



Confederation of Indian Industry

# **IT ENABLED SERVICES IN THE POST-PANDEMIC ECONOMY NEW OPPORTUNITIES FOR RELATIONS BETWEEN INDIA AND LATIN AMERICA**



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# Introduction

During the last few decades, India's trade with the Latin American and Caribbean (LAC) countries has grown substantially, especially in the area of Information Technology (IT) services. The definition of IT services now includes a plethora of IT-enabled services (ITeS) directed to specific sectors, including Agri-tech, Fin-tech, Health-tech, manufacturing and mining-based services, as well as e-commerce. This sector has attracted significant Indian investment in the region. Over the last decade, the share of the IT sector in total Indian Foreign Direct Investment (FDI) in the region has nearly doubled to about 15 percent today.

The COVID-19 pandemic has posed a myriad of challenges and new prospects for ITeS. The industry is confronting this health crisis through opportunities to promote skill-up, embrace the digital transformation and stimulate overall growth of the industry in both regions. The increased reliance on e-commerce has paved the way for greater development of IT-enabled financial products delivered via mobile applications. Moreover, to remain competitive in the global market, companies have increased their demand for new technologies.

In this context, this report examines new challenges and prospects for ITeS and e-commerce in the pandemic economy in India and LAC, and explores new opportunities for bilateral direct investment and trade between the two regions. To formulate recommendations for greater resilience and post-pandemic joint recovery in the two regions through business-to-business (B2B), business-to-government (B2G) government-to-government (G2G) cooperation, this report draws on various data sources. For the same purpose, several interviews were conducted with Indian ITeS companies including Wipro, Tata Consultancy Services, Evalueserve, Tech Mahindra, and Tec.know Services, and the Mexican IT giant, Softtek.

India and LAC export promotion and FDI attraction agencies would like to deepen trade and investment in this

sector as well. Considering the large educated workforce and technical progress in the LAC region, there is scope for greater FDI, trade, and cooperation between India and multiple LAC countries in the IT/ITeS sector via B2B, B2G and G2G channels. Together, India and LAC countries make up for a diverse range of time-zones that can facilitate the delivery of IT services on a best shore basis. Indian IT firms can set up fulfilment centers in the LAC region to benefit from the complementary time zones and deliver cutting-edge solutions to North American, European, Pacific and LAC clients.

Indian businesses could promote the development of several IT-driven sectors in LAC. Given the remarkable success of the fintech industry in India, there is potential for experience-sharing with the LAC countries to develop similar mobile-based financial services to cater to the growing e-commerce environment in the region. Moreover, both India and LAC countries are increasingly embracing the Fourth Industrial Revolution and simultaneously developing the new age technologies, hence, there is scope for greater investment in innovation and research and development in artificial intelligence, robotics, cloud computing, cybersecurity and overall digital transformation of the regional industries. There is also evidence to support greater strategic contributions from India to increase regional integration in LAC within different industries through forward and backward linkages.

The rest of the report is organized as follows: Section 2 presents an overview of the IT/ITeS industry in India and the LAC region, as well the current bilateral trade and investment between the two in this sector; Section 3 highlights the disruption caused by the COVID-19 pandemic, followed by future expectations and opportunities in the ITeS sector in the two regions; finally, Section 4 recommends some policies through industrial and intergovernmental cooperation between India and the LAC to ensure mutual benefit and a joint-recovery for the ITeS sector and its contribution to the recovery.

<sup>2</sup>Although India does not officially release bilateral services trade data, proxy-variables and alternate sources including the Reserve Bank of India (RBI), Organization for Economic Co-operation and Development (OECD)'s Trade in value-added (TiVA) database, United Nations Conference on Trade and Development statistics (UNCTAD stat), Indian National Association of Software and Service Companies (NASSCOM), World Bank, and individual company data were used to estimate the extent of trade in IT/ITeS between India and LAC countries. Outward FDI data released by the RBI, Export-Import (EXIM) Bank of India and FDI markets was supplemented with other secondary data sources such as the Ministry of Commerce and Industry, Government of India, and Indian Missions in the LAC region.

# Overview

## ITeS Sector in India

India is a pioneer in the production and exports of IT and ITeS, including software, business processing, financial technology, e-commerce, and online health services. Their combined share in GDP grew from 15 percent in 2007 to 16 percent in 2010 despite the Global Financial Crisis in 2008-09, and to 21 percent in 2019. This sector has remained resilient during the peak of the COVID-19 pandemic, with a y-o-y decline of “only” 12.5 percent in the second quarter as compared to a 23.9 percent decline in overall GDP (MOSPI, 2020), and a 44 percent y-o-y decline in the manufacturing sector (Figure 1A). Experts remain positive about the future of the sector; as its revenues are expected to grow at a 7.7 percent on a yearly basis until 2025 (The Hindu Business Line Bureau, 2020).

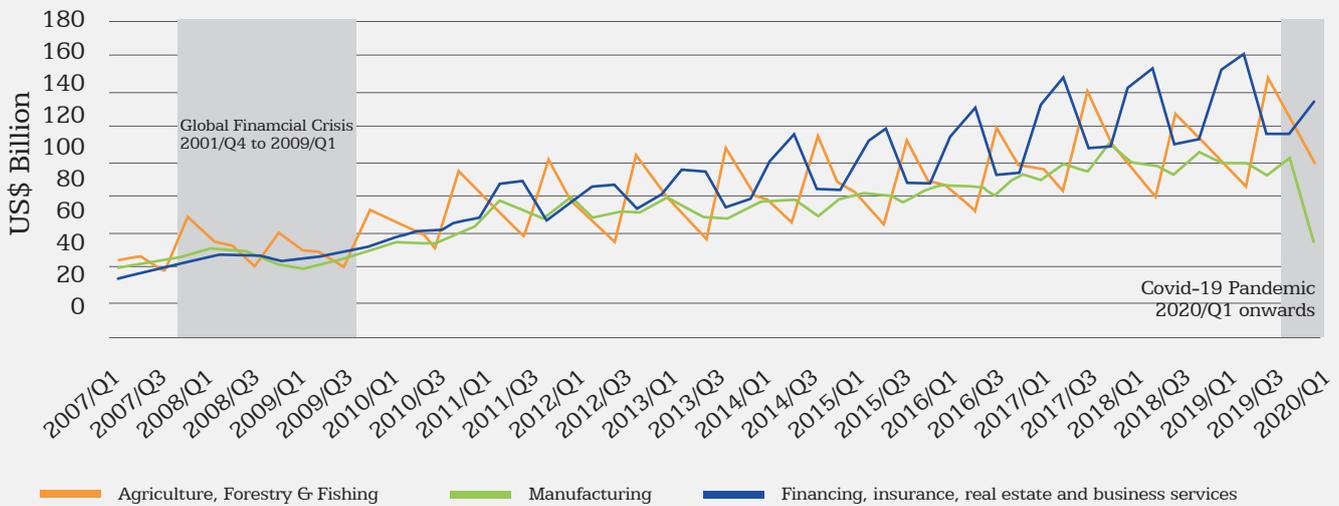
The services sector employed about 32 percent of the total workforce in 2019-2020 as compared to the 42 percent employed in agriculture and the 26 percent in manufacturing (World Bank, 2020). Particularly, the IT/ITeS sector employed 4.1 million people in 2018-2019, growing by 66,000 people since the previous year. Since 2012, employment grew steadily at a compound annual growth rate (CAGR) of 4.7 percent. Over 80 percent of the

persons employed in this sector directly contribute to exports of IT and Business Processes Outsourcing (BPO) services to the world. On an aggregate, the business services workforce also expanded significantly from around 8.3 million in 2012 to just over 13 million in 2017, with a CAGR of 8.1 percent. On a firm level, Tata Consultancy Services (TCS) is the biggest job creator with around 400,000 employees and is a part of the thousand largest IT firms in India out of a total of around 18,000 (Bist, 2020).

From 2008 to 2018, India was one of five nations to rise the fastest in the world’s top 20 traders of goods and services rankings with services exports going up by 8.8% per year on average over this time period (World Trade Organization, 2018). According to the RBI, the ratio of goods to services trade had also increased by 22.4% from 2000-2018, suggesting that services play a major role in India’s current export numbers (Reserve Bank of India, 2018). The latest figures on India’s Balance of Payment report that the exports of software and business services (total IT/ITeS) dropped by 1.1 percent (y-o-y) during the pandemic (Quarter: April-June 2020).



**Figure 1A: India: Gross Value-Added Across Sectors, 2007-2020**



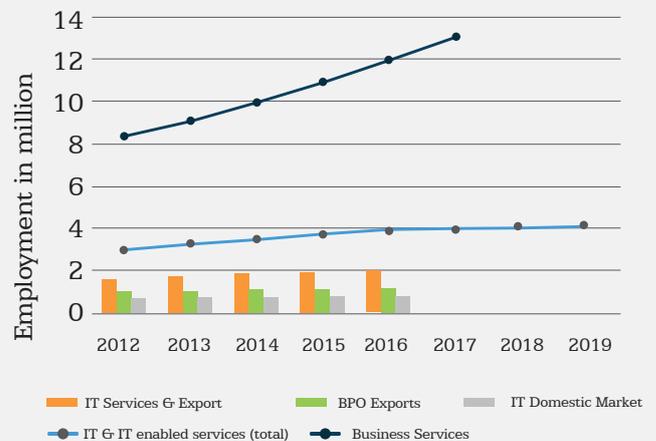
Source: Elaboration by CII and ECLAC based on data from the Reserve Bank of India, 2020

**Figure 1B: India: Share of Financial and Business Services in Total Gross Value-Added, 2007-2019**



Source: Elaboration by CII and ECLAC based on data from the Reserve Bank of India, 2020

**Figure 2: India: Employment in Business Services and IT/ITeS Sector, 2012-2019**

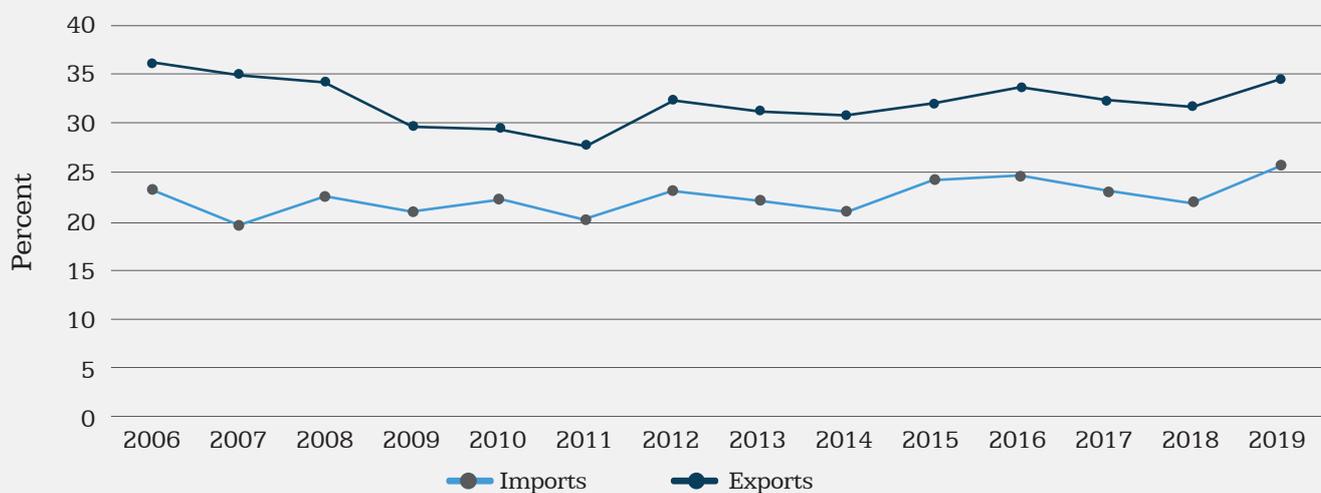


Source: Elaboration by CII and ECLAC based on data from the Reserve Bank of India - KLEMS (Business Services), 2017, and Indian National Association of Software and Service Companies (IT/ITeS), 2019

Invest India, the country's National Investment Promotion Agency reports that the IT sector contributes the largest share in India's total service exports (Bist, 2020). Table 1 highlights the industry-wide distribution of exports from the ITeS/BPO sector in 2017-2019. In particular, BPO services contributed to 77 percent of total ITeS exports in 2018-2019, with a growth rate of 9.7 percent from 2017-2018. Moreover, 74 percent of total software service exports in 2018-2019 were through mode 1 (cross-border trade), 13.6 percent by mode 4 (temporal presence of

natural person), and 12.4 percent by mode 3 (commercial presence). This sector focuses heavily on the United States and European markets for almost 85% of its revenues (RBI, 2019). However, given the current pandemic situation in tandem with the regionalization of international production networks, as well as the saturation of traditional markets, India needs to diversify trade partners in part by paying more attention to new opportunities in potential-filled regions such as LAC.

**Figure 3: India: Share of Other Business Services in Total Trade in Services, 2006-2019**



Source: Elaboration by CII and ECLAC based on data from UNCTADstat, 2019

**Table 1: India: Industry-Wise Distribution of ITeS/BPO Services Exports**

\*Using annual average Rupee/Dollar exchange rate

Activity	2017-18		2018-19	
	US \$ billion	Share (%)	US \$ billion	Share (%)
<b>BPO Services</b>	<b>26.7</b>	<b>77.6</b>	<b>29.3</b>	<b>77</b>
Business consulting services incl. public relations services	2.7	8	2.5	6.6
Finance and accounting, auditing, book-keeping and tax consulting services	4.2	12.3	5.2	13.6
HR Administration	0.2	0.6	0.2	0.5
Supply chain and other management services/ logistics	0.1	0.4	0.1	0.3
Medical transcription and document management	0.1	0.8	0.1	0.3
Content development & management and publishing	0.3	0.8	0.5	1.4
Other BPO services	18.9	54.7	20.7	54.3
<b>Engineering Services</b>	<b>7.7</b>	<b>22.4</b>	<b>8.8</b>	<b>23</b>
Embedded Solutions	1.2	3.5	1	2.7
Product design engineering (mechanical, electronics excl. software)	2.4	7.1	3	7.9
Industrial automation & enterprise asset management	0.2	0.5	0.2	0.5
Other engineering services	3.9	11.3	4.5	11.9
<b>Total</b>	<b>34.5</b>	<b>100</b>	<b>38.1</b>	<b>100</b>

Source: Elaboration by CII and ECLAC based on data from the Reserve Bank of India, 2019

## ITeS Sector in LAC

Trade in ITeS services expanded uninterruptedly in LAC from 2005 to 2014, notwithstanding the financial crisis of 2008-09. During this period, the value of exports increased 12% per year on average. As imports grew at an even faster pace, the region's trade deficit increased from US\$13 to US\$44 billion. In the following five years, however, exports plateaued, whereas imports fell because of the economic stagnation in the region, resulting in a lower demand for ITeS (Figure 4A). The composition of

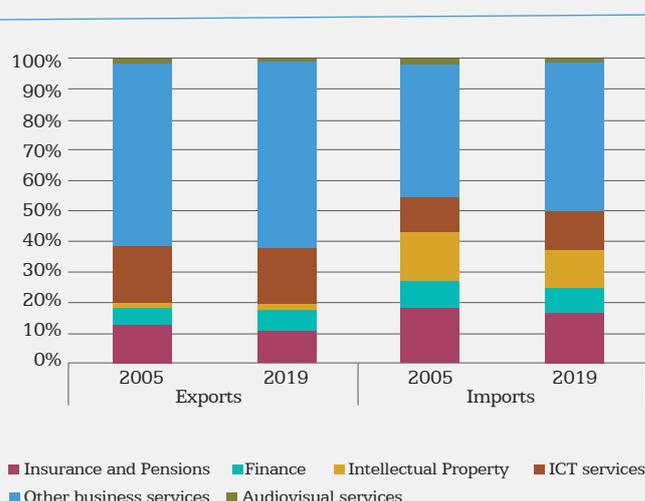
ITeStrade has changed little over time, as other business services is the predominant category in both flows. This type of services, together with ICT services, have a larger share in exports, whereas charges for the use of intellectual property and insurance and pension services weigh more heavily in imports. This confirms that LAC invests relatively little in R&D and absorbs most innovations through imports (Figure 4B).

Figure 4: LAC: Trade in ITeS and Composition, 2005-2019

### A. Exports, imports and trade balance (Billion US dollars)



### B. Composition of ITeS exports and imports (Percentage)



Source: Elaboration by CII and ECLAC based on statistics on Trade in Commercial Services, World Trade Organization, Geneva, 2019

LAC represents a remarkably low share in global exports of ITeS.<sup>5</sup> This share remained stable at 1.7% between 2005 and 2019 compared to 3% share in total exports of services, although within this period there was a slight upward trend until 2012 followed by a decline afterwards (Figure 4A). The region's export performance in individual categories of ITeS shows contrasting trends during the 2005-2019 period. LAC slightly gained market share mostly in insurance and pension services, while in some other categories (finance, global charges for the use of intellectual property and audio-visual services) it also registered some gains (Figure 5B). However, its share in global exports of IT services (telecommunications,

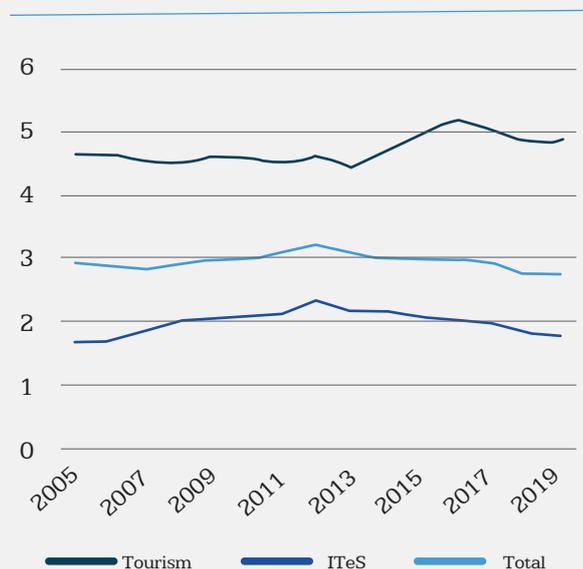
computer, and information services) slightly fell, while its market share in other business services trade stagnated.

Brazil, Argentina, and Costa Rica were the top three exporters of ITeS services in the region, accounting for almost two-thirds of the total. From 2005 and 2019, Brazil and Argentina maintained their lead, and even increased their market share in regional exports over this period, however, the third to fifth position changed from Mexico, Chile, and Costa Rica in 2005 to Costa Rica, Mexico, and Chile in 2019. Over the same period, Peru and The Bahamas exited the top-ten list, whereas Uruguay and Guatemala entered this ranking.

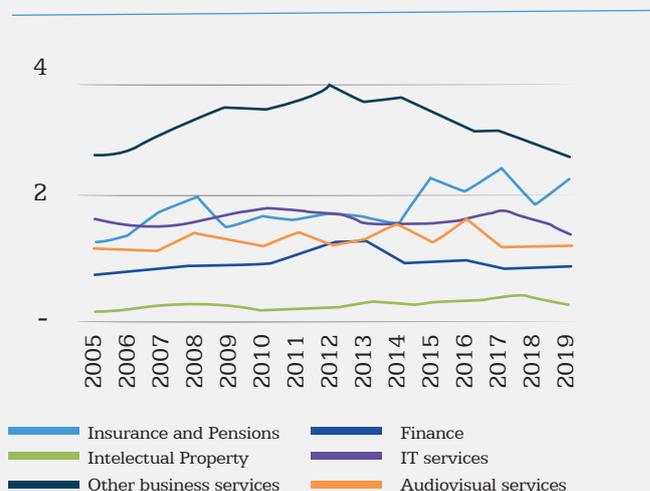
<sup>5</sup>The ITeS include the following categories of the Balance of Payments: Telecommunications, computer, and information services, Insurance and pension services, Financial services, Charges for the use of intellectual property, Other business services, and Audiovisual services. For more information, see the database UNCTADSTAT, "International trade in digitally-deliverable services, value, shares and growth, annual", [online] <https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=158358>

Figure 5: LAC: Shares in World Exports of ITeS, 2005-2019 (Percentage)

A. Total, ITeS and tourism



B. Categories of ITeS



Source: Elaboration by CII and ECLAC based on statistics on Trade in Commercial Services, World Trade Organization, Geneva, 2019

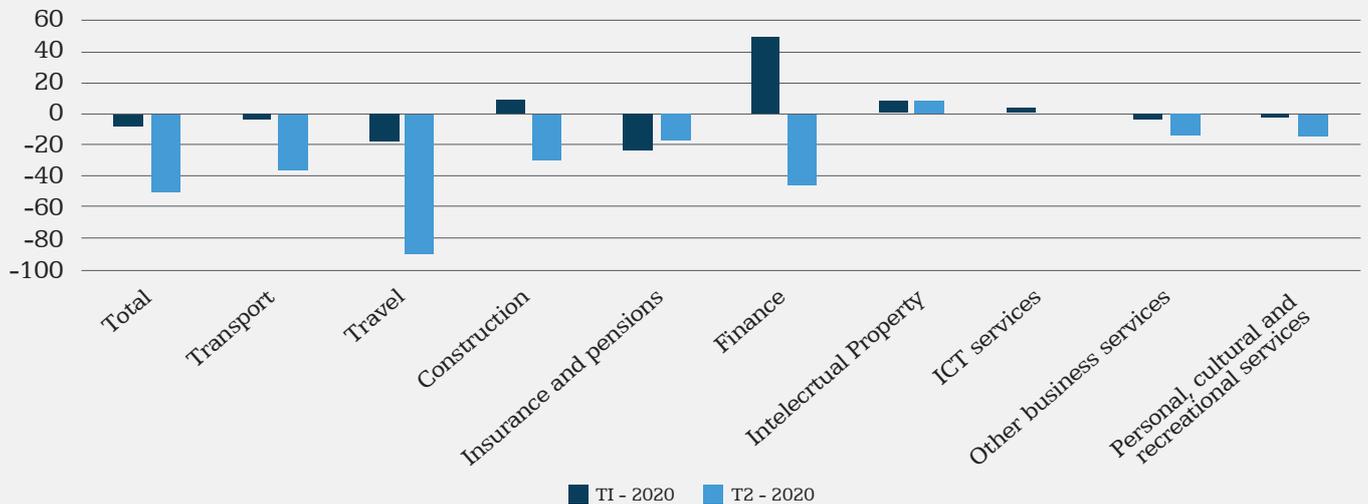
This country ranking is partly linked to country size but there are some important exceptions. First, Mexico has the second largest economy and population in the region, but it ranked fifth in ITeS exports. Second, Costa Rica, Panama and Uruguay have all populations below 5 million people, but are ranked third, sixth and ninth. This surprising result can be explained in part by consistent long-term public and private strategies of these countries to promote ITeS exports. While Panama’s ITeS exports are concentrated in financial services, Costa Rica and Uruguay sell abroad a variety of ITO and BPO services. The latter’s two countries exports are concentrated in multinational companies that operate from free trade zones (Alvarez, Fernandez Stark and Mulder, 2020).

The top three importers in the region are Brazil, Mexico and Argentina, representing 68% of the total. This order, as well as the subsequent countries in the list, follows

largely follows the economy size ranking. Brazil by itself absorbs half the region’s imports. Between 2005 and 2019, the shares of Brazil and Colombia increased substantially, whereas those of Mexico and Chile shrank. Costa Rica, Uruguay, Dominican Republic and Guatemala entered the top ten importers, whereas Venezuela (B.R of), Peru, Jamaica and Ecuador exited the top 10 during this period.

The sanitary and economic crisis in 2020 caused a major drop in traditional services exports in the region, mainly tourism, while contractions in ITeS exports were relatively minor that pointed towards greater resilience compared to traditional services sectors. This is illustrated by Figure 6, which shows how tourism came almost to a standstill in the second quarter (falling more than 80%) and transport (declining almost 40%). In contrast, ITeS exports fell less than 10%, except for finance, insurance and pension services (Figure 6).

**Figure 6: LAC (Bolivia, Brazil, Chile, Colombia, and Mexico)**  
**Interannual Variation of Services Exports, Q1 and Q2 of 2020 (Percentage)**



Source: Elaboration by CII and ECLAC based on official Quarterly National Balance of Payments data, 2020

## Bilateral Trade in ITeS

It is difficult to assess the dynamics of bilateral trade in services between LAC and India, as only Brazil and Colombia publish some bilateral trade in services data. Nevertheless, some organizations like the OECD have estimated bilateral trade in goods and services for 64 economies (including India and seven main economies from LAC for the period 2005 to 2015 as part of the Trade in Value Added (TIVA) database.<sup>6</sup> From 2005-2013, TIVA suggests that LAC imports from India grew at a faster pace

that the region's exports to this country. Therefore, the trade deficit increased from US\$0,5 to almost US\$2 billion. After 2012, imports fell and the trade balance slightly improved (Figure7A). LAC and India trade very different baskets of ITeS: while the first's exports to LAC are concentrated in other business services, India mostly exports IT services to LAC. This composition has largely remained constant throughout 2005-15 (Figure7B).

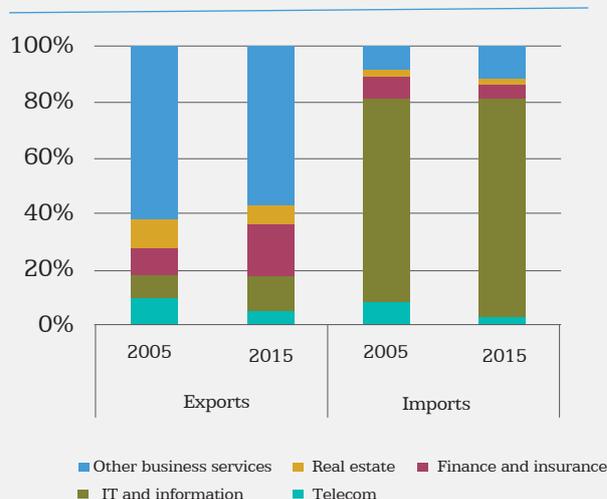
<sup>6</sup> For more information, see [online] <https://www.oecd.org/sti/ind/measuring-trade-in-value-added.htm#access>. A new version with data until 2018 is expected towards the end of 2020.

**Figure 7: LAC (selected countries): Bilateral Trade with India in ITeS and Composition, 2005-2015**

**A. Exports, imports and trade balance**  
(Million US dollars)



**B. Composition of ITeS exports and imports**  
(Percentage)



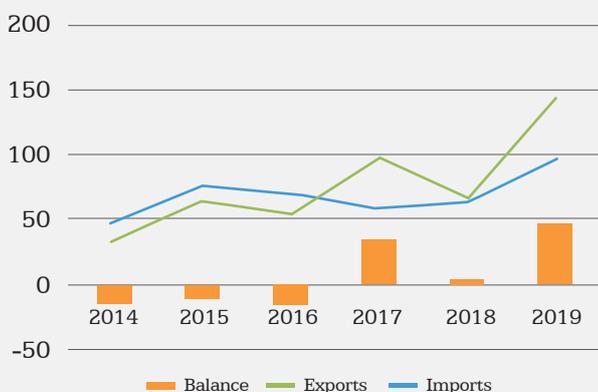
Source: Elaboration by CII and ECLAC based on OECD, TIVA database, 2018. Notes: the countries are Argentina, Brazil, Chile, Colombia, Costa Rica, Mexico, and Peru.

Brazil was the largest LAC ITeS exporter to India, as well as importer from this country in 2015. From 2014 to 2019, bilateral trade in ITeS between the two increased substantially. In contrast to general LAC trends in bilateral trade with India, Brazil posted a trade surplus with this

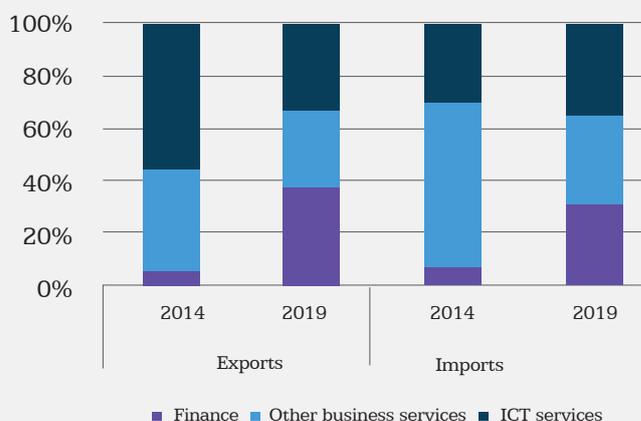
country from 2017 onwards which resulted from dynamic exports (Figure 8A). The composition of exports and imports in 2019 was relatively similar: finance, other business services and IT services each represent about a third of the aggregate flow (Figure 8B).

**Figure 8: Brazil: Bilateral Trade with India in ITeS and Composition, 2014-2019**

**A. Exports, imports and trade balance**  
(Million US dollars)



**B. Composition of ITeS exports and imports**  
(Percentage)

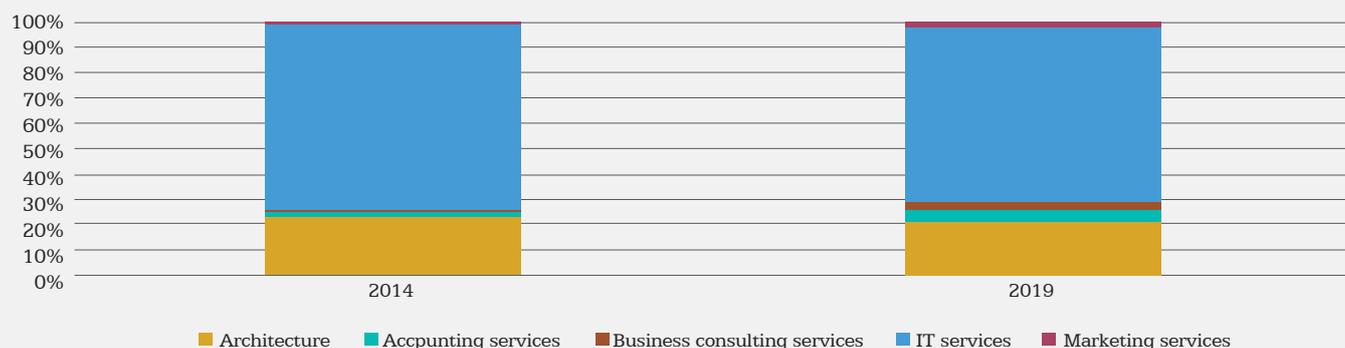


Source: Elaboration by CII and ECLAC based on the SISCOSERV database, Ministry of the Economy, Government of Brazil, 2019

In the case of Colombia, the quarterly Survey on Trade in Services of the Statistical Office (DANE) only registers regular exports of legal services to India over the past five years (which tripled in this period), but no other categories

of ITeS. Colombian imports of Indian ITeS services grew 10% per year on average between 2014 and 2019, with IT services being the main ITeS category (Figure 9).

**Figure 9: Colombia: Composition of ITeS Imports, 2014 and 2019 (Percentage)**



Source: Elaboration by CII and ECLAC based on official Quarterly National Balance of Payments data, Government of Colombia, 2019

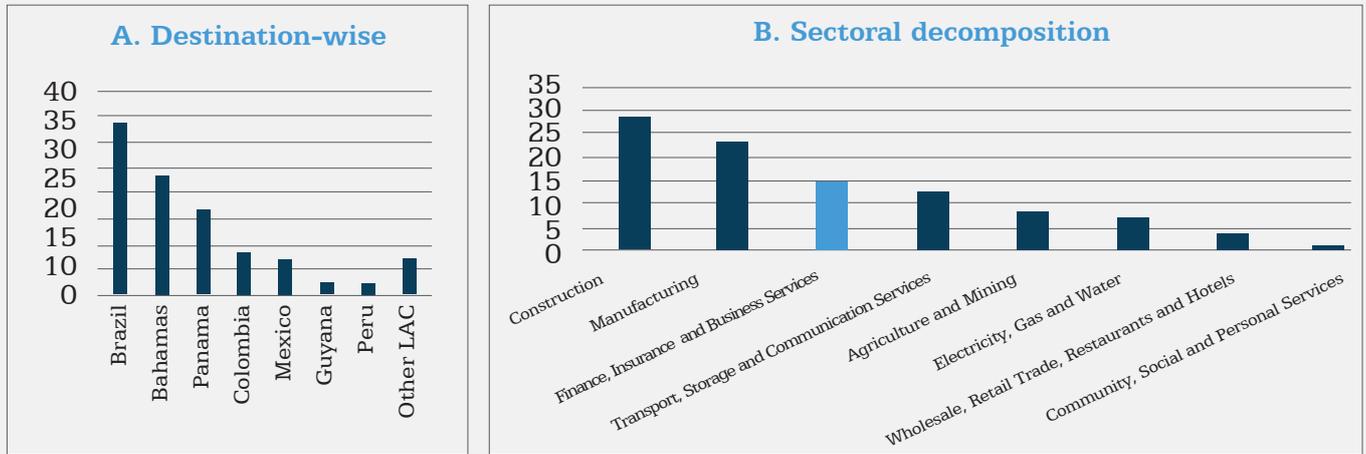
## Bilateral FDI in ITeS

Many large corporations from India have invested in the LAC region in the past decade because of its relatively stable economies (barring a few), manufacturing capabilities, rankings on the Ease of Doing Business compiled by the World Bank (2020) and educated workforce. Notwithstanding many cultural and other differences between the two regions, there is ample scope for shared benefits (EXIM Bank, 2018).

At present, Indian investment in LAC (outward FDI) is present mostly through joint ventures and wholly owned subsidiaries spread across 26 sectors (FDI Markets, 2018) valued at approximately US\$ 15 billion during 2011-2017 (Giordano et al., 2019). According to estimates from the

RBI, total outward FDI to LAC displayed a positive trend over the decade of 2008-2018. However, it continued to account for only 1 percent of total outflows from India. Over this period, Brazil has been the recipient of one-third of the total Indian FDI in LAC, followed by The Bahamas at 23.5 percent, primarily due to it being a tax haven, Panama (16.5 percent), Colombia (8.3 percent), and Mexico (6.9 percent) (Figure 10A). A sectoral breakdown of these numbers in Figure 11B shows that “Finance, Insurance and Business Services”, which include IT/ITeS, accounted for 14.9 percent in the period 2008-2018. In fact, half of the top ten (out of 129) Indian investments in the region were in the IT/ITeS sector (FDI Markets, 2018).

Figure 10: FDI Equity Outflows of India in LAC, 2008-2018 (cumulative percentage)



Source: Export-Import Bank of India and Inter-American Development Bank, 2018

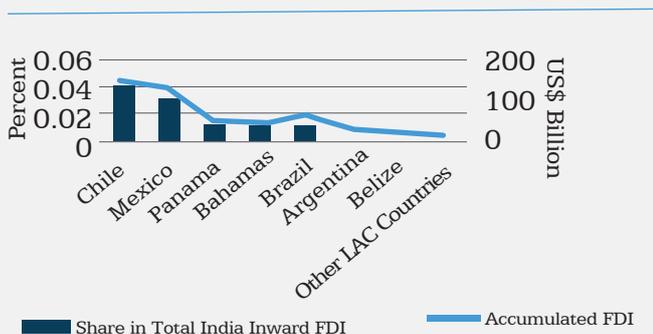
All Indian Embassies throughout LAC maintain a list of the Indian companies present in their respective accredited countries. A collation of these points to the success of the long-term strategy that both large multinational corporations and small and medium Indian companies in this region are deeply integrated into the foreign markets, create local employment opportunities, and engage in capacity building and R&D activities. One success case is that of Tata Consultancy Services, which has been voted a top employer by the Top Employers Institute in the continent for the past six consecutive years and named best employer in Argentina and Chile in 2020 (TCS, 2020).

On the contrary, India received only 0.1 percent of total FDI outflows from the LAC region during this period

(Giordano et al., 2019). Chile and Mexico comprise a major share of total FDI, followed by Panama and The Bahamas. In the IT/ITeS sector specifically, Colombia and Panama lead by far, with a total Colombian investment of almost US\$ 4 billion in computer software and hardware between 2010-2020. Softtek from Mexico, Stefanini and SalaryFits from Brazil, and Techint and Globant from Argentina have set up business in India. Softtek’s South America CEO said in 2019 that India is synonymous with the “offshore” concept; “[Softtek’s expansion] was a strategic step that brought an offshore component to our nearshore business model” to service the entire Asian market, other than China (Giordano et al., 2019).

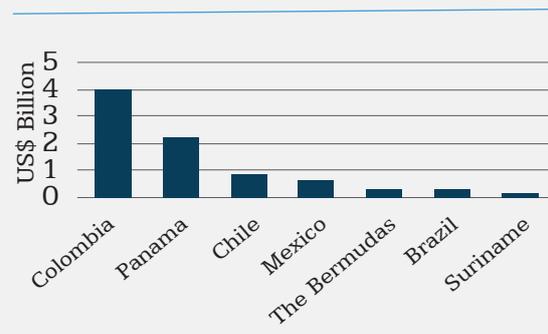
Figure 11: FDI Equity Inflows in India from LAC (cumulative)

FDI Equity Inflows in India From LAC  
April 2000-Dec 2018



Source: Export-Import Bank of India and Inter-American Development Bank, 2019

Total Inwards FDI From LAC in Computer Software & Hardware (2010-2020)



Source: Elaboration by CII and ECLAC based on data from the Reserve Bank of India, 2020



## Present Bilateral Regulatory Environment

In 1997, the Indian Ministry of Commerce and Industry created the "Focus LAC Program" in 1997 with components including institutional mechanisms, measures to improve market access, and economic infrastructure facilities (Department of Commerce, 2019). However, its overall framework was limited to certain trade agreements, investment treaties, and interactions through the private sector mainly focused on merchandise exports. The program had been renewed multiple times until March 2019, after which a reassessment and reinvigoration has been due.

Under this initiative, the India-MERCOSUR and India-Chile Preferential Trade Agreements (PTAs) were signed in 2005 and 2006 respectively. Unlike these partial scope agreements, the India-Peru Free Trade Agreement (FTA) currently being negotiated will include chapters on the trade of goods and services, investments, and the movement of professionals (Siddiqui, 2020). Concurrent with these negotiations, the Indian government in 2019 indicated its interest in pursuing a Double Taxation Avoidance (DTA) Agreement with Peru since companies based there have reported issues with obtaining work permits, and fulfilling tax and social security requirements. India and Brazil, too, have signed an amended DTA Convention in early 2020 (Income Tax Department, 2019). Other countries like Colombia, Ecuador, and Nicaragua have expressed their respective interests in exploring the potential of similar agreements with India. Finally, India's

observer status in the Pacific Alliance grouping may facilitate enhanced interaction in the next few years.

In terms of bilateral investment treaties (BIT), India has experienced a setback. In 2016, the Indian Government announced that its 58 active BITs, including those with Argentina, Brazil, and Mexico (and Colombia and Uruguay that were never enforced) would be terminated in April 2017 (Shah, 2018). This was to be followed by renegotiations according to India's new BIT model, which has proven to be limited in its success due to its restrictive approach. As of 2020, the only active agreement within the LAC region is the Investment Cooperation and Facilitation Treaty signed with Brazil in January 2020 (Department of Economic Affairs). However, consultative machinery such as Joint Trade and Investment Commission meetings with high level representatives do take place regularly (Department of Commerce, 2020).

Beyond these intergovernmental arrangements, initiatives from the private sector go hand-in-hand in helping increase the profile of India in LAC. These include the activities of some of the country's largest industrial bodies with dedicated LAC Desks. The Confederation of Indian Industry (CII), for example, has over 25 MoU partners throughout the region to collaborate on business facilitation and aid the Indian government in its policy making activities (2020). Deeper linkages between the two regions would be strategic in strengthening South-South cooperation and a broader global rebalancing in the near future.

# Impacts and Challenges for the Information Technology Enabled Services Sector During the COVID-19 Pandemic: A Private Sector View

The COVID-19 pandemic has posed a myriad of health and socio-economic challenges for India and LAC. It has proven to be one of the most significant setbacks for the IT/ITeS sector in the world since the financial crisis of 2009. From late March 2020 onwards, companies in this industry have seen revenues fall as clients have reallocated spending budgets, frozen new deals, cut non-essential projects, and interrupted contract renewals. Moreover, project timelines have been difficult to meet due to illness and (international) travel restrictions (Brown, 2020). The rise of virtual business meetings and webinars in lieu of in-person events also meant fewer

business development opportunities and client interactions. However, many new opportunities to promote skill-up, embrace the digital transformation, and stimulate overall growth of the global IT/ITeS industry have also presented themselves for the near future.

Both regions declared nationwide lockdowns starting from March 2020 that paved the way for significant transitions in the IT sectors that took place at three levels – organization, client, and employee. During the months of September and October 2020, several interviews were conducted with a mix of small and large IT/ITeS firms from India and LAC to study these challenges (Table 2).



**Table 2: List of ITeS Companies Interviewed**

Company Interviewed, Location	Number of Employees in LAC/ India	Other locations in LAC region
Evalueserve, Santiago, Chile	600+	-
Softtek, Bangalore, India	650+	Argentina, Brazil, Chile, Colombia, Mexico, Paraguay, Peru, Uruguay, Venezuela
Tata Consultancy Services Limited, Lima, Peru	16,000+	Argentina, Brazil, Colombia, Chile, Ecuador, Mexico, Peru, Uruguay
Tech Mahindra Limited, Florida, USA	4,000+	Colombia, Costa Rica, Ecuador, Guatemala, Perú
Tec.know Solutions S.A., Guatemala City, Guatemala	70+	-
Wipro Limited, Mexico City, Mexico	1000+	Argentina, Brazil, Chile, Colombia

### Organization level

The ITeS sector has remained relatively resilient during the pandemic. It was much less impacted than other sectors, and experienced a faster bounce-back after a few months due to quicker adoption of technology and continued demand from their diverse client base. Several large companies servicing sectors that have been hard hit by the pandemic, like tourism and transportation, faced severe disruptions and chose to diversify to other IT verticals such as education-tech, healthcare, e-commerce and artificial intelligence to spread their risk. As a result, half of the Indian companies confirmed that their plans to expand business operations in the next one year were still on track despite this disruption. However, not all companies have been lucky. Many small firms and tech start-ups have reported that COVID-19 is, by far, the biggest threat they have faced ever and that almost 30-40% of them will not be able to survive it, whether temporarily or permanently (CII, 2020)<sup>7</sup>.

The pandemic was a disruptive force that coerced greater adoption of technology in business models as well as in scenarios of work from home (WFH). With business continuity and employee safety as the top priorities, these companies had been preparing to enable work from home by shifting technology assets, configuring internal networks and setting up proper workstations at employee homes since the second week of March. Although faced with several delays in procuring new hardware as well as setting up internet-related infrastructure during the early months, most were successful in transitioning to a new working-system by August 2020.

Additionally, lessons learnt from previous crises came in handy. An India-based technology MNC from LAC had, for example, decided to make a complete move to the use of laptops from desktops in the aftermath of the H1N1 outbreak in 2009. This allowed it to shift to remote working within 24 hours in the second week of March without any disruptions.

WFH also raised issues of data security. However, most companies had invested in a robust security and encryption system. A few large companies had an upper hand as well – those with offices around the world were able to use their geographic diversity as an advantage to absorb any short-term effects as the pandemic hit different regions at different times. A large share of the workforce was able to successfully transition to the work from home model in March 2020<sup>8</sup>. The companies interviewed also predicted that only about half of the workforce would be returning to office by the end of the year 2020 as this model helps focus on cost optimization, saved travel time, more productive staff and therefore, recovery and growth.

Furthermore, the pandemic has accelerated the pace of a digital transformation across various departments and business processes that take place in an organization as an extension to digitization (an analogue process turning digital) and digitalization (a set of processes that create an overall process that runs automatically). Many companies have already begun adopting cloud technology and enterprise resource planning (ERP) techniques to optimize their operations and ensure maximization of revenue in the next fiscal year.

<sup>7</sup>A recent survey by NASSCOM reported that 75% of its respondents (out of 250 tech start-ups) expect significantly slower growth throughout 2020-2021. A similar share of companies foresees their revenues negatively impacted by the global slowdown, with 40% pointing to a negative growth of 5% or more (NASSCOM, 2020). The International Data Corporation (IDC) highlighted similar trends related to significant cuts in global IT spending over an array of sectors (IDC, 2020).

<sup>8</sup>According to NASSCOM (2020), 90-95% of the Indian workforces successfully transitioned to a work from home model in March 2020, possibly one of the largest work-from-home scale projects anywhere in the world.

## Client level

The transition at this level consisted of timely and constant communication with clients to assure them that service agreements would not be affected by remote working. Companies that did well here were able to retain important clients, that were initially not prepared for such big changes, because of their continued value-based engagement and purpose-driven delivery strategies.

Some also reported engaging in new initiatives that added value to existing clients by way of innovative solutions. One of India's largest IT companies, for example, is collaborating with its strategic partners to provide solutions in the area of secure remote working, data privacy, security monitoring, digital identity, IoT security, and third-party risk management. Moreover, revising outdated processes and creating smart supply-chains with other co-dependent sectors like healthcare and financial technology (fintech) has been the key to a strong post-pandemic recovery. For example, among the companies interviewed, it was found that those that were highly diversified in terms of their client bases were able to use well-performing industries, such as pharmaceuticals, logistics and consumer banking, as a buffer against those hit hard.

## Employee level

Companies reported intense contact with their employees throughout the crisis to ensure the continuation of work as "normal" and organized communications programs to educate their staff on COVID-19-related scams and phishing attacks perpetuated through different modes of communication. Some also organized a series of initiatives on training and preparedness for the oncoming of next generation technologies and the concept of the "workplace of the future" (secure borderless workplaces), the adoption of which has sped up due to the pandemic. This was complemented by acceleration in upskilling and reskilling of employees to help them adapt to the new digitized practices adopted in the last few months.

All interviewed companies confirmed employees are the main asset of any organizations. Therefore, well-being initiatives included weekly sessions of fitness, entertainment or team bonding to ensure connectedness, as well as regular sessions with a psychologist on a priority basis. Of those interviewed, fifty percent of the Indian companies were interested in substantially growing their employee base in their currently operational global nearshore bases in the next one year based on the local talent that can be found in the region.

# Major Trends and Opportunities for the Future

Some important trends have emerged from this pandemic for the IT/ITeS industry in India and LAC. The first is the accelerated adoption of remote working, which firms are likely to embrace on a long-term basis<sup>9</sup> and transition to a secure borderless workforce model. Another work culture might emerge in the post-pandemic phase based on the 25-25 model, wherein only 25 percent of the workforce will be required to come to office for only 25 percent of the number of pre-COVID work hours. Moreover, travel for business will be strongly curtailed. These shifts present a unique opportunity to access diverse workforces through digital interfaces and to tap into a globally connected productive workforce that is empowered to act in uncertain times. This scenario is likely to benefit the IT/ITeS outsourcing industries located in India and LAC.

A second accelerated trend is the increased demand for technology across businesses. What was until now a choice has single-handedly been turned into a necessity by the

pandemic – the adoption of new software, robotic process automation and AI to enhance services and security, although this change would have invariably taken place in the next three years at the latest. Moreover, companies will need to create sustainable business models with build-in technology to protect against cybercrime, data breaches and regulatory setbacks to fully reap the perceived benefits of this new work culture (Cudahy and Gautam, 2020). In this context, the IDC expects the adoption of a zero-trust policy<sup>10</sup> to increase over the next few months (2020). There will also be an increased need for investment in infrastructure that enhances digital connectivity, especially in rural areas (CAF Development Bank, 2020).

A third accelerated and related trend is the increased demand for the digital upskilling of workers around the globe, which also benefits the IT/ITeS sector. According to the World Economic Forum (WEF), "by 2022, no fewer

<sup>9</sup>Indian industry has also predicted that its capacity utilization will rise above 50% in the second half of the fiscal year in a recently released CII survey of 115 top Indian CEOs (The Economic Times Bureau, 2020).

<sup>10</sup>Zero Trust is a security concept centered on the belief that organizations should not automatically trust anything inside or outside its perimeters and instead must verify everything trying to connect to its systems before granting access.

than 54% of all employees will require significant reskilling and upskilling” to fit into the new realities presented through digital transformation (Sun et al., 2020). NASSCOM estimates the skills and relevance of today’s IT workforce as only 70% relevant (2020). Large players in India such as KPMG and McKinsey (2020) have already begun to invest in upskilling their employees with a focus on training modules in cloud technology, artificial intelligence (AI), machine learning, user experience (UX), cybersecurity, customs relations management (CRM), mobile application development and digital networking to cater to more sophisticated needs of the clients (KPMG, 2020). However, the grass-root level skilling of fresh graduates must be coordinated with universities to ensure an updated curriculum that meets industry’s needs. A noteworthy example of this is TCS’s plan to virtually hire at least 20,000 new graduates by the end of 2020 through a national qualifier test that will cover 1,800 Indian technical institutions (Digital Education Portal, 2020).

A fourth accelerated trend under the current health crisis is the change in the companies’ operation strategies. Continued WFH will pose a challenge for both managers and their teams - new tasks learned in the first period of the pandemic, such as holding meetings online, will have to compliment bigger tasks such as managing long-term customer relationships efficiently on a virtual platform. Moreover, the pandemic has exposed the risk of relying on a few verticals and companies must think of ways to diversify to other IT-enabled segments such as fintech, specifically, contactless-payment options, drone delivery, platform aggregators, health-tech and ed-tech services<sup>11</sup>.

A fifth trend is the paradigm shift from traditional brick-and-mortar shopping towards consumer spending via digital platforms (e-commerce)<sup>12</sup>. This increased reliance on e-commerce, along with the proliferation of contactless payment, has led to accelerated growth in the fintech industry and offered the possibility of further innovation in financial products and services (Deloitte, 2020). The contactless payment options via mobile methods have facilitated online shopping transactions and eased the process of exchanging money among families and friends,

while simultaneously alleviating concerns of disease transmission through handling of cash and credit cards by vendors (Abbaei, 2020; Chawla, 2020). Obviously, this shift has also enhanced the dependence on mobile applications to acquire a breath of services online and presents a unique opportunity to develop m-platforms to provide essential services including health (health-tech) and education-related services (ed-tech). Although many IT companies in India are already assisting delivery of services by healthcare and pharmaceutical industries during COVID-19 crisis (Sangani, 2020), there is also scope to further develop incubators and IT parks to promote new tech-based startups and build resilience of incumbents in the industry during future crises (Economic Times, 2020). Similar trends are observed in LAC.

A sixth trend that has mixed impact on the sector is accelerated reshoring to home countries and regions of activities within the global value chains (GVCs) that concentrate about 70% of international trade today (World Bank, 2020). While the share of GVCs in global manufacturing was already declining since the 2008, the current growth model can be further threatened by technologies that reduce dependence on labor (World Bank, 2020). The pandemic has also exposed the consequences of over reliance on a few countries, including China (Javorcik, 2020). Resultantly, many countries have adopted the strategy of self reliance and “near or back-shoring” to reduce expenditures and overdependence on individual countries (World Trade Organization, 2019). The above tendencies have mixed consequences for IT and ITeS companies around the world. On the one hand, they have faced a reduction in market shares due to the uptake of the accelerated reshoring and insourcing activity by large multinationals (Sreeram and Philipose, 2020). On the other hand, there is an increased demand for automation and outsourcing of firms to remain competitive in the market, which has led to greater expenditure on research and development (R&D) to facilitate moving up the IT value chain and faster adoption of cloud-based technology to increasingly deliver digital services (Cudahy and Gautam, 2020; Mohapatra, 2020).

<sup>11</sup>Some of the interviewed LAC-based companies identified these sectors as priorities for future investment by large Indian companies. India’s budding tech start-up ecosystem, too, will see 30-40% of its members will not be able to survive it, whether temporarily or permanently (CII, 2020). 54% of the NASSCOM (2020) pulse-survey respondents indicated that they are seeking new opportunities to venture into different verticals for this very reason.

<sup>12</sup>A trend that was accelerated in part due to social distancing measures imposed by the government.

# Recommendations and Policy Directives

Any government's role in facilitating the growth of the ITeS sector is primarily through developing holistic strategies linked with the core competencies of its respective country. Both the Indian and LAC ITeS sectors possess expertise in innovation through R&D activities and low-cost skilled manpower. Therefore, any targeted growth strategies would require the formulation of specific policy initiatives. Given that the growth of this "crucial" sector is significantly linked with economic growth in India and LAC, some policy initiatives may have short term implications like attracting new IT players to the country, while others have long term implications like ensuring the sustainability of the entire sector.

## What India needs to do for itself

The Indian IT industry is considered a global pioneer in software development and a favorite destination for ITeS. However, whether through the statistical office or its central bank, it does not have an adequate system of recording data on IT services exports and BPO/ITO/KPO activities that could be used to formulate key policy initiatives required for giving these sectors the necessary push. Transforming India into a digital economy means

that there is an urgent need for policymakers, researchers, and commerce bodies to take on regular survey work and research projects to develop an updated database of these figures. Digital solutions have become an integral component of the growth roadmaps for most enterprises in India and there is scope to adopt IT-related technologies in various sectors such as healthcare, education, and agriculture to make them more competitive and resistant to external shocks<sup>13</sup>. Moreover, the Government of India could provide substantial incentives for private sector participation that would also provide an exciting opportunity for LAC companies interested in entering or expanding in the Indian market.

## What LAC can do for itself

Although several countries in the region have a digital agenda, few have a strategy to promote the development and exports of the ITeS sector. Given the importance and demanding nature of the process of digitization that has been discussed in this report, LAC governments must give priority to implementing policies that will ensure a conducive environment to widely adopt these trends. This



<sup>13</sup>This was one of key recommendations offered by companies we interviewed as well. For example, there is scope for crop, pest and labor management through development of agri-tech solutions, enhancing financial literacy through mobile-based financial assistance to supplement the growing fintech market in the country, populating edu-tech solutions to social-distancing concerns caused by the pandemic and effectively providing e-health diagnostics through a centralized health management system.

directly goes hand in hand with the need to re/upskill – through targeted education and upskilling programs of employees to meet the new challenges posed by greater adoption of technology. Other urgent needs include access to reasonably priced high-speed internet, appropriate regulation to develop and export ITeS and access to credit for MSMEs in this sector. In this context, countries could establish public-private committees to assess bottlenecks and adapt or develop new instruments to enhance this sector's performance. These committees need to address challenges of the whole ecosystem. The analysis in this report also revealed that regional integration between different countries in the region is hindered by significant differences in taxation, visa laws and digital regulations across borders. Moreover, most of the countries in the continent remain fairly closed to trade and international cooperation. There is therefore scope for the signing of double-taxation avoidance treaties and other intergovernmental treaties on immigration and visa regimes to enhance ways for greater experience sharing across borders and ease of doing business.

### India-LAC trade and investment integration

Numerous Indian companies have set up development and service centers, including business process outsourcing, in multiple countries in LAC. The 'nearshoring' model has proven to be successful by a number of companies –relying on Indian software and expertise, LAC human resources, and collaboration to cater to a diverse range of time zones and international clients based in the respective regions on a best shore basis. There is however, scope for more Indian ITeS companies, both large corporations and start-ups to set up fulfilment centers and global in-house centers in the LAC region to tap the growing local needs in technology, and deliver cutting-edge solutions to North American, European, and Pacific clients.

Indian companies can help bridge the regional gap in the LAC IT/ITeS industry by diversifying their office locations within the region, engaging with local companies and hiring talent across borders to meet the language challenges in the region. Moreover, there is also scope for knowledge-sharing across businesses in India and LAC region, given the model is adapted to the local needs. Interaction with, and through, regional groupings will also permit the expansion of business between SMEs and provide scope for interaction through regional trade agreements that cover services and investments. India's relationship with LAC still includes limited spaces for formal dialogue, a factor that should be considered when assessing the progress that has been achieved in this relationship in comparison with other Asian economies.

Given the remarkable success of the fintech industry in India, there is potential for experience-sharing with the LAC countries to develop similar mobile-based financial services to cater to the growing e-commerce environment in the region. Moreover, both India and LAC countries are increasingly embracing the Fourth Industrial Revolution and simultaneously developing the new Industry 4.0 technologies, a market previously dominated by North America – hence, there is an opportunity for collaborative efforts between the two regions to develop combined solutions to ensure a favorable post-COVID recovery of their respective IT industries.

Moreover, India has the capability to export its educated workforce and skillset to the LAC region in the IT/ITeS sector especially given the advantage in knowledge in technology, mathematics, and English language skills. There is also scope for greater FDI, trade, and cooperation between India and multiple LAC countries via business-to-business, business-to-government and government-to-government channels. For example, export promotion and FDI attraction agencies of several LAC countries have already expressed a desire to deepen trade and investment ties with Indian IT/ITeS sectors<sup>14</sup>. This presents a unique opportunity for their Indian counterparts to develop mutually beneficial bilateral investment treaties for greater collaboration between the Indian and LAC IT industries. Sector-specific delegations and business events should also continue to be organized in partnership with nodal Ministries and IT services-focused organizations.

### Conclusion

The overall path for recovery in the post-COVID-19 world can be tracked through three trends for the future. First, every region will increase its self-reliance. Second, digital ubiquity will be the norm in the 4th Industrial Revolution, and tech companies can, therefore, expect to see a higher demand for their services as the demand for increased connectivity goes up. Emerging technologies such as analytics and big data, as well as AI, robotics, and AR/VR, will increasingly define growth, in partnership with cloud technology and automation. Third, sustainability and resilient business models that change according to changing consumer behaviors will be essential. Hence, with the right strategy, joint policies, and preparedness, Indian IT/ITeS companies can thrive in the LAC region and vice versa by collectively developing tech-based solutions to the disruptions caused by the COVID-19 pandemic.

<sup>14</sup>For example, including Chile (Pro Chile and InvestChile), Colombia (ProColombia), Costa Rica (CINDE and PROCOMER), Uruguay (Uruguay XXI), and Venezuela (CONAPRI) have expressed interest to promote the IT/ITeS sectors.

# References

Alvarez, M., K. Fernandez-Stark and N. Mulder (2020), *Gobernanza y desempeño exportador de los servicios modernos en América Latina y la India*, Santiago: ECLAC.

Bist, A. (2020). *IT Industry in India - Investment Opportunities in IT Sector*. Retrieved 2 October 2020, from <https://www.investindia.gov.in/sector/it-bpm>.

Brown, B. (2020). *KPMG UK Tech Monitor Q1 2020*. Retrieved 11 August 2020, from <https://home.kpmg/uk/en/home/insights/2020/04/kpmg-uk-tech-monitor-q12020.html>.

CAF Development Bank. (2020). *El estado de la digitalización de América Latina frente a la pandemia del COVID-19* (p. 18). Caracas. Retrieved from [https://scioteca.caf.com/bitstream/handle/123456789/1540/El\\_estado\\_de\\_la\\_digitalizacion\\_de\\_America\\_Latina\\_frente\\_a\\_la\\_pandemia\\_del\\_COVID-19.pdf?sequence=1&isAllowed=y](https://scioteca.caf.com/bitstream/handle/123456789/1540/El_estado_de_la_digitalizacion_de_America_Latina_frente_a_la_pandemia_del_COVID-19.pdf?sequence=1&isAllowed=y).

Confederation of Indian Industry. (2020). *About Us*. Retrieved 9 October 2020, from [https://www.cii.in/About\\_Us.aspx?enc=ns9fJzmNKJnsoQCyKqUmaQ==](https://www.cii.in/About_Us.aspx?enc=ns9fJzmNKJnsoQCyKqUmaQ==).

Confederation of Indian Industry. (2020). *Emerging Technologies: Transforming Indian Socio-Economy*. New Delhi: Confederation of Indian Industry.

Cudahy, G. and Gautam, R. (2020). *COVID-19: What's next for the technology sector*. Retrieved September 15 2020, from [https://www.ey.com/en\\_gl/tmt/covid-19-what-s-next-for-the-technology-sector](https://www.ey.com/en_gl/tmt/covid-19-what-s-next-for-the-technology-sector)

Data Security Council of India. (2020). *Cyber Security Firms in India Respond to COVID-19* (p. 21). New Delhi: National Association of Software and Service Companies.

Department of Commerce. (2019). *International Trade - Focus: LAC*. Retrieved 7 October 2020, from <https://commerce.gov.in/PageContent.aspx?Id=65#:~:text=Under%20the%20Focus%3ALAC%20program,an%20upper%20ceiling%20of%20Rs.>>.

Department of Economic Affairs. (2020). *Bilateral Investment Treaties*. Retrieved 11 October 2020, from <https://dea.gov.in/bipa>.

Digital Education Portal. (2020). *TCS Plan to Hire 20,000 Freshers to Join Tata Consultancy Services Ltd*. Retrieved 5 October 2020, from <https://educationportal.org.in/tcs-plan-to-hire-20000-freshers-to-join-tata-consultancy-services-ltd/>.

Export-Import Bank of India (2018). *Indian investment in the Latin American and the Caribbean: Trends and Prospects*. Working paper no. 75.

fDi Markets. (2018). *India investment in LAC: January 2003 to December 2018* (pp. 6-11).

Giordano, P., Ortiz de Mendivil, C., Jandhyala, V., G-Dutta, A. (2019). *A Bridge Between India and Latin America: Policy Options for Deeper Economic Cooperation*. Inter-American Development Bank. Retrieved from <https://publications.iadb.org/en/bridge-between-india-and-latin-america-policy-options-deeper-economic-cooperation>.

Income Tax Department. (2020). *Double Taxation Avoidance Agreements*. Retrieved 2 October 2020, from <https://www.incometaxindia.gov.in/Pages/international-taxation/dtaa.aspx>.

International Data Corporation. (2020). *Worldwide ICT Spending Guide: Industry and Company Size*. Retrieved 11 August 2020, from [https://www.idc.com/getdoc.jsp?containerId=IDC\\_P33207](https://www.idc.com/getdoc.jsp?containerId=IDC_P33207).

KPMG (2020). *COVID-19: Skills sector impact- How should India respond?* Retrieved September 26 2020, from <https://www.home.kpmg/in/COVID-19>

Lavelle, J. (2020). Gartner CFO Survey Reveals 74% Intend to Shift Some Employees to Remote Work Permanently. Retrieved 2 October 2020, from <https://www.gartner.com/en/newsroom/press-releases/2020-04-03-gartner-cfo-surey-reveals-74-percent-of-organizations-to-shift-some-employees-to-remote-work-permanently2>.

---

McKinsey & Company (2020). COVID-19 and reskilling the workforce. Retrieved September 22 2020, from <https://www.mckinsey.com/~media/McKinsey/Business%20Functions/Organization/Our%20Insights/To%20emerge%20stronger%20from%20the%20COVID%2019%20crisis%20companies%20should%20start%20reskilling%20their%20workforces%20now/To-emerge-stronger-from-the-COVID-19-crisis.pdf>

---

MOSPI (2020). Press note on Estimates of Gross Domestic Product for April-June 2020-2021.

---

NASSCOM (2017). The IT-BPM sector in India: Strategic Review. New Delhi.

---

National Association of Software and Service Companies. (2020). CEO Pulse Review: Covid-19 Impact on Indian Tech Sector. Retrieved from [https://nasscom.in/system/files/secure-pdf/NASSCOM\\_CEO-Pulse-Review-Series-I-vF.pdf](https://nasscom.in/system/files/secure-pdf/NASSCOM_CEO-Pulse-Review-Series-I-vF.pdf).

---

Ramachandran, G. (2020). Industry Overview on Disruptive Technologies. Presentation, CII India-ASEAN-Oceania Summit.

---

Reserve Bank of India (2019). Survey on Computer Software and Information Technology-Enabled Services Exports: 2018-19.

---

Reserve Bank of India (2020). Outward and Inward Foreign Direct Investment.

---

Rosales, O., Kuwayama, M. and Alvarez, M. (2011). India And Latin America and the Caribbean: Opportunities and Challenges in Trade and Investment Relations. Santiago: United Nations Economic Commission for Latin America and the Caribbean, p.45. Retrieved 7 October 2020, from [https://repositorio.cepal.org/bitstream/handle/11362/3021/1/S1100867\\_en.pdf](https://repositorio.cepal.org/bitstream/handle/11362/3021/1/S1100867_en.pdf).

---

Shah, A. (2018). India's proposed investment treaty terms leave foreign partners cold. Retrieved 11 October 2020, from <https://www.reuters.com/article/india-investment-treaty-idUSL4N1P72N1>.

---

Sun, H., Henry-Nickie, M., & Frimpong, K. (2020). Trends in The Information Technology Sector. Retrieved 11 August 2020, from <https://www.brookings.edu/research/trends-in-the-information-technology-sector/>.

---

Tata Consultancy Services. (2020). TCS Named A Top Employer in Latin America. Retrieved 7 October 2020, from <https://www.tcs.com/tcs-named-top-employer-latin-america-2020#:~:text=MEXICO%20CITY%2C%20March%205%2C%202020,for%20the%20sixth%20consecutive%20year.>>.

---

The Economic Times Bureau. (2020). Worst is Behind Us: CII CEO Survey. The Economic Times, p. 1. Retrieved 5 October 2020.

---

The Hindu Business Line Bureau. (2020). How the IT sector has emerged as a pillar of modern India. Retrieved 2 October 2020, from <https://www.thehindubusinessline.com/news/national/how-the-it-sector-has-emerged-as-a-pillar-of-modern-india/article32357389.ece#>.

---

The World Bank. (2020). Ease of Doing Business rankings. Retrieved 6 October 2020, from <https://www.doingbusiness.org/en/rankings>.

---

The World Bank. (2020). World Development Report 2020: Trading for Development in the Age of Global Value Chains. Retrieved 11 August 2020, from <https://www.worldbank.org/en/publication/wdr2020>.

---

World Bank (2020). World Development Indicators

---

World Trade Organization. (2020). Global Value Chain Development Report 2019. Retrieved 10 August 2020, from [https://www.wto.org/english/res\\_e/publications\\_e/gvcd\\_report\\_19\\_e.htm#:~:text=Technical%20innovation%2C%20supply%20chain%20trade%2C%20and%20workers%20in%20a%20globalized%20world&text=The%20report%20is%20a%20follow,chains%20and%20value%2Dadded%20trade](https://www.wto.org/english/res_e/publications_e/gvcd_report_19_e.htm#:~:text=Technical%20innovation%2C%20supply%20chain%20trade%2C%20and%20workers%20in%20a%20globalized%20world&text=The%20report%20is%20a%20follow,chains%20and%20value%2Dadded%20trade).

---

Wu, D. (2020). Not Made in China Is Global Tech's Next Big Trend. Retrieved 11 August 2020, from <https://www.bloomberg.com/news/articles/2020-03-31/supply-chains-latest-not-made-in-china-is-tech-s-next-move>.

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## ECONOMIC COMMISSION FOR LATIN AMERICA AND THE CARIBBEAN (ECLAC)

ECLAC is one of the five regional commissions of the United Nations.

ECLAC was founded in 1948 for the purpose of contributing to the economic development of Latin America and the Caribbean, coordinating actions to promote that development and reinforcing economic ties among the region's countries and with other nations of the world.

Over the years, the institution's in-depth analysis of the region has taken the form of two main lines of action: economic and social research and the provision of technical cooperation to governments.

The Commission's ongoing concern for economic growth, technical progress, environmental issues, equality, social justice and democracy has characterized the integrated approach to sustainable development that now forms part of the legacy of its rich intellectual tradition.

The 33 countries of Latin America and the Caribbean are member States of ECLAC, together with the United States, Canada, and several European and Asian countries that have historical, economic or cultural ties with the region. The Commission thus has a total of 46 member States. In addition, 14 non-independent Caribbean territories hold the status of associate members.

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## Confederation of Indian Industry

The Confederation of Indian Industry (CII) works to create and sustain an environment conducive to the development of India, partnering industry, Government and civil society, through advisory and consultative processes.

For 125 years, CII has been working on shaping India's development journey and, this year, more than ever before, it will continue to proactively transform Indian industry's engagement in national development.

CII is a non-government, not-for-profit, industry-led and industry-managed organization, with about 9100 members from the private as well as public sectors, including SMEs and MNCs, and an indirect membership of over 300,000 enterprises from 288 national and regional sectoral industry bodies.

CII charts change by working closely with Government on policy issues, interfacing with thought leaders, and enhancing efficiency, competitiveness and business opportunities for industry through a range of specialized services and strategic global linkages. It also provides a platform for consensus-building and networking on key issues.

Extending its agenda beyond business, CII assists industry to identify and execute corporate citizenship programmes. Partnerships with civil society organizations carry forward corporate initiatives for integrated and inclusive development across diverse domains including affirmative action, livelihoods, diversity management, skill development, empowerment of women, and sustainable development, to name a few.

With the Theme for 2020-21 as Building India for a New World: Lives, Livelihood, Growth, CII will work with Government and industry to bring back growth to the economy and mitigate the enormous human cost of the pandemic by protecting jobs and livelihoods.

With 68 offices, including 10 Centres of Excellence, in India, and 8 overseas offices in Australia, Egypt, Germany, Indonesia, Singapore, UAE, UK, and USA, as well as institutional partnerships with 394 counterpart organizations in 133 countries, CII serves as a reference point for Indian industry and the international business community.

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