

Concept Note for the PPP Talk panels on Supply Chains and Job Creation

Vicepresidency for Countries

Gastón Astesiano
Carolina Lembo
Pablo Pereira dos Santos
Ancor Suárez-Alemán
Paula Castillo Martínez
Ana Beatriz Araújo
Jaime Hurtado

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CONCEPT NOTE

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Supply Chains and
Job Creation

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SECTION 1 INTRODUCTION

The Inter-American Development Bank (IDB) holds the *PPP Americas* every two years in partnership with a national or subnational government. The regional forum brings together top professionals and public and private-sector representatives from **Latin America and the Caribbean** (LAC) to discuss groundbreaking topics and exchange ideas on planning, structuring, and managing public-private partnerships (PPPs). For the 2023 conference, the IDB is holding three preparatory events - **the PPP Talks** - before the main event. During the PPP Talks, invited experts will lay the groundwork for the discussions to be held during the conference.

The second PPP Talk will consist of two panels on March 2nd, 2023: **Supply Chains and Job Creation**, which are part of the thematic agenda of PPP Americas 2023. The second PPP Talk will be held virtually on February 2023. This Concept Note provides the conceptual framework of the two themes discussed during these panels. In addition, this note offers descriptions of key concepts, as well as the main opportunities and challenges that countries in Latin America and the Caribbean face in each area. Section 2 below presents the topic of the first panel (Supply Chains), while Section 3 describes the basis for the second panel (Job Creation).

SECTION 2 SUPPLY CHAINS

Global supply chains are the backbone of international trade, which has a key role in supporting economic growth and reducing poverty throughout the globe. Container port traffic, a common marker of global trade, has grown almost uninterrupted in the last two decades. Container traffic rose from 225 million TEUs¹ in 2000 to 807 million TEUs in 2019, representing more than a 3.5-fold increase in less than 20 years.² The only two exceptions to this trend were observed during the global financial crisis of 2008 and the COVID-19 pandemic. However, container traffic fell less sharply in 2020 (-1.9 percent) than during the financial crisis (-8.5 percent).³ Trade performance during supply shortages and regional recessions help understand these events' effects on broader economic trends.

In addition to the COVID-19 pandemic, other recent global events, such as the war in Ukraine, Europe's energy crisis, and China's zero-COVID policy, have further disrupted global supply chains and put significant strains on production networks. These disruptions have dragged on economic activity and global trade, impacting businesses, consumers, and the livelihoods of people around the world. A study estimates that, between November 2020 and September 2021, world trade would have been around 2.7 percent higher cumulatively if supply chain bottlenecks had not occurred, while global industrial production would have been 1.4 percent higher.⁴ Moreover, freight prices increased 8-fold between March 2020 and September 2021.⁵ Freight prices have since decreased substantially but are still almost double the average prices observed shortly before the start of the COVID-19 pandemic.⁶

More recently, deteriorating economic circumstances and increasing uncertainties observed in many developed and developing countries are some factors that exert pressure on global trade and supply chains during the second half of 2022.⁷ Although global trade is estimated to have reached US\$32 trillion in 2022, trade growth turned negative during the third and fourth quarters

¹ TEU refers to a twenty-foot equivalent unit. One TEU equals the volume of a 20-foot-long container, which is the standard container size in the industry.

² World Bank. 2023. "Container port traffic (TEU: 20-foot equivalent units)". Accessed January 30, 2023. <https://data.worldbank.org/indicator/IS.SHP.GOOD.TU>

³ Ibid.

⁴ European Central Bank. 2021. "Economic Bulletin Issue 8, 2021". Accessed November 21, 2022. <https://www.ecb.europa.eu/pub/economic-bulletin/html/eb202108.en.html>

⁵ Freightos Data. 2023. "Freightos Baltic Index (FBX): Global Container Freight Index". Accessed January 30, 2023. <https://fbx.freightos.com/>

⁶ Ibid.

⁷ UNCTAD. 2023. "Global Trade Update (December 2022)." Accessed January 30, 2023. <https://unctad.org/webflyer/global-trade-update-december-2022>

of the year.⁸ Moreover, geopolitical tensions, enduring inflation, and depressed global demand are expected to continue affecting international trade into 2023.⁹

These events have evidenced the multiple vulnerabilities that characterize global supply chains. First, global supply chains are highly interconnected; therefore, a shock in one place can produce disruptions in various locations along the chain.¹⁰ Moreover, global supply chains are also highly vulnerable because of their high levels of specificity—companies usually rely on a set of suppliers that cannot be easily substituted. In addition, it is common for global supply chains to extend to several tiers of suppliers. A vulnerability in a single supplier can therefore reverberate throughout the subsequent levels of suppliers, affecting hundreds or thousands of companies down the chain.

In Latin America and the Caribbean (LAC), the disruption of global supply chains has clearly impacted food security. Resulting of the war in Ukraine, fertilizer shortages are now widespread in many countries in the region, which has led to increasing food prices and lower crop yields. This has been threatening the already fragile food security of the region's poorest, while exacerbating inflation pressures across the region. The average year-on-year food inflation in 24 LAC countries was estimated at 17.2 percent by the end of 2022.¹¹ In some countries, food inflation is much higher than the regional average. Haiti, for instance, reported a 53.1 percent increase in food prices by October 2022, while in Suriname, food inflation reached 61.1 percent by December of the same year. Countries such as Chile and Colombia also reported significant increases in food prices—24.7 and 27.8 percent increases by December 2022, respectively.¹²

These circumstances present both an opportunity and a challenge for countries in LAC. The regionalization of supply chains can provide great dividends to countries in LAC with the infrastructure needed to support logistics operations. However, these new circumstances could further isolate countries with deficiencies in, for example, ports, airports, and intermodal transport. It is, therefore, imperative for governments in LAC to reduce the gap in investment in this type of infrastructure.

⁸ Ibid.

⁹ Ibid.

¹⁰ IDB. 2022. "Global and Regional Value Chains in Latin America in Times of Pandemic". Accessed November 21, 2022. <https://publications.iadb.org/en/global-and-regional-value-chains-latin-america-times-pandemic>

¹¹ Estimation done using data from Trading Economics. Month of the data varies for each country and ranges from October to December 2022. Estimates do not include data for Argentina and Venezuela. Trading Economics. 2023. "Food Inflation | America". Accessed January 30, 2023. <https://tradingeconomics.com/country-list/food-inflation?continent=america>

¹² Trading Economics. 2023. "Food Inflation | America". Accessed January 30, 2023. <https://tradingeconomics.com/country-list/food-inflation?continent=america>

A survey of 113 supply chain leaders worldwide, accounting for organizations from several industries, found that companies are increasingly taking measures to mitigate supply chain risks.¹³ Revised inventory stocks and dual-sourcing strategies are the most common measures taken by companies to increase their resilience to supply chain shocks. However, the regionalization of supply chains is increasingly becoming a tool for companies to reduce supply chain risks. The survey found that the share of respondents developing regionalized supply networks increased from 25 percent in 2021 to 44 percent in 2022.¹⁴

The IDB estimates that attracting supply chains to LAC could add an annual USD 78 billion in additional exports of goods and services in the region in the near and medium term.¹⁵ The key industries that could lead this growth are the auto industry, textiles, pharmaceuticals, and renewable energy, among others. However, improving trade, connectivity, transportation, and logistics infrastructure is critical to ensuring that regional companies are cost-competitive.¹⁶ According to IDB estimates, reducing international shipping costs by 10 percent can increase the value of exports by at least 30 percent.¹⁷

Efficient infrastructure and services for trade usually translate into lower transportation and logistics costs, promoting trade growth. Critical infrastructure for this purpose are ports, airports, and other infrastructure for multimodal transportation like roads, rail, and inland waterway transportation. A recent IDB study estimated that, for instance, maritime transportation costs could decrease between 5 percent and 15 percent if the developing countries analyzed would be as efficient as the country with the most efficient port sector in the study's sample.¹⁸ This is just an example of the enormous potential to promote trade in the region through targeted investments in efficient, sustainable infrastructure and services in the sectors related to supply chains.

While investment needs for ports and airports in the region loom large in the next two decades, fiscal constraints are deepening due to slower economic growth, persistent inflation, and higher interest rates. According to a recent study by the IDB, countries in the region need to invest

¹³ McKinsey & Company. 2022. "Taking the pulse of shifting supply chains". Accessed November 21, 2022. <https://www.mckinsey.com/capabilities/operations/our-insights/taking-the-pulse-of-shifting-supply-chains>

¹⁴ Ibid.

¹⁵ IDB. 2022. "Nearshoring can add annual \$78 bln in exports from Latin America and Caribbean". Accessed November 21, 2022. <https://www.iadb.org/en/news/nearshoring-can-add-annual-78-bln-exports-latin-america-and-caribbean>

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ IDB. 2021. "On the historical relationship between port (in)efficiency and transport costs in the developing world". Accessed January 31, 2023. <https://publications.iadb.org/en/historical-relationship-between-port-inefficiency-and-transport-costs-developing-world>

USD 146 billion to meet the expected growth in the air transport market between 2020 and 2030.¹⁹ Meanwhile, the region’s ports’ investment gap is estimated to be USD 246 billion by 2040.²⁰

Faced with these challenges, the region can harness PPPs to increase the efficiency of supply chain infrastructure and services, use available funding more efficiently—particularly during fiscal tightening—and attract the finance needed for infrastructure development. This will be explored in more detail in the next section.

PPPS AND THE RECONFIGURATION OF SUPPLY CHAINS

PPPs have been key in developing LAC’s supply chain infrastructure, particularly in airports and container port terminals. The region had 168 airports operating under a PPP scheme, accounting for 70 percent of the region’s total passenger traffic by 2017.²¹ In terms of ports, 91 percent of the cargo moving through state-owned container port terminals was moved through a terminal under a PPP contract in 2018.²² As shown in Table 1, the share of passenger traffic going through an airport operated under a PPP scheme is above 80 percent in most of the region’s countries. In addition, Figure 1 presents the share of containerized cargo moving through state-owned ports that goes through a PPP terminal, which in many countries is 100 percent.

Table 1: Share of Total Passenger Traffic that goes through PPP Airports (2017)²³

Country	Passengers (million)		PPP share of total
	PPP	Total	
Argentina	38.5	38.8	99%
Colombia	60.8	65.9	96%
Honduras	2.1	NA	>95%

¹⁹ IDB. 2020. “Public-Private Partnerships in Airports in Latin America and the Caribbean: Main Figures and Trends in the Sector”. Accessed November 21, 2022. <https://publications.iadb.org/en/public-private-partnerships-airports-latin-america-and-caribbean-main-figures-and-trends-sector>

²⁰ IDB. 2020. “Public-Private Partnerships in Ports: Main Figures and Trends in Latin America and the Caribbean”. Accessed November 21, 2022. <https://publications.iadb.org/en/public-private-partnerships-ports-main-figures-and-trends-latin-america-and-caribbean>

²¹ IDB. 2020. “Public-Private Partnerships in Airports in Latin America and the Caribbean: Main Figures and Trends in the Sector”. Accessed November 21, 2022. <https://publications.iadb.org/en/public-private-partnerships-airports-latin-america-and-caribbean-main-figures-and-trends-sector>

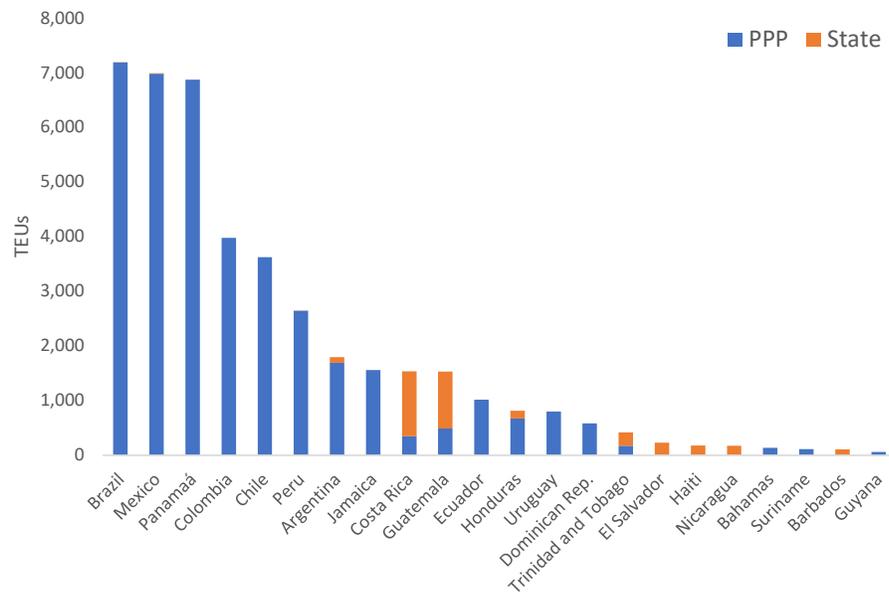
²² IDB. 2020. “Public-Private Partnerships in Ports: Main Figures and Trends in Latin America and the Caribbean”. Accessed November 21, 2022. <https://publications.iadb.org/en/public-private-partnerships-ports-main-figures-and-trends-latin-america-and-caribbean>

²³ Honduras’ figures are for 2016 and Ecuador’s (Cuenca Airport) are for 2018.

Jamaica	5.9	NA	>95%
Ecuador	10.1	NA	>95%
Uruguay	2.2	NA	>95%
Chile	30.3	33.9	89%
Peru	29.1	33.2	88%
Costa Rica	5.9	7.0	85%
Brazil	134.5	202.6	66%
Mexico	30.7	46.7	65%
Dominican Republic	4.9	11.2	44%

Source: IDB. 2020. "Public-Private Partnerships in Airports in Latin America and the Caribbean: Main Figures and Trends in the Sector."

Figure 1: Share of Containerized Cargo Going Moving through a State-Owned Port that Goes through PPP Terminal (2018)



Source: IDB. 2020. "Public-Private Partnerships in Ports: Main Figures and Trends in Latin America and the Caribbean."

Given that PPPs can help increase the efficiency and quality of airport and port terminal services and speed up infrastructure development, PPPs can be a powerful tool for countries trying to reap the benefits of regionalization trends in global supply chains. The operational efficiency of ports in LAC is estimated to have increased by an average of over 20 percent between 2000 and 2020, a period marked by increasing private-sector participation in port operations.²⁴ In addition, the best ten airports in South America, according to Skytrax, which measures several indicators of service efficiency, are all operated through a concession to a private operator.²⁵ PPPs can also help countries use fiscal resources more efficiently and attract the additional financing needed to develop new airports and port terminals and refurbish existing ones. These advantages of PPPs fit very well with the need to quickly develop efficient infrastructure that the regionalization of supply chains requires.

However, governments must address some of the challenges common in airport and port PPPs in the region. For instance, a study found that the average delay in developing airport PPPs exceeds 25 months, representing cost overruns in most cases.²⁶ In addition, the study also found that renegotiations are common in airport PPPs, translating into changes in the required investment in half the cases surveyed, in the operators' tariffs (30 percent of cases), or payments to the government (25 percent of cases).²⁷ Although systematic information is not available for port PPPs in LAC, anecdotal accounts suggest that delays and cost overruns are also common.²⁸ For example, renegotiations took place in 90 percent of the cases of port PPPs surveyed by a recent study, affecting the required investment in 71 percent of cases, the areas occupied by operators (62 percent of cases), or the terms of payments to the government (57 percent of cases).²⁹

To help decrease delays, cost overruns, and the prevalence of contract renegotiations, countries in the region must have effective legal, policy, and institutional PPP frameworks in place, as well as promote a balanced allocation of risks. Moreover, governments should apply formal methodologies to prioritize and select infrastructure projects, enhance procurement methods

²⁴ Ibid.

²⁵ Skytrax. 2020. "Best Airports 2022 by Global Region". Accessed January 31, 2023. <https://www.worldairportawards.com/best-airports-2022-by-global-region/>

²⁶ IDB. 2020. "*Public-Private Partnerships in Airports in Latin America and the Caribbean: Main Figures and Trends in the Sector*". Accessed November 21, 2022. <https://publications.iadb.org/en/public-private-partnerships-airports-latin-america-and-caribbean-main-figures-and-trends-sector>

²⁷ Ibid.

²⁸ IDB. 2020. "*Public-Private Partnerships in Ports: Main Figures and Trends in Latin America and the Caribbean*". Accessed November 21, 2022. <https://publications.iadb.org/en/public-private-partnerships-ports-main-figures-and-trends-latin-america-and-caribbean>

²⁹ Ibid.

to the best international practices, and apply them consistently. In addition, governments must carry out appropriate project preparation, including technical, financial, and legal pre-feasibility and feasibility studies and ex-post assessments to learn from previous experiences and draw lessons for future PPP projects. PPP frameworks and procurement methods in LAC countries had improved substantially when compared to when the first port and airport PPP projects were developed in the region. For example, ten out of the 12 countries in the region that implemented airport PPPs did not have a PPP regulatory framework in place during their first stages.³⁰ In contrast, the 2021/22 Infrascope Index, a benchmarking tool commissioned by the IDB that evaluates the readiness and capacity to implement sustainable and efficient PPPs, ranked 18 out of 26 countries in the region as having either mature or developed PPP regulations and institutions.³¹

Besides ports and airports, consolidating other components of sustainable multimodal transportation networks—such as roads, rail, and waterway transport—is vital to strengthening regional supply chains. PPPs have been employed extensively to develop road networks in LAC—the Private Participation in Infrastructure (PPI) database shows that 294 PPP road and highway projects are either active or have been completed since 1998 in 12 countries in the region (Argentina, Brazil, Colombia, Costa Rica, Dominican Republic, Ecuador, Honduras, Jamaica, Mexico, Paraguay, Peru, and Uruguay). In comparison, the PPI database lists 289 active or completed PPP projects during the same period when adding airports, ports, and railways together.³²

It is essential to note that all these transportation modes have their own development challenges in the region. For example, although LAC depends heavily on its road network to transport goods and services, most countries suffer from coverage, quality, and connectivity challenges. CEPAL estimated that no more than 18 percent of the total road network in the region was surfaced by 2015.³³ In the same year, the region had an average of 18 km of roads for each 100

³⁰ IDB. 2020. “Public-Private Partnerships in Airports in Latin America and the Caribbean: Main Figures and Trends in the Sector”. Accessed November 21, 2022. <https://publications.iadb.org/en/public-private-partnerships-airports-latin-america-and-caribbean-main-figures-and-trends-sector>

³¹ IDB and Economist Impact. 2022. “The 2021/22 Infrascope. Evaluating the environment for public-private partnerships in Latin America and the Caribbean”. Accessed on November 3, 2022. <https://impact.economist.com/projects/infrascope>.

³² World Bank. 2023. “Private Participation in Infrastructure (PPI) Database”. Accessed January 31, 2023. <https://ppi.worldbank.org/en/ppi>

³³ Cepal. 2018. “Road transport in Latin America: evolution of its infrastructure and impact between 2007 and 2015”. Accessed January 31, 2023. https://repositorio.cepal.org/bitstream/handle/11362/44459/1/S1801183_en.pdf

km² of land area, which is much lower than in other developing countries in other regions like Asia.³⁴

Rail and inland waterway transport are less developed means of transportation in the region, with much fewer PPPs in these subsectors than in roads, airports, and ports. A study by the International Union of Railways found that railways in the region “*if they exist, some have deteriorated, are outdated, or closed due to various reasons. Regulations, infrastructure, rolling stock, and procedures in Latin America are not homogenous, all contributing to more complex border crossings in regions where the infrastructure exists. This discontinuity has a severe impact on effective logistical chains, time consumption as well as costs*”.³⁵ Waterway transportation in the region is incipient and usually hindered by the prevalent use of hydroelectric dams without locks, which allow for the passage of ships. However, it has great potential to serve as a mode of transportation between LAC countries. CAF estimates that 75 percent of the surface water belongs to basins shared by two or more countries.³⁶ In addition, the benefits are threefold—waterway transport is the cheapest mode of inland cargo transportation, has the lowest CO₂ emissions per unit of cargo, and is the most energy-efficient mode of transportation.³⁷

Moreover, there is still room for improvement in other areas, particularly in several vulnerabilities that were evidenced during the COVID-19 pandemic. Airport demand, for example, was severely affected by travel restrictions imposed by countries trying to limit the spread of the virus. The reluctance of passengers to travel given the uncertainty of complex entry requirements (tests, vaccine certificates, quarantines) and the risk of contagion also continued impacting demand after some of the travel restrictions were eased. For instance, the concession owner in charge of expanding, renovating, maintaining, and operating an international airport in South America recently filed an arbitration process against the public authority. The concession owner claims

³⁴ Ibid.

³⁵ UIC. 2019. “Strategic Action Plan for UIC Latin America Region”. Accessed January 31, 2023. https://www.developmentaid.org/api/frontend/cms/file/2021/12/latin_america_strategic_vision_2019.pdf

³⁶ CAF. 2016. “Rivers could transform transportation and communications in South America”. Accessed January 31, 2023. <https://www.caf.com/en/currently/news/2016/07/rivers-could-transform-transportation-and-communications-in-south-america/>

³⁷ Hunt, J.D.; Pokhrel, Y.; Chaudhari, S.; Mesquita, A.L.A.; Nascimento, A.; Leal Filho, W.; Biato, M.F.; Schneider, P.S.; Lopes, M.A. Cleaner Engineering and Technology Challenges and Opportunities for a South America Waterway System. *Clean. Eng. Technol.* 2022, 11, 100575.

about USD 1 billion in damages given that the pandemic substantially affected actual demand compared to the demand projections prepared during project procurement.³⁸

The case described above is just an example of the need for PPP practitioners to reflect on innovations that allow for more contract flexibility when events like the pandemic, which was not a risk allocated to any of the parties, significantly change the conditions of the concession owner. This could help decrease the number of disputes between concession owners and concession providers, thereby minimizing the likelihood of disruption in the provision of infrastructure services related to supply chains. Panel participants will discuss these topics in more detail.

Finally, besides improving physical infrastructure for connectivity, transport, and logistics, as well as its governance— which are crucial steps to increase their participation in regional supply chains—countries in LAC could benefit from other types of policies. For instance, policies such as strengthening trade promotion agencies, fostering small and medium enterprises (SMEs) as exporters, allowing multinational corporations to operate more freely, reducing trade barriers such as tariffs, enhancing integration at border crossings, improving logistics efficiency, and investing in education and training of local workers can help attract supply chains to the region.³⁹

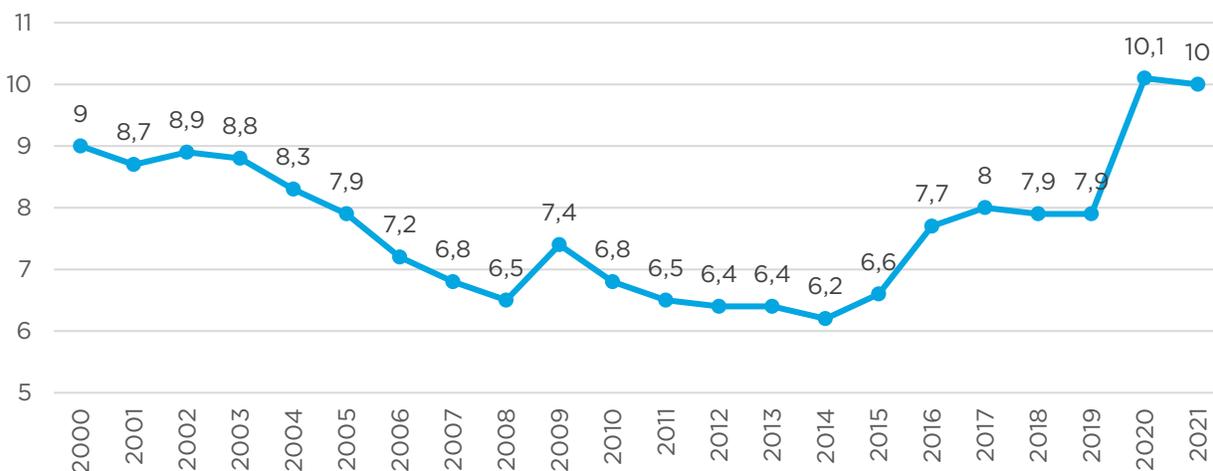
³⁸ BNamericas. 2023. “*Cómo la concesionaria del aeropuerto de Santiago afrontará tiempos turbulentos*”. Accessed January 31, 2023. <https://www.bnamericas.com/es/entrevistas/como-la-concesionaria-del-aeropuerto-de-santiago-afrontara-tiempos-turbulentos>

³⁹ IDB. 2022. “*Global and Regional Value Chains in Latin America in Times of Pandemic*”. Accessed November 21, 2022. <https://publications.iadb.org/en/global-and-regional-value-chains-latin-america-times-pandemic>

SECTION 3 JOB CREATION

Recent macroeconomic conditions have evidenced the importance of strengthening the region’s labor markets. Forty-nine million jobs were lost in Latin America and the Caribbean by the second quarter of 2020 due to the COVID-19 pandemic, out of which 4.5 million were yet to be recovered by February 2022.⁴⁰ The average unemployment rate in the region was estimated at 10 percent by the end of 2021, which is higher than at any point in the last two decades.⁴¹ Figure 2 shows the average unemployment rate in the region between 2000 and 2021.

Figure 2: Unemployment, total (% of total labor force), 2000-2021



Source: World Bank. 2022. “World Bank Open Data—Unemployment, total (% of total labor force) (modeled ILO estimate) - Latin America & Caribbean”

More worryingly, 49 percent of the region’s workers are part of the informal economy, leaving their jobs unprotected and vulnerable to future macroeconomic shocks.⁴² Therefore,

⁴⁰ ILO. 2022. “ILO: After two years of the pandemic, labour market recovery has been insufficient in Latin America and the Caribbean”. Accessed December 2, 2022. https://www.ilo.org/caribbean/newsroom/WCMS_836156/lang--en/index.htm

⁴¹ World Bank. 2022. “World Bank Open Data—Unemployment, total (% of total labor force) (modeled ILO estimate) - Latin America & Caribbean”. Accessed December 2, 2022. <https://data.worldbank.org/indicator/SL.UEM.TOTL.ZS?locations=ZJ>

⁴² ILO. 2022. “ILO: After two years of the pandemic, labour market recovery has been insufficient in Latin America and the Caribbean”. Accessed December 2, 2022. https://www.ilo.org/caribbean/newsroom/WCMS_836156/lang--en/index.htm

governments in the region must promote quality jobs and strengthen labor markets to reduce the vulnerabilities that recent global events have exposed.

Overall, PPPs can be an effective tool to stimulate job growth by leveraging the resources and expertise of both the public and private sectors. For example, PPPs can lead to the development of infrastructure projects, such as the construction of highways, airports, or schools that otherwise would not have been developed. Therefore, these developments can create jobs for workers in the construction industry. Additionally, PPPs can lead to the expansion of existing businesses or industries by aligning private and public objectives.

However, a well-known caveat regarding employment in infrastructure development is that jobs are usually temporary, and informality is highly prevalent, particularly in the LAC region. For this reason, the section below will focus on synergies between PPPs and skills development to promote quality jobs in the region.

PPPS AND SKILLS DEVELOPMENT

Rapid technological change and the emergence of new industries are increasingly influencing the dynamics of labor markets worldwide. Therefore, countries in LAC need to ensure that their labor markets keep up with the skills required to face these changes and reap the benefits of quick technological changes. Moreover, upskilling and reskilling are essential to increase labor productivity, which grows too slowly in the region—at about 1 percent per year—and is vital to create good employment conditions.⁴³

PPPs will play a role in this endeavor as much of the infrastructure developed through private participation will likely be in new industries, particularly infrastructure aimed at mitigating and adapting to climate change. For example, the generation of clean energy through solar photovoltaic, concentrated solar power, and wind, as well as energy storage through green hydrogen and lithium-ion batteries are technologies that are currently or could be developed through PPPs in LAC. However, these technologies need large pools of qualified labor, which many countries in the region would likely lack if the pace of technological shifts continues.

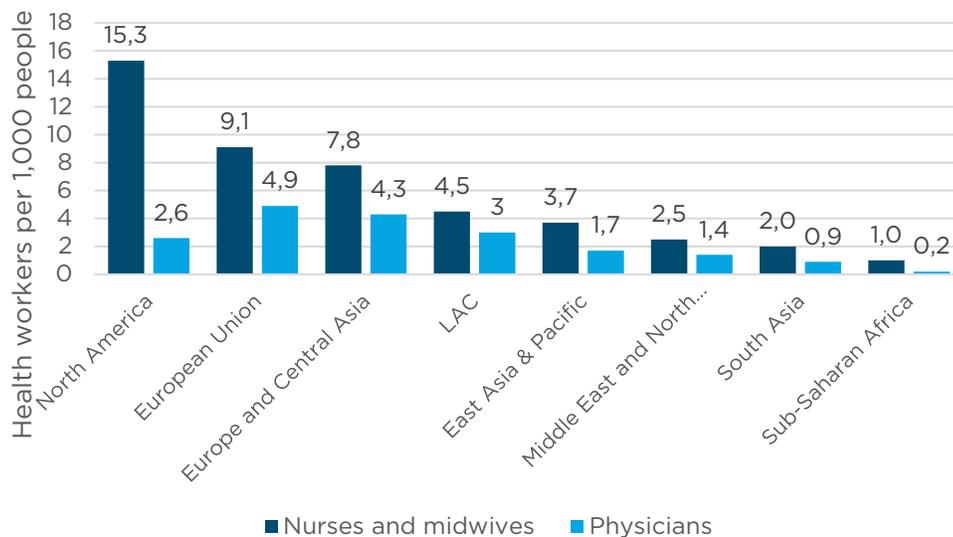
How PPPs will deal with these bottlenecks is a crucial question that the region's PPP practitioners, governments, and the private sector face imminently. More specifically, how PPPs may contribute to upskilling and reskilling workers to ensure projects are appropriately staffed throughout contract durations is another critical question that needs to be answered so LAC

⁴³ IDB. 2021. "Labor Sector Framework Document". Accessed February 6, 2023. <https://www.iadb.org/en/about-us/sector-policies-and-sector-framework-documents>

countries can benefit from technological change. Unfortunately, LAC countries have often seen many highly educated professionals and academics move to more developed economies looking for better living standards and working opportunities. Overcoming these challenges is vital to increasing the ability of PPP projects in new technologies or industries to find the skilled workers necessary for success.

Developing service-oriented infrastructure through PPPs also requires a coordinated approach to ensure that services can be staffed according to project needs. One example is staffing in social infrastructure such as hospitals and schools. Quality staffing is critical to project success, as provision of healthcare and education services is only possible with specific skills. However, local labor markets may be insufficient to staff these projects once operation begins, particularly in small cities and rural areas. Accordingly, ensuring appropriate staffing for new social infrastructure PPPs is also a pivotal topic of discussion. For example, Figure 3 below presents the number of nurses/midwives and physicians per 1,000 people in LAC by 2017 compared to other regions. The figure shows that the region trails North America, Europe, and Central Asia in these metrics.

Figure 3: Nurses/midwives and physicians per 1,000 people, 2017



Source: World Bank. 2023. “World Bank Open Data— Physicians (per 1,000 people) / Nurses and midwives (per 1,000 people) - Latin America & Caribbean, East Asia & Pacific, European Union, North America, South Asia, Europa and Central Asia, Sub-Saharan Africa, Middle East and North Africa”

Governments could start addressing these challenges by incorporating upskilling and reskilling clauses in PPP contracts that are likely to face staff or skills shortages. For example, these clauses could require the training of local workers in the use of specific machinery or equipment

for construction or operation of infrastructure that uses new technologies. Moreover, other incentives can be incorporated to ensure that upskilling and reskilling of local workers goes beyond the minimum requirements of contract clauses throughout the duration of the contract. Possible methods to incorporate these mechanisms in future PPP models will be discussed during the panel.

To strengthen local labor markets and develop skills that may be lacking for specific infrastructure projects, governments and private stakeholders can also implement programs on vocational education and training (VET).⁴⁴ VET programs can be provided through outcome-based, policy/program PPPs, which differ from the traditional long-term infrastructure PPPs.⁴⁵ Policy/program PPPs usually do not seek to overcome financial constraints or increase project efficiency but aim to increase the effectiveness of policies and programs through private-sector participation.⁴⁶ Improved effectiveness may derive from higher competence or innovation capacity from the private sector, but also from allowing several stakeholders and institutions to work together toward a common goal.⁴⁷

Countries in the European Union employ VET programs to upskill and reskill people in several sectors of the economy. Moreover, a recent study by the European Training Foundation identified 23 case studies of policy/program PPPs in Europe and Asia that have been used to develop and provide VET programs.⁴⁸ This study concluded that this type of PPP could lead to the improvement of VET programs leading to more people with high-quality skills that are beneficial to individuals, companies, and society at large. It also found that interactions between private and public stakeholders are largely dynamic, often not governed by a formal contract but by agreements.

⁴⁴ The European Union defines VET as “*the training in skills and teaching of knowledge related to a specific trade, occupation or vocation in which the student or employee wishes to participate. Vocational education may be undertaken at an educational institution, as part of secondary or tertiary education, or may be part of initial training during employment, for example as an apprentice, or as a combination of formal education and workplace learning*”.

⁴⁵ ETF. 2020. “*Public-Private Partnerships for Skills Development. A Governance Perspective*”. Accessed December 9, 2022. https://www.etf.europa.eu/sites/default/files/2021-01/ppps_for_skills_development_volume_i.pdf

⁴⁶ Ibid.

⁴⁷ Ibid.

⁴⁸ Ibid.

JOB CREATION THROUGH PPPS PROMOTING SERVICE-INTENSIVE SECTORS

Another potential opportunity to indirectly support job creation in the region is through PPPs that enhance service-intensive sectors such as sustainable tourism and agribusiness. For instance, airports, roads, and other transportation infrastructure are direct tourism enablers. PPPs could create jobs in these areas if they align private investment and expertise with sustainable growth policies in these sectors.

Tourism employs one out of 11 workers in the world. It represents 10 percent of the world's GDP while employing more women, young people, and people with limited educational backgrounds compared to other industries.⁴⁹ However, countries in LAC need to develop further and maintain infrastructure such as roads, bus terminals, rail, airports, and ports to ensure competitiveness on the global stage. Countries in the region could thereby rely on this type of infrastructure to enable sustainable tourism.

An example of close collaboration between the private and public sectors to promote tourism in the region was implemented in Salta, Argentina, between 2003 and 2010. The provincial government conducted several policies—collectively known as the Tourism Development Policy (TDP)—to foster tourism in the city and create jobs, particularly after the country's economic crisis of 2001.⁵⁰ The TDP consisted of three pillars:⁵¹

- Construction and modernization of tourism and transport infrastructure through PPP projects
- Tax credits for construction, expansion, and refurbishment of hotels and other hospitality infrastructure
- Strengthening of the tourism governance

A recent study of the measures implemented through the TDP found that employment in the tourism sector grew by 11 percent annually, which accounted for a 112 percent aggregate increase during the TDP's implementation period.⁵² In addition, the TDP created 750 new formal jobs in the hospitality industry.⁵³

⁴⁹ IDB Invest. 2020. "Tourism development through PPPs: An opportunity to generate employment in Latin America and the Caribbean?". Accessed December 6, 2022. <https://idbinvest.org/en/blog/development-impact/tourism-development-through-ppps-opportunity-generate-employment-latin>

⁵⁰ Ibid.

⁵¹ IDB. 2019. "Política de Desarrollo Turístico en Salta, Argentina". Accessed December 6, 2022. <https://publications.iadb.org/es/politica-de-desarrollo-turistico-en-salta-argentina>

⁵² Ibid.

⁵³ Ibid.

The panel on job creation that will take place during the second PPP Talk will discuss how PPPs can further help governments in the region to reduce unemployment, create formal jobs, and improve labor security in the medium and long term. Panelists will focus on how PPPs can incorporate upskilling and reskilling mechanisms to ensure the appropriate staffing of projects in new technologies and industries, and in social infrastructure such as hospitals and schools. The panel will also explore how governments can leverage PPPs that promote service-intensive sectors to accelerate job creation.