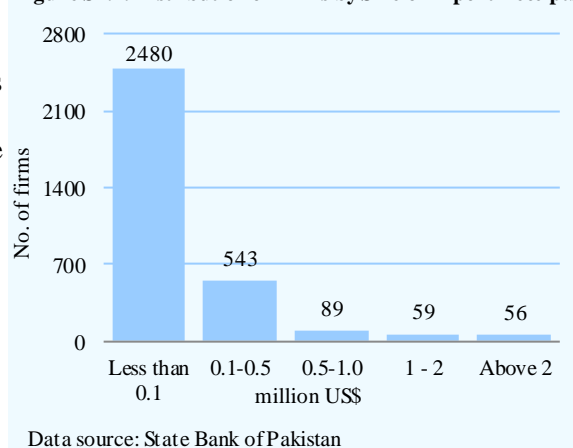
Data source: State Bank of Pakistan

Low value-added segment dominates

As per the official statistics, computer services have generated most of the export momentum in recent years (**Table S2.1**). However, while software exports have displayed a more-or-less stagnant export performance over the previous 5 years, a steady growth has been observed in the export of consultancy services. As for the sector's composition, export revenues of only 30 percent of the total 3,228 ICT exporting entities came from computer software during FY18; the rest had either

limited or no product orientation, as they generated revenues only from low value-added services (e.g. call centers). From FX generation perspective, this dominance of low value-added services is not favorable. The breakdown of FY18 data suggests that the average receipts from software exports (across firms) were more than double the average receipts from other ICT exports. Therefore, it is not surprising to see that only 56 firms had exports of US\$ 2 million and above, as an overwhelming majority of firms could not even fetch US\$ 0.1 million receipts during the year (**Figure S2.2**).

Figure S2.2: Distribution of Firms by Size of Export Receipts



Informal exports are probably higher than formal exports

Estimates by industry experts place the total size of Pakistan's ICT exports at around US\$ 2.5 billion. Of these exports, registered firms using formal banking channels to collect export receipts account for around US\$ 1 billion (as captured in **Table S2.1**). However, roughly US\$ 1 billion is attributed to SME exports in the grey market, and the remaining US\$ 0.5 billion is accounted for by freelancers in the IT and IT-enabled services (ITES) space that serve international clients.

While the major stakeholders – including Pakistan Software Export Board (PSEB), associations, and industry analysts – provide different estimated figures pertaining to the undocumented exports, a common narrative prevails when it comes to reasons behind the under-representation of receipts in the official statistics. First, the absence of PayPal – the most widely used payment method across the globe, and which both employers and freelancers consider relatively more convenient, cheap and safe – is a major concern.¹ Therefore, a number of ICT and business process outsourcing (BPO) firms prefer to receive their revenues using money transfer organizations like Western Union, with some even

¹ This is important because: (i) foreign employers generally make their transactions through PayPal, rendering it undesirable for them to concurrently use the alternative platforms; (ii) PayPal gives an additional payment reversal/dispute resolution facility to the employers, which helps in increasing the level of trust between the transacting parties; and (iii) domestic freelancers or the exporters of digital content have to pay extra to settle their transactions via alternative channels (e.g. Payoneer and Skrill).

preferring to have their revenues deposited in banks outside Pakistan to avoid the associated transfer costs. In the case of former, the export receipts reflect as workers' remittances, whereas in case of latter, these earnings remain unrecorded altogether.

Second, anecdotal evidence also suggests that some firms and individuals themselves bypass proper documentation in order to either stay under the radar of tax authorities, or avoid the hassle of filling out SBP's Form 'R' (considered both cumbersome and redundant). Furthermore, most firms simply opt out of negligence and lack of awareness about the proper export procedures.

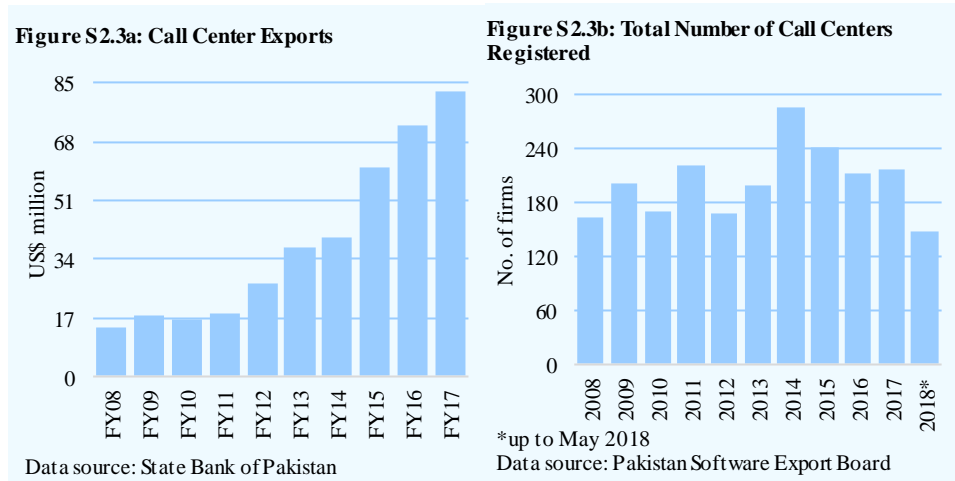
Call centers are expanding

Within the ICT sector, call centers are considered low-end services as these jobs pay on average around half of what may be earned under the software development segment. Irrespective of this, these services hold significance for developing economies because these can generate employment at a very large scale. Pakistan had made a very late entry in this outsourcing industry, as an inadequate telecom infrastructure and slow pace of skill-building of the human resource did not allow it to capitalize on significant expansions in the global BPO industry that started a couple of decades ago.

The sector took a promising start, but it faced a setback in its early years when the country's only internet landing point (SMW3) went through a major breakdown in 2005. Since no backups were available at that point, Pakistan remained disconnected from the web for almost two weeks. As a result, the export-oriented IT and IT enabled service industry had to face significant financial losses, as well as reputational issues in the global market. Resultantly, call centers in the country began shutting down as the international clientele switched to alternate destinations such as India and Philippines.

Encouragingly, however, Pakistan's service-oriented ICT industry has reemerged in recent years owing primarily to a significant improvement in the telecommunication infrastructure, a growing focus of young population in technology sector, and a gradual improvement in the country's perception as a BPO destination. In particular, Pakistan has significantly developed its backup internet support by installing six internet gateways, all the while widening the accessibility with the rollout of the NGMS (3G/4G/LTE) services. Not only has this helped improve the reliability of the communication system, but it has also aided in enhancing the speed and ability of the system to ensure faster connectivity. Realizing this opportunity, an average of 200 call centers got registered with the Pakistan Software Export Board (PSEB) on an annual basis

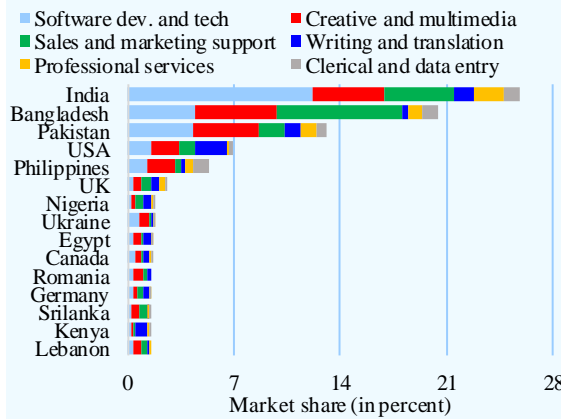
over the past decade, with their export earnings, albeit still at a low level in terms of value, consistently growing at a rapid pace (**Figure S2.3a** and **S2.3b**).



Pakistan is figuring prominently in other BPO segments as well

BPO is a cost-saving measure to outsource processes that are not the core business of an entity but are nonetheless essential for a company to operate. Fundamentally, this involves delegating specific business tasks such as customer relationship management, data entry, bookkeeping, human resource management, payroll processing, and marketing, etc. to a third-party service provider (TPSP), usually situated outside the firm's country of operation.

Figure S2.4: Online Labour Index: Top 20 Worker Home Countries



Data source: Oxford Internet Institute; Index retrieved at end September 2018

Globally, the BPO industry has witnessed a period of robust growth post 2002 and, according to industry experts, has expanded into a US\$ 180 billion industry. It is expected that this market will grow further to US\$ 250 billion by 2020, as remote work gets increasingly popular around the world, especially via

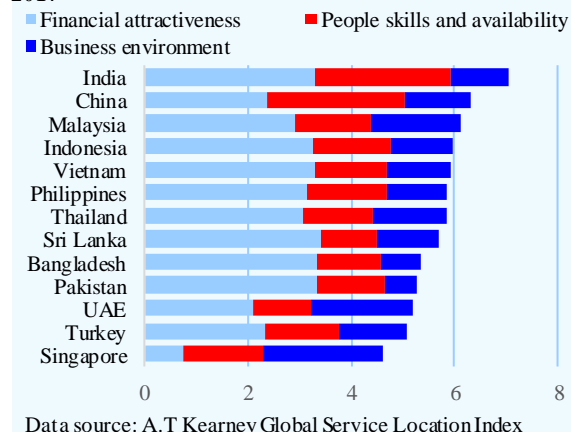
freelancing websites (such as Upwork and Fiverr). Pakistan was home to the third largest population of professionals related to global online gig industry after India and Bangladesh, as per the ranking available at end September 2018 (Figure S2.4).² Improved internet access to more than 2,000 cities across Pakistan; a large number of graduates entering the workforce; and government efforts to promote freelancing are the key factors behind this growth.

However, significant improvement is needed before Pakistan can attract more business

According to the A.T. Kearney Global Services location index of 2017, Pakistan is the 10th most attractive destination among Asian countries, and 30th in the world, for offshore services (Figure S2.5). Pakistan’s score was most encouraging in financial attractiveness: 3rd largest among Asians after Sri Lanka and Egypt amongst the 55-country index.

This is representative of the relatively favorable wage rates in Pakistan compared those in more established destinations such as India and China. However, when it comes to cross-country comparison of other off-shoring fundamentals (quality of human resource and overall business environment), Pakistan lags behind its regional competitors. Indeed, despite the fact that the country was able to increase its ICT revenues, it has fallen two points in the rankings compared to last year.

Figure S2.5: A.T. Kearney Global Services Location Index 2017



In particular, the low ranking in the ‘people skills and availability’ category is a big concern. It is pertinent to note that Pakistan has an abundant supply of young and English-speaking population who can potentially assume the nature of the jobs that BPO has to offer. However, since the industry is relatively new to the country, it is still not being pursued as a long-term career; the more qualified employees tend to upgrade their careers and move into software development,

² Otto Kässi, Vili Lehdonvirta, Online labour index: Measuring the online gig economy for policy and research, Technological Forecasting and Social Change, Volume 137, 2018. The regularly updated open dataset of Online Labour Index tracks all the projects or tasks posted on five major English-language online freelancing platforms (i.e. upwork.com, Peopleperhour.com, Freelancer.com, Guru.com and Mturk.com).

quitting the BPO industry after a very short span of time. As for the new entrants, the lack of technical and professional capacities works as a major growth barrier, making it hard for the BPO industry to compete in the international market.

Going forward, focusing on skill building and improvement of payments infrastructure would be the key

The government is taking administrative measures through PSEB to promote the sector's smooth progress. For instance, the recently announced Digital Pakistan Policy provides multiple tax incentives to the industry and envisions a strong interplay between IT firms, cellular operators, and government institutions. SBP is also guiding banks on proper documentation of the proceeds of BPO outlets and working with the industry to sort out associated payment-related issues. It is vital that the government continues to work in this trajectory and embrace the idea of technology-centric Special Economic Zones (SEZs), where companies can take advantage of IT-ready plug and play clusters and operate under a one-window structure with the government.

As for the human resource, some important initiatives have been taken by Ministry of Information Technology and Telecommunication (MOITT) and associated private enterprises, including the launch of National Incubation Centers and the Digital Skills Training Program. Furthermore, Pakistani freelancers often find Massive Open Online Course providers like Coursera, edX, Alison, etc. useful in improving and learning new skills. Last year, Coursera collaborated with Pakistan (among six other countries) to provide training to 3,000 young professionals. Local universities that specialize in IT also need to focus more on the education quality, especially with respect to developing programming/coding skills in demand in the global market.

As far as cross border payment solutions are concerned, although exchange services of intermediaries such as Payoneer and Skrill are available for individuals and startups associated with the freelancing and BPO industry, little progress has been made in introducing the most widely used digital payment service of PayPal. As things stand, data privacy is one of the major hurdles in the way of PayPal to enter Pakistan.³ Furthermore, as PayPal's funds transfer mechanisms work in a bidirectional fashion, there are concerns for countries with weak external buffers to risk excessive outward remittances of foreign exchange.

³ In past, PayPal had to cease or narrow down its operations in multiple countries by failing to satisfy the local regulatory authorities on the issue of data security. The platform stores information on data-handling from all the countries on a universal cloud platform. This practice is often inconsistent with the banking regulations of the countries, as sensitive information of the citizenry is held offshore.

Nonetheless, to facilitate freelancers and the BPO industry, SBP has recently allowed commercial payments - both B2C and C2B - through the bulk payment-processing channel under the Pakistan Remittance Initiative (PRI),⁴ which may not perfectly substitute PayPal but can potentially provide some relief in the form of lower financial charges relative to other channels. Cumulatively, such efforts would help improve industry's fundamentals going forward.

⁴ Exchange Policy Department, SBP circular No 11 of 2018, dated October 22, 2018 available at <http://www.sbp.org.pk/epd/2018/FEC11.htm>