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#### LABOR SECTOR FRAMEWORK DOCUMENT

#### **LABOR MARKETS DIVISION**

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#### **ABBREVIATIONS**

ALMP Active Labor Market Policies

Al Artificial Intelligence

COVID-19 Coronavirus disease 2019

ES Employment Services

GDP Gross Domestic Product

ICT Information and Communications Technology

IDB Inter-American Development Bank

IDBG Inter-American Development Bank Group

ILO International Labour Organization
LAC Latin America and the Caribbean

MSME Micro, Small and Medium-Sized Enterprise

OECD Organisation for Economic Co-operation and Development

pp Percentage Points

PES Public Employment Services
PPP Purchasing Power Parity

SFD Sector Framework Document

STW Short-Time Work

SIMS Sistema de Información de Mercados Laborales y Seguridad Social

SME Small and Medium-Sized Enterprise

TA Technical Assistance

TVET Technical and Vocational Education and Training

TWP Temporary Work Programs
UBI Universal Basic Income

UN United Nations

#### **EXECUTIVE SUMMARY**

The pathway to shared prosperity is paved with an abundance of "good employment opportunities." We define good employment opportunities as work that pays enough to allow workers and their families to be part of the middle class, with access to social insurance and core labor protections. Good employment opportunities are associated with better social, economic, and political outcomes, including greater support for democracy.

The Latin America and the Caribbean (LAC) region has made slow progress in the creation of good employment opportunities. Over the past 20 years, LAC labor markets did not produce enough good employment opportunities. Despite sizable declines in poverty and inequality, between 1998 and 2018 the average growth in wages was 0.63% per year, well below LAC's potential. Furthermore, the share of workers under the umbrella of social insurance systems, also known as formal employment, stagnated at around 42%. In all, only 34% of the jobs in the region generate a middle-class income and protect against risks—up from 27% in 1998. At this rate it will take 130 years for the region to reach 80% of middle-class jobs protected against risks. This fact has enormous consequences for growth, inequality, and social inclusion.

The region faces the worst economic recession ever recorded, presenting additional challenges for countries to create good employment opportunities for their citizens. At least 30 million jobs were lost between February and June 2020 (IDB, 2020a). Countries in the region are rightly focused on mitigating the crisis and on recovery; meanwhile, the underlying structural challenges that limited good employment opportunities have been accentuated by the Coronavirus disease 2019 (COVID-19) pandemic.

This Sector Framework Document (SFD) addresses the actions that make progress towards a plentiful supply of good employment opportunities in LAC possible. It balances the critical need to accelerate the recovery of employment today while addressing the structural issues that have historically prevented the widespread creation of good employment opportunities, all against a backdrop of important technological, demographic, migration and climate change trends. To make progress, countries will have to address four challenges:

Challenge 1: Recover employment growth and bring people back to work. More jobs have been destroyed during the COVID-19 pandemic than at any other time in the region's recent history (IDB, 2020a). From February to June 2020, total employment fell by 14% (at least 30 million jobs) and formal employment fell by 8% (at least 8 million jobs). Since then, only around a third of employment has been recovered. The employment loss was stronger for women, young people, and informal workers. It is widely expected that after the pandemic, good employment opportunities will be rarer and traditionally excluded groups will suffer more. Without bold action, this crisis threatens to leave scars for a generation of LAC citizens and undo the progress on poverty and inequality gained in previous decades. The region needs to take advantage of the positive impacts of the crisis in terms of expanded digitalization and remote work, advances that are here to stay.

Challenge 2: Boost labor productivity and ensure that gains are shared equitably. Labor productivity is a key engine for creating good employment opportunities. Over the past 30 years, regional labor productivity grew at a slow pace—around 1% per year. Even the region's high performers are well below the productivity growth frontier. Some countries have stagnated with negative or no productivity growth for 30 years. The region lags in three key elements necessary to generate healthy productivity growth: skills, innovation, and an adequate business environment. The COVID-19 pandemic has further affected productivity by raising transaction costs and limiting skills development. Today more than ever, the long-run growth prospects of the region depend on finding ways to accelerate labor productivity, including the adoption and efficient use of

technology and upskilling a large segment of the workforce to work with these technologies. But productivity is not enough; labor market institutions should ensure that all workers benefit from labor productivity growth.

Challenge 3: Create inclusive, equitable, and sustainable social insurance systems. Well-developed social insurance systems are central to the creation of good employment opportunities as they provide workers essential protection against risks. In most countries, however, social insurance systems, built around salaried work and financed with employer and employee contributions, produce low and unequal coverage of basic programs, including pensions, unemployment insurance and sometimes health care. Today less than half of the LAC labor force hold formal jobs. In addition, other design features of individual social insurance programs reduce their effectiveness. In some countries, one such imperfect design feature is a generous pension system that favors only a few and skews public spending toward the rich and the old at the expense of the poor and the young.

Challenge 4: Reduce the constraints faced by some population groups to access good employment opportunities. Some groups have a particularly difficult time attaining good employment opportunities. Even when accounting for differences in education and experience, there are large disparities in participation, employment, formality rates, and salaries across groups that have different ethnicity, gender, disability, or sexual and gender identities, as well as people from rural areas. On average, women, persons with disabilities, Afro-descendants and Indigenous peoples have lower rates of labor force participation and formality than men, people without disabilities, and whites. The pandemic is affecting these groups more than others. In addition to these traditionally excluded groups, one must also consider migrants, youth, older workers and a large group of newly unemployed individuals affected by COVID-19.

The IDBG's activities will focus on the recovery of employment levels in the region and help countries create good employment opportunities for all. This SFD puts forward four lines of action to: (i) accelerate the recovery of employment after COVID-19, bringing people back to work with a combination of mitigation and reactivation policies aligned with a long-run vision of high productivity, universal social protection, and inclusion; (ii) implement innovative multisectoral approaches for higher productivity growth and ensure that gains are shared equitably, by promoting substantive investments in skills development, and advancing an agenda to reshape tax, and labor regulations and social insurance systems; (iii) achieve adequate, equitable and sustainable social insurance systems, by delinking access to a substantial part of social protection benefits (especially health care) from the employment condition, expanding the mandate of social insurance to all workers, and updating labor laws and pension systems; and (iv) expand access among traditionally excluded populations and disadvantaged groups to good employment opportunities.

# I. THE LABOR SECTOR FRAMEWORK DOCUMENT IN THE CONTEXT OF CURRENT REGULATIONS, THE INSTITUTIONAL STRATEGY, AND INTERNATIONAL AGREEMENTS

- 1.1 The Labor Sector Framework Document (SFD) aims to guide the work carried out by the Inter-American Development Bank Group (IDBG) alongside countries in Latin America and the Caribbean (LAC) as they develop their labor market and social security policies and programs.<sup>1</sup>
- 1.2 This SFD has been prepared in accordance with the document "Strategies, Policies, Sector Frameworks, and Guidelines at the IDB" (GN-2670-5), which establishes the sectoral regulatory framework of the Bank, including for SFDs. In accordance with the provisions of that document, which state that SFDs should be updated every four years, this SFD replaces the previous Labor SFD (GN-2741-7). The development of skills aspect is covered in the Skills Development SFD (GN-3012-3).
- 1.3 This SFD is consistent with the Update to the Institutional Strategy (AB-3190-2) document, which identifies social exclusion, inequality, and low levels of productivity and innovation as regional development challenges. It is also related to the Strategy on Social Policy for Equity and Productivity (GN-2588-4), which seeks to increase the Bank's effectiveness in promoting social policies that increase equality and productivity in the region. It is related to the following SFDs: Skills Development (GN-3012-3); Social Protection and Poverty (GN-2784-7); Gender and Diversity (GN-2800-8); Innovation, Science, and Technology (GN-2791-8); Integration and Trade (GN-2715-11); Climate Change (GN-2835-8); Agriculture (GN-2709-10); Tourism (GN-2779-7); and Health and Nutrition (GN-2735-7). Finally, it is aligned with the Gender Action Plan (GN-2531-19).
- 1.4 Of the United Nations' Sustainable Development Goals (SDGs) for the year 2030, this SFD relates primarily to the following: SDG 1: "End poverty in all its forms everywhere"; SDG 4: "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all"; SDG 5: "Achieve gender equality and empower all women and girls"; SDG 8: "Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all"; SDG 10: "Reduce inequality within and among countries"; and SDG 17: "Partnerships for the Goals". This SFD promotes designing and implementing labor market policies to create good employment opportunities for all, with a focus on vulnerable and excluded populations to close inequities in access due to gender, ethnicity, race, or the presence of disabilities. This SFD views equal access to decent work<sup>2</sup> as a universal objective as stated in several UN Resolutions and in Article 23 of the Universal Declaration of Human Rights, as well as the eight fundamental conventions from the Internationa Labor Organization (No. 29, 87, 98, 100, 105, 111, 138 and 182).
- 1.5 The rest of the document is structured as follows: Section II describes the challenges of the labor market in the region and relies on data processed by IDB's data portals: COVID-19 Labor Markets Observatory and Sistema de Información de Mercados Laborales y Seguridad Social (SIMS).<sup>3</sup> Section III presents evidence on the effectiveness of policies and programs that address the challenges identified in Section II. Section IV summarizes the

This document was created by the Labor Markets and Social Security Division (LMK), with the participation of other IDB departments, IDB Lab, and IDB Invest.

Decent work is work that is productive, provides a fair income, workplace security, social protection, equal treatment, personal development prospects, social integration and freedom to organize and express concerns.

Table 1 details the lists of countries included in most Figures, along with their respective ISO country codes.

lessons learned by the IDBG. Section V describes lines of action the IDBG can undertake in supporting the region as it takes up the challenges identified in Section II.

#### II. KEY LABOR MARKET CHALLENGES FOR THE REGION

- An abundance of "good employment opportunities" paves the way for shared prosperity. Good employment is work that, first, pays enough to allow workers and their families to be part of the middle class and, second, provides them with access to social insurance<sup>4</sup> and core labor protections.<sup>5</sup> Such employment allows most individuals to earn enough during their working years and have protection in case of ill health and job loss; it also means that in retirement and old age, they do not fall into poverty. Good employment opportunities are associated with better social, economic, and political outcomes, including greater support for democracy (Rodrik and Sabel, 2019; Acemoglu, 2019). In LAC, good employment is often associated with salaried formal, full-time jobs: these jobs pay relatively well and are covered by social insurance mechanisms. 6 As such, promoting the creation of formal jobs is a key strategy to expand the access to good employment opportunities for all, but so is expanding the umbrella of protection against risks to all types of labor (salaried and non-salaried). Although the advent of new technologies and labor arrangements such as automation and the platform-based economy may reshape how workers and firms engage in the labor market, decent pay and protection against risks will remain defining features of a good job. This SFD addresses the actions that make progress towards a plentiful supply of good employment opportunities for all in LAC possible.
- 2.2 The progress in the first decade of the twenty-first century came to a halt well before the arrival of COVID-19, ending a 20-year period that saw minimal progress in creating good employment opportunities. The region boomed during the first decade of the twenty-first century. From 2000 to 2012, poverty fell by almost 20 percentage points (pp), while inequality, measured by the Gini coefficient, fell 8.7%.<sup>7</sup> From 2013 to 2018, however, the average unemployment rate rose 1 pp, to 7% (Figure 1).<sup>8</sup> Formality rates stayed constant at around 42%, only 5 pp higher than twenty years earlier. Real wages stagnated in most countries. Taken as a whole, this 20-year period showed average annual wage growth of 0.63%. Andean countries achieved annual growth of 1.71%, followed by Southern Cone countries (0.92%), Central American countries (0.39%) and Caribbean countries (-0.65%). By 2018, only 34% of the jobs in the region generated a middle-class income and were protected against risks, up from 27% in 1998. At this rate, it will take 130 years for the region to achieve 80% of middle-class protected jobs.<sup>9</sup> Even though poverty and inequality kept decreasing up until the pandemic struck (Busso et al., 2020), countries like Chile and

<sup>4</sup> Throughtout the document social insurance and social security are used interchangeably.

See Table 2 for country labor data and for detailed information of data case by case, see the <u>Electronic Link</u>.

Job security is another important determinant of job quality (Sehnbruch et al., 2020), as well as job satisfaction and career development. However, data on many of these variables are not available for all countries, and therefore, for measurement purposes, we adopt a narrower definition.

Throughout this document, workers are considered formal if they contribute to social insurance as defined in the labor surveys of each country (IDB, 2020c). This refers both to salaried employees and self-employed/employers where countries include these categories in their social insurance systems.

Several factors drive this trend, among them expanded access to education and the increased demand for unskilled workers caused by the commodity boom. Institutional factors, such as increases in minimum wages, helped to decrease wage inequality (De la Torre et al., 2017; Silva and Messina, 2020). The introduction of several social transfer programs also played a role in reducing wage inequality (Gasparini et al., 2008; Lustig et al., 2016).

Middle-class income is considered as 12.4 PPP daily in U.S. dollars (Alonso Puelles et al., 2016).

Colombia were experiencing unrest. Commentators attributed this unrest to the countries' failure to address structural inequities (Lustig, 2020; Güemes and Paramio, 2019).

- 2.3 The COVID-19 pandemic has exposed the structural vulnerabilities of the region's large, informal labor markets. In the first months of the pandemic as many as 30 million workers lost their jobs and their incomes, with most of them losing access to health care and having no unemployment insurance. Although most countries provided some emergency transfers to informal workers (Busso et al., 2020), the assistance did not make up for incomes lost, nor did it reach everyone who needed it. Post-pandemic opportunities for good employment are expected to become even more scarce. Furthermore, the pandemic has revealed additional dimensions regarding the true costs of informal labor markets: the impaired ability of states to respond to shocks (Busso et al., 2020; Díaz Cassou et al., 2020). Informality sometimes implies not only a disconnect with the state but also with financial institutions. Many informal workers, especially women, have no bank accounts, 10 which prevents the rapid delivery of financial help. According to Demirguc et al. (2018), 57% of LAC's population aged 15 years and up, and many of the poorest 40%, had neither a bank account nor mobile money services in 2017. Moreover, informality has made containment policies more complex. Without access to coverage against unemployment risks (e.g., unemployment insurance), or sick and health care leave, informal workers were unable to stay home and follow advice from public health officials (Bottan, Vera-Cossio, and Hoffmann, 2020).
- 2.4 Looking beyond the pandemic, we anticipate labor markets will be vulnerable to four trends—technology, demography, climate change, and migration—likely to reshape **LAC economies in the coming decades.** Technology is reshaping the way we work today, increasing the cognitive, digital, and social skills required by firms—skills the region lacks. Technology is also enabling new labor relations, such as the platform-based economy, 11 whose workers fall outside of the scope of most social insurance and labor regulations. Furthermore, the pandemic has triggered a massive move toward telework, for which most firms, workers, and regulations were unprepared. In addition, the region's population is aging faster than that of the rest of the world (Figure 2). By 2085, LAC will be the oldest region in the world (ECLAC, 2019). The region is also highly vulnerable to climate change; the anticipated increase in the frequency and intensity of natural disasters together with the slow-onset impacts of climate change is already disrupting economic activities and leading to job and productivity losses. Migration flows also put pressure on LAC countries. Venezuelan migration stands out as the most urgent, 12 with more than 5.2 million Venezuelans having left their country. Of these, 4.3 million people reside in nearby LAC countries, compared with 140,000 in 2015.
- 2.5 Over the next several years, LAC will naturally focus on recovery from the pandemic. However, the capacity of governments to respond will be limited by a dire post-pandemic fiscal situation. But this great dislocation might have a silver lining—political impetus and support for ambitious policy options not thought possible before the COVID-19 pandemic. A sustainable and inclusive recovery will need to confront the looming demographic, technological, climate, and migration challenges. Kickstarting a sustainable recovery, while setting the foundation for good employment opportunities, requires several elements at once. Policies need to balance governmental response to the crisis with addressing the structural

<sup>10</sup> The ratio of women with respect to men owning a bank account is 0.84 (Demirguc et al., 2018).

<sup>11</sup> The orange economy, for example.

Rural-urban migration is also important, given the consequences it has on urban and rural labor markets, but will not be addressed profoundly in this document.

issues that limited the widespread creation of good employment opportunities in the first place. Therefore, this SFD puts forward an agenda that addresses four challenges:

## A. Challenge 1: Recover employment and bring people back to work

- 2.6 COVID-19 has destroyed employment like no previous crisis, exposing the vulnerabilities of LAC labor markets and threatening to undo the gains made on poverty and inequality over the past two decades (Acevedo et al., 2020). The pandemic has produced external and domestic shocks expected to bring systemic contractions in gross domestic product (GDP) growth for 2020 of -8.1% in LAC countries (IMF, 2020a). From February to June 2020, approximately 14% of all employment in the region, and8% of the region's formal employmentwas lost (Figure 3). 13 Since then, only a third of employment has been recovered. Millions of vulnerable and middle-class workers were not only more likely to lose their jobs, but also, because of their informal status, had no access to health care or unemployment insurance. Labor demand in occupations and sectors that require high physical proximity (e.g., retail, hotels, restaurants, and many personal services) has plummeted because of the social distancing that COVID-19 required. These contactintensive occupations are more common among women (IMF, 2020a) 14 and draw extensively on low-skilled labor (Mongey, Pilossoph and Weinberg, 2020), so they employ the region's informal workers (Hatayama, Viollaz and Winkler, 2020). Data from online surveys show that in every country of the region, the lockdown's impacts on job losses has been concentrated heavily in the bottom half of the distribution (Bottan et al., 2020). According to survey and administrative records, evidence from Mexico, Chile, Colombia, and Uruguay, five informal jobs vanished for every formal job lost (IDB, 2020a). In some countries, even in formal jobs, low-income workers lost their jobs at a higher rate. In Mexico, 9% of workers with wages between 1 and 2 times the minimum wages lost their jobs compared to 1.4% of those earning between 2 and 3 times the minimum wages. These changes threaten the important gains in inequality and poverty reduction over the past decades. According to the United Nations (UN), the poverty rate is expected to rise by 7.0 pp in 2020 to 37.2%, while extreme poverty is expected to rise by 4.5 pp, from 11.0% to 15.5%, representing an increase of 28 million people. Increases in inequality will follow. The Gini index is expected to increase with the pandemic by between 1.1% and 7.8% (UN, 2020).
- 2.7 The pandemic persistence in LAC could imply a slower recovery compared to previous recessions. While it is expected that the region will regain real GDP growth in 2021, per capita GDP levels will not converge to its pre-COVID levels until 2025 (IMF, 2020a). On average, GDP recovery from the 2008 recession took two years (with substantial variation across countries). Except for Nicaragua and Venezuela, LAC countries will experience real economic growth in 2021, and given the downturn of 2020, most will do so with rates of 4% and higher. On the other hand, the IMF projects that unemployment rates will not recover their pre-COVID levels until 2025. And this is a lower bound for the true impact of the crisis, as unemployment rates do not reflect the fact that many workers may have been discouraged from participating in the labor market. Beyond the GDP recovery,

The estimation for all employment is based on published data from eleven countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Mexico, Paraguay, Peru, the Dominican Republic and Uruguay), which together represent 82% of total employment in the region.

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In the case of occupations that are amenable to telework, the effective ability to telework is diminished for women because of the disproportionally higher number of hours women dedicate to household chores, including care of others and the lower adoption of digital technologies for productive use by women compared to men, potentially furthering pre-existing inequalities (for instance, the ratio of women to men with respect to making digital payments is 0.80 according to Demirgue et al., 2018).

long-lasting impacts on productivity are expected due to major human capital effects due to diminished health, school closures, increased school drop-out and child labor, economic inactivity and joblessness. These will likely have a prevalent impact on long-run growth (Busso and Messina, 2020).

- The COVID-19 pandemic has accelerated the need for digital tools and remote work and may structurally change the skills demanded in the post-pandemic labor market. Although telework already existed as a job modality, the pandemic has pushed teleworking (with its advantages and disadvantages) to the forefront of the public policy debate. 15 On the one hand, it has allowed millions of firms and workers to continue operating while under quarantine; on the other hand, it has exacerbated existing inequalities between those who can telework (and keep their work) and those who cannot telework (and subsequently lose their jobs). According to an analysis of pre-COVID household surveys of 23 LAC countries. the proportion of employed persons who could telework was low by developed country standards: between 7% and 16%, with the lowest rates in Guatemala and Honduras and highest in Costa Rica and the Bahamas (Azuara et al, 2020). Studies conducted during the pandemic in the region suggest a slightly larger number. In Chile and Mexico, one in four workers were teleworking in May 2020 (INEGI, 2020; Bravo, Castillo and Hughes, 2020), but these average numbers hide important inequalities. Online surveys suggest that while 62% of high-income workers in the region were teleworking during the lock-down, only 29% of low-income workers were able to do so (Bottan et al., 2020). This is confirmed by early data in Chile, where in July 2020, in the worst unemployment period of the pandemic, 35% of highly educated workers were teleworking vs. 5% of less educated workers. Beyond changing the way we work, previous recessions show that in the face of structural change, the types of jobs that will be created may not be the same as the ones lost; they will likely require different, higher skills (Hershbein and Kahn, 2018). This crisis is bound to change telework forever for a substantial part of the population. Recent estimates show that about 20 to 25 percent of workforces in advanced economies could work from home between three and five days a week (McKinsey, 2021).
- B. Challenge 2: Boost labor productivity and ensure that gains are shared equitably
- 2.9 Labor productivity growth is the engine that drives good employment opportunities over the long run. An increase in productivity (the amount of goods and services that can be produced with a given quantity of capital and labor) allows firms to produce at lower costs and, given enough competition, to sell at lower prices. This increases the demand for goods and labor to produce them. Firms and workers that become more productive can afford higher wages and can cover the costs of social protection and labor legislation. Higher productivity translates into more formal employment in two ways: first, firms that become more productive can afford to register as companies and formalize a higher percentage of their labor force; and second, a share of low-productivity business owners that are self-employed shift to salaried formal jobs, as wages increase (Cusolito and Maloney, 2018).
- 2.10 The COVID-19 pandemic will affect labor productivity adversely in the short and long run. Biosecurity measures and capacity restrictions are essential in fighting the pandemic but have adversely affected productivity, as they reduce the capacity to produce with existing capital and labor. In addition, the crisis will have impacts on productivity growth in ways that will scar a generation of LAC citizens. First, despite mitigation policies, we are seeing significant losses in formal jobs (IDB, 2020a) and the loss of specific human and physical capital. Job displacements and persistent unemployment may cause workers to

<sup>&</sup>lt;sup>15</sup> Five LAC countries approved telework legislation during the COVID-19 pandemic.

lose skills, as has occurred in other crises (Oreopoulos, Von Wachter, and Heisz, 2012; Eliason and Storrie, 2006). Entire sectors, such as tourism, have been particularly hard-hit. Second, educational institution closures may have affected the skills development of future generations. This may have affected working age women and school age girls disproportionally, as they assume most of the domestic and care responsibilities resulting from the pandemic.

- 2.11 This is most troublesome because over the past 30 years, labor productivity has grown at a scant pace, around 1% a year. Even high performers like Trinidad and Tobago (2.7%), the Dominican Republic (2.5%), and Chile (2.2%) are well below the productivity growth frontier (China, 6.1%; India, 5.1%; Vietnam, 4.8%). Some countries stagnated with negative or no productivity growth for 30 years—Venezuela (-2.2% a year), Jamaica (-0.6%), Barbados (-0.1%), and Mexico (0%). Throughout this period, labor productivity growth in the region has been lower than in the United States, Asia, or Western Europe. Relative productivity with respect to the United States has dropped from 37% to 28%. This implies that it now takes almost four workers to produce what a single U.S. worker can produce (Figure 4).
- 2.12 The region lags in key elements underlying labor productivity growth. Skills, together with innovation and incentives created by the business environment, are the main determinants of productivity (Busso et al., 2017; Hanushek and Woessmann, 2012; Barro, 2001; Jones, 2001; Chevalier et al., 2004). But the region lags in all three.<sup>16</sup>
- 2.13 First, a large share of the workforce in LAC does not have the basic literacy, numeracy, socioemotional and problem-solving skills to be productive. A large share of young workers entering the workforce have inadequate skills to meet new social and labor demands; and there seems to be a disconnect between the skills taught in school and those demanded in entry-level jobs (Accenture, 2018; Bassi et al, 2012). There is also evidence of insufficient skills among adult workers: 56% of adults in Chile, Ecuador, Mexico, and Peru, perform poorly in literacy and numeracy, ranking at the bottom among 39 participating countries in the OECD's Program for the International Assessment of Adult Competencies (PIAAC) (IDB, 2020d). Even though women have made progress in human capital accumulation, they are still underrepresented in STEM fields (typically conducive to higher earnings) (Petrangolo and Ronchi, 2020; OECD, 2015). LAC also has, on average, lower management scores and more poorly run firms than do more-developed regions (Lederman et al., 2014). This lack of preparation combined with the potential change in skills demanded may hamper the ability of the region to adapt to the new post-pandemic world.
- 2.14 LAC falters on technology adoption and innovation. Even though some progress has been made in the region in terms of technological diversification and increase in broadband penetration both in urban and rural areas, there are major barriers that affect the adoption of new technologies and innovation. Among these are, first, the lack of preparation among the region's workforce impedes the adoption of new technologies (Benavente et al., 2016), and lower wages make technological innovations less attractive to companies. Innovation is further restricted by the fact that most companies in LAC are small and medium enterprises (SMEs) with little capacity to innovate. For example, in Peru, only 27% of companies have incorporated new technologies; this drops to 7% if advanced network

Productivity is also negatively affected as climate-related shocks steadily increase and disrupt work. From 2000 to 2007 and 2008 to 2015, working-life years lost from environment-related hazards increased from 138 to 197 per 1,000 workers in LAC. Rising temperatures and heat waves threaten working conditions, with an anticipated reduction in productivity equivalent to 2.5 million full-time jobs by 2030 (Saget, Vogt-Schilb, and Luu, 2020).

services are not considered (Novella, Rosas and Alvarado, 2019). Moreover, key infrastructures for technology adoption are lacking. Despite progress in expansion, only 13% of the population in LAC has access to fixed broadband and 65% to mobile broadband (in the OECD the figures are 33% and 96%). The rural connectivity gap is even greater with 95% of households (120 million people) without internet access. Added to this are quality and cost issues. Connectivity costs are around 10% of household income, while in OECD countries they are less than 2% (threshold of affordability for broadband services).<sup>17</sup>

- 2.15 The business environment does not create enough incentives to boost productivity. Tax regimes and labor regulations often affect firm growth and efficiency in capital and labor allocation. They can also affect productivity growth by preventing the reallocation of resources from less- to more-productive firms. In LAC countries these effects can be substantial (Pagés, 2010). An example is the prevalence of simplified tax regimes that benefit micro and small firms that may lower the costs of firm formalization but also limit firm growth. For instance, in Peru, a size-dependent simplified tax regime leads firms to bunch below the size threshold that determines eligibility (Azuara et al., 2019). On the labor regulation side, excessive costs to labor formalization (Alaimo et al., 2017) and uncertain dismissal costs can cause large distortions and disincentivize firm growth (Alaimo et al., 2015; Kugler, 2004). Furthermore, access to credit is limited. Domestic credit to the private sector represents 47.4 percent of GDP in the region, compared to 198 percent in the US. Micro and SMEs face a financing gap of 41.7 percent of regional GDP (Herrera, 2020). Even before the COVID-19 pandemic the Micro, Small and Medium Enterprises (MSMEs) had great difficulty accessing credit, with a funding gap estimated at US\$1.8 trillion, equivalent to 41.7% of regional GDP (Herrera, 2020). Women are particularly affected, as only half of firms set up by women survive after three years in LAC (IDB, 2014). No Latin American economies rank in the top 50 of the World Bank's Doing Business Index.
- 2.16 The little gains that have occurred in productivity may have been less equitably shared with workers than in the past. A great deal of evidence suggests that the labor share, that is, the fraction of national income that goes to workers is declining all over the world (Autor et al., 2020). Busso and Messina (2020) found evidence that this decline also appeared to have occurred in LAC. From the early 1990s to the 2010s, the labor share declined in five of the seven countries of Latin America for which data are available. This global decline in labor share has been attributed to technical change (Karabarbounis and Neiman, 2014), automation (Acemoglu and Restrepo, 2018), economic integration, where the lower-skill and labor-intensive stages of production are moved to cheaper locations (Elsby, Hobijn, and Şahin, 2015) and a decline in worker power (Autor et al., 2020, Stansbury and Summers, 2020; Fichtenbaum, 2011).
- C. Challenge 3: Create inclusive, equitable, and sustainable social insurance systems
- 2.17 The protection of workers against risks of unemployment, illness, and loss of income during old age is a defining element of a good employment opportunity. Given the design of social protection systems in LAC, formal employment is the gateway to a series of contributory social insurance programs like unemployment insurance, disability insurance, pension systems, and, in some countries, health insurance.<sup>18</sup> Furthermore, formal jobs have protections embedded in labor laws and regulations (such as minimum wage and severance)

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https://digilac.iadb.org/en/inicio.

There are mainly two competing views on how to access key elements of social insurance. On the one hand, Bismarkian systems establish access through job status, on the other hand, Beveridge types of systems grant access to social insurance through citizenship or residency status.

payment). Hence, throughout this document we equate formal employment with protection against risks. However, two important qualifications are necessary to understand the mapping between formality and risk coverage. A formal job per se does not necessarily confer full coverage. Some insurance mechanisms such as unemployment insurance and especially pensions, require contributions over a long period of time. Some workers who were formally employed at some point during their life might not be covered. Second, coverage against risks may not necessarily be linked to formal employment. Informal workers may access parts of the social protection system available to all citizens and financed with general taxation. This is the case for health care in countries like Brazil, Mexico, and Colombia and for anti-poverty pensions in Bolivia, Chile, and Brazil.<sup>19</sup>

- 2.18 Less than half of workers in the region are formally employed. In 2018, 42% of employment in the region was formal, although with large regional differences. Countries like Brazil, Chile, and Uruguay (Figure 5) had formality rates of around 70%, while Bolivia, Peru, and Nicaragua reported formal employment at 20%. More than 130 million workers participate in the labor market without risk protection and outside the umbrella provided by labor laws. Furthermore, not all formal workers are continuously covered against risks. There are large flows of workers between formal and informal jobs. On average, around 25% of workers transition from formal to informal jobs within a year, which implies that the share of workers that are continuously formally employed is even lower. This is particularly true for women; on average, women spend around 30% less time employed in formal jobs during their working age than men (Maloney, 2000; Alaimo et al., 2015).
- 2.19 Despite progress in poverty and inequality, large disparities in access to the protection of formal employment across income and educational levels remained almost unaltered over the past two decades. Highly educated workers not only have better paying jobs but are also more likely to hold formal jobs than less-educated workers (Figure 6a). On average, workers with college education are 24 pp and 56 pp more likely to be formal than workers with secondary and primary schooling, respectively (68% vs. 44% and 12%). These proportions have barely changed since 1998. If anything, the differences have increased. This means that less-educated workers, who are normally subject to more frequent health and income shocks (Parro and Pohl, 2018), are the least protected by social insurance programs. Pensions are one element in the social insurance system compounding the difference between those who have and maintain good employment opportunities over the course of their lives and those who do not, as entitlement to a contributory pension requires between 15 and 25 years of contributions. In LAC, in 2018, only 23% of less-educated workers had access to a contributory pension when retired compared with 66% of highly educated workers.
- 2.20 Formality is intimately related to productivity and development. At the same time, the design of social insurance and policy matters. There is a clear positive relationship between formality and income. It is true that richer countries are more formal (Figure 7); within countries, more-productive firms are more likely to hire formal workers (Busso et al., 2012), and more-educated workers are more formal than less-educated workers (Figure 6a). Therefore, any progress on productivity growth will normally be reflected in larger formal

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These are part of a broader social protection system (UNRISD, 2010), defined in various ways. Barr (1999) considers social protection as the following: social assistance (transfers to vulnerable individuals or households), social insurance (covers risks of unemployment, ill health, disability, work-related injury, and old-age poverty), as well as active labor market policies (ALMPs). The UN expanded the definition to include not only labor laws and regulations but also programs that promote employment, the efficient operation of labor markets, and the protection of workers.

sectors. Nevertheless, policy matters. On average, LAC countries are 5 pp more informal than they should be, according to the level of development (Loayza, 2020). Countries like Bolivia, Guatemala, and Peru are over 15 pp more informal than their level of development would suggest. A few Caribbean countries overperform —Guyana, Barbados, and Trinidad and Tobago. Costa Rica, and particularly Uruguay, are substantially more formal than their GDP would predict.

- 2.21 There are four main reasons why countries have not achieved high coverage and efficient social insurance systems given their level of development, particularly for low-income workers. First, social insurance systems were built around salaried work, financed with employer and employee contributions. This has left many workers (particularly low income, self-employed workers) and their families detached from these insurance mechanisms. Also, the systems are ill-equipped to include new forms of employment, such as those emerging from the platform-based economy. Although some countries have expanded contribution mandates to self-employed, domestic, and rural workers, coverage has remained low. On average, 62% of salaried jobs are formal vs. 13% among the selfemployed (Figure 6b).<sup>20</sup> Second, the cost of social insurance plus the implicit cost of labor laws and regulations make formal labor expensive (relative to productivity), which reduces incentives for firms to hire formal workers. On average, minimum wages plus the contribution for pensions, health insurance, and unemployment insurance amount to 36% of GDP per worker in LAC vs. 22% of GDP in OECD countries (Figure 8). For countries like Hounduras, Paraguay, Nicaragua and Guatemala, the present cost of hiring formal salaried labor is more than 60% of GDP per worker (three times as much as in the OECD). Third, lax enforcement of contributions and regulations result in severe noncompliance, even among formal and relatively large firms (Bosch, Melguizo and Pagés, 2013). Finally, lack of social insurance coverage has led countries to expand their social assistance programs to fill the vacuum. Most of the time this is done without any integration, and sometimes in competition, with social insurance, discouraging the creation of formal jobs. Given the prevalence of informal labor, most countries have created noncontributory insurance programs and safety nets alongside contributory programs (e.g., pensions, unemployment benefits, and health insurance) (Palacios and Robalino, 2020). These programs have substantially reduced health and pensions coverage gaps (Figure 9a). However, they also give rise to social protection systems that offer unequal coverage, sometimes generating disincentives to participate in formal employment (Bosch and Schady, 2019; Bergolo and Cruces, 2021; Amarante, Arim and Dean, 2011). The result: a fragmented and inefficient social protection system.
- 2.22 Formal jobs are particularly- scarce in rural areas. One hundred and twenty-five million people in LAC—almost a fifth of the region's population—live in rural areas, including most Indigenous peoples (UN, 2018). Given the low productivity levels in rural areas, good employment opportunities are particularly scarce. And since self-employment is prevalent in the agriculture sector, social insurance protection is also scarce. Around 53% of rural workers earn wages below the minimum wage and the share of formal employment is 29% compared to 48% in urban areas. This has led to particularly high rates of poverty in rural areas. Prior to the COVID-19 pandemic, 47% of LAC's rural population lived in poverty and 21% in extreme poverty—two to three times the percentages in urban areas (ECLAC, 2019; Trivelli and Berdequé, 2019).

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An average of 20% in countries where they are mandated to contribute; 1% in countries where they are not.

### Programs to protect workers against unemployment are inadequate

- 2.23 Despite overlapping instruments to protect workers' income during unemployment spells, coverage against the risk of unemployment is low, even for formal workers. At least three mechanisms are used in LAC: (i) severance pay; (ii) individual unemployment savings accounts; and (iii) unemployment insurance. Severance pay lacks adequate coverage and does not provide an efficient mechanism of income support after separation. In Mexico, just 20% of workers receive severance pay upon separation, while 39% receive nothing at all (De Buen et al., 2012). Since severance pay is generally proportional to salaried-job tenure, independent workers and workers who hold temporary formal jobs are frequently unprotected (Gonzalez-Velosa and Robalino, 2020). Several countries (i.e., Chile, Colombia, Ecuador, and Peru) have introduced individual unemployment savings accounts through which workers can internalize the costs of unemployment benefits. But they lack redistribution, and so fail to provide insurance to workers at the greatest risk of unemployment. Finally, unemployment insurance, which is typically financed with contributions from firms and workers, can be accessed by those who make a minimum number of contributions, continuously or discontinuously, prior to separation. Frequent transitions between formal and informal jobs limit both eligibility and the funds available to cover the spell of unemployment. In countries using this instrument (Brazil, Colombia, Ecuador, and Uruguay) coverage is low, and even for formal workers who are covered, the protection may be insufficient (Gonzalez-Velosa and Robalino, 2020).
- 2.24 Coverage of active labor market policies (ALMPs) is low and unintegrated with income support mechanisms. Countries in the region are investing to improve the governance and scope of ALMPs through the enhancement of Public Employment Services (PESs) and the expansion of coverage through new service channels. Despite these efforts, coverage is low—only 30% of workers seek jobs through formal employment services (ESs)—and PESs are often targeted to informal workers (Alaimo et al., 2015). Furthermore, regional studies show limited coordination between income support mechanisms and ALMPs (Amarante, Arim and Dean, 2011; Gerard and Gonzaga, 2013; González-Rozada and Pinto, 2011; Medina, Núñez, and Tamayo, 2013; Huneeus, Leiva, and Micco, 2012). In all, regional evidence suggests that after a spell of unemployment, workers are twice as likely to transition to informal work than to find formal work (Alaimo et al., 2015).

Programs to protect workers against the risk of poverty in old age face serious challenges of coverage, adequacy, and sustainability

- 2.25 Low levels of formality coupled with imperfect pension design and aging populations are generating imbalances across all pension systems. Over the past 60 years, the fertility rate has plummeted (the average family had six children in 1960 compared with two today). Over the same period, life expectancy has increased by six years. By 2085, LAC will be the oldest region in the world. However, pension systems have not adapted to this reality. The slow adjustment of the basic parameters, such as contribution rates or retirement age in accordance with an aging population, has yielded significant imbalances in pension systems. Depending on how benefits are defined and financed, these imbalances range from growing actuarial deficits and regressive spending to low and diminishing pensions.
- 2.26 Traditional, public, defined-benefit systems are generous per international standards and generate large fiscal imbalances, skewing social spending toward the rich and the old, at the expense of the poor and the young. The average pension promised in LAC relative to the last wage (replacement rate) is 65% compared to 49% in the OECD (OECD, 2019) (Figure 9b). Furthermore, LAC's average minimum retirement age is

62 compared with 65 for the OECD (Figure 9c), Despite the promise of more generous benefits, these systems have an average contribution rate of 12% of wages compared with 17% in the OECD (Figure 9d). This results in large subsidies to the few individuals who manage to obtain a contributory pension. Altamirano et al., (2018) estimates that those subsidies are on average US\$75,000 but can reach US\$200,000 and US\$300,000 in some countries.<sup>21</sup> Given their lower contribution densities, women are less likely to qualify for contributory pension benefits. Because systems tend to be generous, countries spend substantial resources on pensions even though the region is relatively young (the share of population that is 65 and older is 9% compared with 17% in the OECD). Argentina, Brazil, and Uruguay have managed to obtain almost universal pension coverage. However, their pension spending is on par with, if not greater than, pension-spending in advanced, and substantially older, European countries like France, Greece, Italy, and Spain (Cavallo et al., 2016; Izquierdo, Pessino and Vuletin, 2018). This significant pension expenditure is a large portion of public spending. On average, 5.9% of GDP (19% of public spending) is dedicated to pensions (Izquierdo, Pessino and Vuletin, 2018). By 2050, without reforms, as the LAC population ages, pensions are bound to absorb an even greater share of public spending to finance the pension of higher-than-average-income workers, leaving little room for investment in other social priorities.

- 2.27 Caribbean countries are facing acute aging processes that will significantly stress their defined-benefit pension systems. Caribbean countries face imminent demographic challenges. According to the UN, the first country in the LAC region to see a population decline (a symptom of aging demographics) will be Trinidad and Tobago (2030) followed by Barbados (2037), Jamaica (2037), and Guyana (2043). These demographic trends will affect the sustainability of their defined-benefit pension systems. According to pre-pandemic actuarial reviews, Barbados, Jamaica, Trinidad and Tobago, and the Bahamas will see their reserves depleted between 2027 and 2037 (Figure 10); contribution rates required to balance the systems would be between 30% and 40% of wages.
- 2.28 Some countries will generate low or no pensions at all for large segments of the population—a challenge to social sustainability. Following Chile, nine countries in the region moved to systems that put workers' contributions in individual investment accounts, creating substantial aggregate savings. By eliminating the hefty pre-reform subsidies, they were able to resolve their fiscal sustainability issues. However, given extensive informality, relatively low contribution rates, a steady decline in asset returns, high administration costs and fixed minimum retirement ages, these systems will deliver pensions well below citizens' expectations, resulting in significant social sustainability problems. In Chile, the first system to mature, the median replacement rate is 34%, and a large share of pensions are below the poverty line. In addition, there are significant gaps between men and women. The median replacement rate for men is 60% vs 31% for women. (Presidential Advisory Commission on the Pension System, 2015). Projections for Mexico, the Dominican Republic, Peru, and El Salvador are similar if not worse owing to high levels of informality (Altamirano et al., 2018; Serpas, 2014; Durán and Pena, 2011). Low pensions also occur in definedbenefit systems. In Jamaica, replacement rates are below 50% (NIS, 2016). In Peru, replacement rates in the defined-benefit system could be as low as 25% for middle-income workers, even for those who had contributed all their active lives (Altamirano et al., 2018).

This is the discounted present value of the money, which an average worker with a full formal career would receive in excess of their lifelong contributions (the latter yielding a real return of 3.5% per annum).

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- 2.29 Technological trends such as the rapid expansion of the platform-based economy and climate change are emerging as stressors of social insurance systems. In the future, atypical employment threatens salaried employment and formality rates. Platform-based technologies, such as Uber, Rappi, or many others, are reshaping the employer-employee relationship and labor regulations should evolve accordingly. The share of employment in these platforms in LAC is still low, but is expected to grow rapidly. For instance, LAC experienced an 875% increase in downloads from on-demand platforms, between 2015 (3,006 downloads per 1,000 inhabitants) and 2019 (29,322 downloads) (SensorTower, 2020). If social insurance systems do not adapt to this reality, coverage could further erode. New modalities of work are bound to thrive in the post-pandemic world, and countries will have to decide how to integrate workers and platforms into the labor market. Climate change also exposes the assets of social security systems, such as pension funds, to financially material climate-related risks. So far, over 60% of the world's 100 largest public pension funds—and all LAC funds surveyed—have little or no approach to climate change (AODP, 2018).
- 2.30 The COVID-19 pandemic and related policy responses are creating additional challenges and imbalances for social insurance in the region. Using existing conditional cash transfer (CCT) programs as platforms, countries have expanded their income protection programs for vulnerable families and informal workers (IDB, 2020b). Countries like Brazil have initiated new programs, creating a de facto unemployment insurance system for informal workers. These policies to mitigate the effects of the pandemic have left an even more fragmented social protection system. For pensions systems, major losses in formal employment have reduced contributions and created cashflow problems in many defined-benefit, pay-as-you-go systems. To preserve formal employment, countries like Argentina or Colombia have either stopped or delayed contributions. Furthermore, the crisis has increased pressures to use resources accumulated in the individual pension accounts to finance consumption during the lockdown, which will reduce pensions in the future. Peru and Chile have already enacted laws that permit early access to pension funds; Colombia, El Salvador, and the Dominican Republic have considered such laws (Bosch et al., 2020a).
- D. Challenge 4: Reduce the constraints faced by some population groups to access good employment opportunities
- 2.31 Women face structural barriers that prevent them from fully participating in the labor market. Women in the LAC region earn about 18% less than men (on an hourly basis) and their employment rates are 25 pp lower. Traditional human capital factors such as differences in years of education can no longer explain the bulk of the earnings or employment differentials (Azmat and Petrongolo, 2014). However, the lack of particular skills demanded in the labor market, such as digital skills, could still play a role in determining gender gaps. Women's traditional role as primary providers of childcare and home production, which limits their labor market participation, remains one of the central explanations of gender gaps.<sup>23</sup> In addition, evidence shows that childbirth drives large and

In Argentina, the set of user-provider services on platforms represented only approximately 1% of the total employed population (Madariaga et al., 2019).

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As a likely consequence of work-life balance considerations, women typically work shorter or more irregular hours than men, are more likely to take career breaks, and specialize in different occupations and industries (Petrangolo and Ronchi, 2020). These work dimensions may only marginally contribute to differential accumulation of actual work experience but could still contribute to gender gaps via differences in job search behavior and compensating pay differentials associated with job characteristics especially favored by women, such as short or flexible hours, atypical work arrangements, or shorter commutes, to name a few (Goldin, 2014; Blau and Kahn, 2017; Bertrand, 2018).

persistent wedges between the earnings of mothers and fathers (Kleven et al, 2019). Additional explanations of gender gaps rely on stereotypes (presence of a variety of cognitive biases and discrimination), behaviors (aspirations, negotiation skills and risk aversion)<sup>24</sup> and social norms (intrahousehold division of labor and new family arrangements) (ILO, 2019). The region also shows increasing cases of gender-based violence, which negatively affect labor market outcomes (Sabia et al, 2013)

2.32 Other groups of individuals face significant barriers to attaining and sustaining good employment opportunities. Even when accounting for differences in inputs such as education and experience, there are notable differences in outputs such as labor force participation, employment, unemployment, and formality rates, as well as in pay across groups of people with different personal characteristics (e.g., ethnicity, disability status or sexual orientation and gender identity) (Atal et al, 2009; Ñopo, 2012; Duryea and Robles, 2016). 25 Persons with disabilities, Afro-descendants and Indigenous groups have lower average rates of labor force participation and formality than (Figure 11) do, persons without disabilities, and white people.<sup>26</sup> In the case of Indigenous peoples, differences with the non-Indigenous regarding unemployment are not notable (World Bank, 2018a), while Afro-descendants do face higher levels of unemployment. 27 The share of workers in low-skilled occupations is greater for Indigenous and Afro-descendants than for white people (Freire et al., 2018; World Bank, 2018b).<sup>28</sup> Similarly, there are significant earning gaps (Figure 12) - around 16% for persons with disabilities relative to people without disabilities, and 19% for individuals from ethnic groups relative to white people. Among men. the differences are not as striking; non-white males earn 7.5% less than white men across the region. There are, however, exceptions: in Bolivia and Guatemala non-white males earn at least 30% less than white men. In Brazil, non-white women earn 42% less than white men. When comparing formality rates across people with similar education and experience. there is a 4.7% gap in formality for persons with disabilities, and a 7.4% gap for non-whites relative to white people (IDB, 2020c).

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The unemployment rate among Afro-descendants was nearly twice the rate of unemployment of non-Afro-descendants in many countries, at about 13% vs. 6%.

Some gender differences in preferences and psychological traits (innate or shaped by social contexts) have been documented in attitudes towards risk, competition and negotiation, and these may interfere with labor market success (Croson and Gneezy, 2009; Bertrand, 2011; Azmat and Petrongolo, 2014).

Evidence from developed countries shows that the LGBTQ+ population faces barriers to success in the labor market. They work in less-productive jobs and tend to underinvest in human capital (Badgett et al., 2019). A meta-analysis of studies from countries with laws against discrimination based on sexual orientation (Drydakis, 2019) shows that gay and lesbian employees report more incidents of harassment and are more likely to report experiencing unfair treatment in the labor market than are heterosexual employees. In terms of earnings, gay men earn less than comparably skilled heterosexual men, while for lesbians, earnings patterns are ambiguous.

Female labor participation has grown over the past 20 years, but it is still much lower than that of women in more developed countries and that of men in the region. Despite progress, the participation of women in the labor market remains low: 57.6% of women participate in LAC, while 66.7% do so in high-income countries (IDB, 2020c) (Figure 11). Men in the region have a substantially higher participation rate, at 81.5%.

About 75% of the Afro-descendant population works in low-skilled occupations, compared with around 69% of the non-Afro-descendant population (Freire et al., 2018). Urban Indigenous people work mostly in low-skill/low-paying jobs. The percentage of indigenous persons occupying high-skill jobs is consistently smaller than the percentage of nonindigenous people in countries such as Peru, Ecuador, Bolivia, and Mexico.

- 2.33 Migrants have limited access to good employment opportunities, especially when their status in the host country is irregular.<sup>29</sup> Approximately 1.5 million migrants in the region have an irregular migration status. In Ecuador, Colombia, Peru and Costa Rica the share of migrants with an irregular status is 74%, 56%, 25% and 25%, respectively (Abuelafia, 2020). This affects their quality of life, by reducing their access to social services and formal job opportunities. This also leads to large gaps in labor outcomes between natives and migrants. A pre-pandemic study showed a significant gap in the quality of jobs held by migrants and natives: 65% informality for migrants relative to 50% for natives (Blyde et al., 2020). In addition, their salaries are usually lower.<sup>30</sup> In Colombia, 64% of recent migrants earn less than a minimum wage; in Ecuador it is 86% less.31 In Peru, 18% of the migrant population is poor (Rossiasco Uscategui, 2019). In Costa Rica, there are gaps between the average wages of the Costa Rican and migrant Nicaraguan populations in all occupations, but especially among those with higher skills (Mora Román and Guzmán, 2018). The phenomenon of cross-border migration, dominated by movements to high-wage labor markets in Canada and the U.S, is important in the region, but movements within the region itself are as well.32
- 2.34 Young people in LAC experience worse labor market outcomes than prime age adults. This is a worldwide phenomenon that, to some extent, is explained by more frequent turnover early in the life cycle. Evidence shows that, just like in every other region, young people in LAC spend more time searching for jobs that match their preferences than do older workers (Cunningham, 2016). However, youth in LAC also face disadvantages due to regulations that disproportionately affect them, skills deficiencies and a misalignment between their aspirations and labor market realities (Busso et al 2011; Novella et al 2018; Alaimo et al 2015). Evidence shows that poor labor market performance at a young age can have substantial effects that last into adulthood (Cruces et al, 2012). It is also associated with criminal activity, risky behavior, and teen pregnancy (Alaimo et al, 2015).
- 2.35 Due to their specific vulnerabilities, all the groups mentioned above are suffering disproportionately in the current recession. Women are disproportionately affected due to their high employment rate in the hardest-hit sectors (hospitality, food services, and retail, among others) (Alon et al., 2020, World Bank, 2020). School closures are also impacting female labor participation; since women are more likely to assume childcare duties. Women also bear a larger physical and emotional burden related to childcare given the traditional and gendered division of roles; evidence shows women dedicate three times more time than

Even though this SFD will focus on addressing the challenges associated with the most vulnerable migrants, the heterogeneity of this population group is recognized. The migrant population is, on average, younger and more educated than native populations. The participation rate of migrants exceeds 80%, which represents potential to contribute a demographic dividend that could be important for countries characterized by population aging or to complement the skills of local workers.

Website of Colombia's National Administrative Department of Statistics based on the 2018 Great Integrated Household Survey; website of the Ecuador's <u>Displacement Tracker Matrix</u> (DTM); World Bank (2019); OIM (2019).

The impact of immigration on native wages in general is relatively small, a finding that is consistent with research in developed countries (Blyde et al, 2020).

For example, in the coffee sector, 50% of the 76,000 coffee pickers in Costa Rica were Nicaraguans and Indigenous Ngäbe Buglé (Gamboa et al, 2014). Mexico has issued 51,994 Border Worker Visitor Cards and 349,479 Regional Visitor Cards to citizens of Belize and Guatemala between 2016 and 2020 (Secretaria de Gobernacion de Mexico, 2020).

do men to unpaid domestic and care work (World Bank, 2020; ILO, 2020; OECD, 2020b),33 In four of the five countries with survey data for the pandemic period, women are losing formal and informal jobs at a higher rate than men.<sup>34</sup> However, in countries for which social security data are available, women appear to be losing formal jobs at a lower rate than are men.<sup>35</sup> Household surveys and social security data suggest that, in both formal and informal labor markets, the pandemic has affected younger workers and workers close to retirement age more than prime age adults (IDB, 2020a).<sup>36</sup> This is consistent with evidence that shows that, in general, youth unemployment shows excess cyclical volatility, with young people's unemployment exceeding that of adult workers during recessions (OECD, 2010). In the case of Afro-descendant and Indigenous peoples, it is expected that they will be disproportionately affected by the pandemic not only because of their higher employment vulnerability, but also because of underlying health characteristics and limited access to basic services (ECLAC, 2020). Similarly, migrants participate in economic activities that are expected to suffer disproportionately from the impact of the crisis generated by COVID-19 (services, commerce, restaurants, accommodation, and construction). In Colombia, Peru. and Costa Rica, the proportion of immigrants working in the service sector is 47%, 57%, and 25%, respectively.

#### III. EVIDENCE OF THE EFFECTIVENESS OF LABOR MARKET POLICIES AND PROGRAMS

- A. Interventions to accelerate the recovery of employment and bring people back to work
- 3.1 The duration and intensity of the pandemic are still uncertain, but its effects will continue for some months until vaccines are more widely distributed or effective treatments are found. In the immediate term, governments will need to address three concerns: protecting incomes and consumption of affected workers and the productive capacity of affected sectors; implementing temporary measures to stimulate employment creation; and supporting the reallocation of workers to growing or emerging sectors.<sup>37</sup>
- 3.2 Emergency social assistance programs introduced by LAC countries to sustain the income of informal workers and their families during shelter-in-place orders to contain COVID19 have had limited effect. These direct transfers succeeded in mitigating losses in consumption and preventing pervasive increases in poverty for the very poor, but they were not designed to cover an important part of income for informal workers who are not poor but became unemployed because of the crisis. The coverage and replacement rates of labor income are high among the first quintile of the population but low in the second and third quintiles (Busso and Messina, 2020).

In LAC, around 63% of the time dedicated to unpaid care for older adults is provided by women (Cafagna et al., 2020; Addati et al., 2018), which makes them less likely to work, work fewer hours per week, and carry the heavy double burden of labor and long-term care (Stampini et al., 2020). This evidence is consistent across four countries with available data—Chile, Colombia, Costa Rica, and Mexico.

In the case of Bolivia, 18% of women lost their job vs. 15% of men, Chile 24% vs. 19%, Colombia 20% vs. 14%, Peru 43% vs. 40%, and Mexico 16% vs. 6%).

<sup>&</sup>lt;sup>35</sup> In the Dominican Republic, 23% of women lost their formal job vs. 25% of men; in El Salvador, 8% vs. 9%.

For example, in Peru-Lima Metropolitan area, 70% of young people lost their jobs, while for Colombia, 23% of those under 24 years of age lost their jobs. Likewise, In the Dominican Republic, 37% of those under 24 lost their formal job, while in Mexico, this figure is equal to 12%. Worker above 55 years of age lost jobs at a higher rate than prime age workers in Argentina, Chile and Paraguay.

Table 3 shows a brief assessment of the evidence presented in this section and to what extent it applies to LAC. For detailed information about individual impact evaluations, please see the <u>Electronic Link</u>.

- 3.3 Experience from developed economies as well as for the region shows that short-time work (STW) schemes are especially helpful in the face of temporary shocks.<sup>38</sup> STW schemes help employees that face economic difficulties to retain formal employment. They also limit losses of intangible capital between workers and companies, allowing the acceleration of economic recovery (Cahuc et al. 2018, Kopp and Siegenthaler, 2019; Giupponi and Landais, 2018; Bruhn, 2020). These schemes also help preserve workers' health insurance, as well as their experience and firm-specific human capital (Davis and von Wachter 2011, Schmieder et al. 2019). In the LAC region, however, their coverage is limited by informality, and their fiscal costs may be beyond the reach of many countries. In order to complement measures that have a direct fiscal impact (and to preserve intangible capital outside the employer-employee relationship), countries can offer credit guarantees (Izquierdo et al., 2020). As the shock becomes more permanent, countries with STW schemes should avoid measures that lock workers into sectors and roles that offer few prospects of return and make gradual shifts toward policies that promote worker reallocation.
- 3.4 Temporary Work Programs (TWP) can help mitigate the effects of the shock and can act as unemployment insurance for informal workers, but they are unlikely to increase long run employability. COVID-19 made clear the need to extend the reach of work programs to these populations. Evidence, from both developed countries and those in the region, suggests that these programs are effective at supporting income, but do not improve workers' employability at the end of the intervention. In some cases, negative impacts, associated with the stigma of being on the program have been reported, meaning that such programs work better as a consumption smoothing mechanism than as a job placement mechanism (Gasparini, Haimovich and Olivieri, 2007a; Hernani, Villegas and Yáñez, 2011; Kluve, 2006; Del Ninno, Subbarao and Milazzo, 2009). Therefore, countries face intertemporal trade-offs as short-term mitigation policies are unlike to address long term structural needs.
- 3.5 Hiring incentives and public works and infrastructure investment can be effective measures to promote the recovery of employment. Hiring credits, in the form of reduced labor costs (i.e., wages, payroll taxes, and training), can spur employment creation. Evidence from the United States suggests that hiring credits are more effective in recessions when applied broadly, rather than just to disadvantaged groups (Neumark, 2013). Evidence for LAC suggests that they can also be effective in improving the employability and formality of certain groups (Novella and Valencia, 2019; Galasso, Ravallion and Salvia, 2004), particularly where high minimum wages or other pressures prevent wages from adjusting downward in the event of low labor demand (Pagés, 2017). Evidence from the United States indicates that these credits could be more cost-effective per net job created than a general stimulus measure (Neumark, 2013). There is also evidence of positive effects on the ability of beneficiaries to improve their job opportunities in the medium term (Cockx, Goebel, and Robin, 2013; Gerfin, Lechner, and Steiger, 2002). However, hiring incentives could be expensive. Subsidizing half of the non-salaried costs for minimum wage workers during one year for 10% of the employed population could cost 0.2% of GDP in LAC. Public works and infrastructure investments are also key for employment recovery. Recent evidence shows that a US\$1000 million investment in water and sanitation, energy and transportation infrastructure can create at least 35,000 new direct jobs. Including indirect employment, this figure could amount up to 99,000 (Pastor et al., 2020).

STW schemes include Subsidies for reductions in the hours worked in firms affected by temporary shocks (Giupponi and Landais, 2020).

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- 3.6 The platform-based economy could create quick and flexible employment opportunities during the recovery. There are three reasons: (i) low barriers of entry and flexible work arrangements allow workers to have contingent employment when they need extra income;<sup>39</sup> (ii) many firms are looking for new ways of hiring talent without adding new personnel to their fixed set of employees; and (iii) until the pandemic is over, and possibly after, consumers will use more online and delivery services (Canigueral, 2020). The challenge will be to maintain this flexibility while providing core labor protections to these workers, who often have very little bargaining power over working conditions and wages. This will require an agenda that incorporates both the public and the private sectors in designing worker-tech services to complement public policies and help independent workers to cover risks (Madariaga et al. 2020 and Canigueral, 2020).<sup>40</sup>
- PES play a key role in bringing the unemployed back to work and helping firms find the right talent. Strengthening the capacity of PES to perform their main functions is key. These are: (i) generating and supplying labor market information, where innovations in online vacancy data allow for better tracking of the market; (ii) providing labor intermediation services; (iii) designing and implementing ALMPs; (iv) managing unemployment benefits; and (v) managing labor migration. They need to be understood as a system encompassing private and public intermediation services, and civil society organizations that forge linkages (ILO, 2012). A meta-analysis of ALMPs (Card, Kluve, and Weber, 2015, 2010), found labor intermediation programs to be cost-effective. Labor intermediation shortens the duration of unemployment and increases the rate of rehiring (Davis and Michaelides, 2013; Forslund et al., 2011). For the region, an evaluation in Mexico showed labor intermediation helped the unemployed find jobs with higher incomes over those using other search mechanisms, although this impact was found only for men (Flores Lima, 2010), and for Colombia, it was beneficial for finding formal work (Pignatti, 2016). The evidence among developed countries suggests that the gains for beneficiaries could be greater for workers with weaker prospects in the job market (Van den Berg and Van der Klaauw, 2006; Dolton and O'Neill, 1996).
- 3.8 Training programs to upskill and reskill the population could also help relocate workers to growing occupations. Because of the pandemic, demand for skills could shift towards a more technological (especially digital) and remote labor market (Aguerrevere et al, 2020). Evidence suggests that modular and stackable training courses, combined with certification systems, may allow people to increase their employability and transition to new labor trajectories. Additionally, public-private partnerships are necessary to identify firms' needs, skills gaps, course contents and build a feedback ecosystem that will allow for successful labor insertion (Bos and Rucci, 2020). This occurs in many European and Asian countries that have implemented programs like training vouchers for unemployed people, subsidies for better connectivity, free mass online courses, apprenticeships, and technical and vocational education and training (TVET)-focused programs to promote job recovery in the context of COVID-19 (IMF, 2020b; Gentilini et al., 2020). Given the strong link between human capital and per capita GDP (Hanushek and Woessmann, 2012), inaction is expensive. Estimates of the opportunity costs resulting from the lag in cognitive skills of LAC workers range from 15 to 25 pp of per capita GDP for Peru, Brazil, Colombia, Mexico, Chile,

Previous to the pandemic, 76% of Uber drivers in Brazil, Chile, Colombia, and Mexico (Azuara Herrera, Keller, and González, 2019) reported using the platform to generate income, and labor flexibility was cited by 66%.

Worker-tech services are a set of digital services that use technology to offer independent and flexible workers personalized benefits while facilitating access to protection systems and the defense of their rights. IDB Lab and the LMK Division worked together in 2020, researching how worker tech services can be promoted and used in LAC and deploying a first experience in El Salvador. These digital services offer self-employed and flexible workers personalized benefits while facilitating access to protection systems and defending their rights.

Argentina, and Uruguay (IDB, 2014). Conversely, a one-time basic job readiness program aimed at 10% of the economically active population would result in a regional average cost of 0.5% of GDP. <sup>41</sup>

- B. Interventions to raise labor productivity and ensure that gains are shared equitably
- 3.9 **Productivity depends on three deeply interrelated factors:** (i) the skills of workers and managers; (ii) the technologies that they develop and adopt; and (iii) the business environment in which firms operate, which determines the allocation of workers and capital across firms. Furthermore, ensuring that productivity gains in the labor market are shared equitably requires key labor market policies and institutions that correct market failures and balance bargaining power between firms and workers. We discuss here the policies that alter all these factors and therefore affect productivity and employment, highlighting the trade-offs that countries face between productivity growth, employment and equity.

## Policies to improve the skills and capabilities of workers and companies

- 3.10 A well-functioning skills-development system, combined with policies to promote employee training in firms, is a key lever for increasing productivity and increasing formal employment. Because skills accumulate over the life cycle, successful countries invest in improving skill acquisition at each stage of life, strengthening the capacity of crucial skills development institutions. Adapting the skills of the labor force is particularly relevant in the context of rapid transition to remote or hybrid work, potential changes in the business environment and the emergence of new modalities of work in the region. <sup>42</sup> The key elements for effective skills-development systems are the following: (i) developing continuous feedback loops among stakeholders at all levels to identify productive sector needs and align training to match the demand for socioemotional, digital, and advanced cognitive skills; (ii) developing effective curricula and instruction while investing in high quality of teachers and instructors; (iii) establishing performance-based quality and relevance standards that allow for rapid adaptation to a fast-changing environment; and (iv) supporting adequate financing including incentives to employers to invest in training.
- 3.11 Combining skills-development interventions with demand-side interventions, such as technical assistance (TA) or extension services, multiplies their impact on productivity and employment. Providing TA to SMEs offers companies high-quality information on how to improve management practices, increase sales, lower costs, or structure products or services. This in turn creates needs for skills development (Bloom et al., 2013; McKenzie and Woodruff, 2015). Estimates indicate that investing in TA to SMEs has a present value of 5.4 times program costs through higher-productivity growth (Bartik, 2018; Jarmin, 1999; Bloom et al., 2013), and more employment creation (Piza et al., 2016). Evidence for the region also shows that TA had significant job creation effects in Argentina (Castillo et al., 2010), Brazil (Cravo et al., 2014), and Mexico (Bruhn, 2018) and improved performance for small businesses (Calderon, Cunha, and De Giorgi, 2020). In addition, workforce development interventions in companies can achieve higher results when they target both managers and workers (Prada et al., 2019).

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This calculation is based on a cost of US\$600 per capita.

The Skills SFD presents five challenges related to skills development in five stages of life: infancy, childhood and preadolescence, adolescence, young adulthood, and adulthood, and proposes different solutions to each challenge according to evidence and lessons learned. As such, it covers in depth the policies aimed at improving skill development in each stage. The material covered in this SFD complements this approach by highlighting the interaction between skills development and additional policies to achieve productivity growth such as, innovation, technology adoption, manager's skills development and technical assistance to firms.

3.12 Skills development programs are also essential in the transition to a green and climate resilient economy with low greenhouse gas (GHG) emissions and reduced vulnerability to climate change and shocks. Coherent environmental and labor policies will be needed to decarbonize LAC economies and ensure a green and climate-resilient transition. All countries in the region have ratified the Paris Agreement and are invited to communicate strategies to drastically reduce emissions by 2050. New jobs can be created (e.g., in the shift to renewable energy) if adequate skilling and reskilling policies are implemented. Incorporating climate-smart practices in vocational training is also key to reducing vulnerabilities: for example, they can enable farmers to anticipate, absorb, and recover from weather shocks. Unfortunately, skills for a green and climate-resilient transition are not yet part of most formal TVET curricula in LAC (ILO, 2018).

Policies to adopt new technologies, paying attention to employment and inequality impacts

- 3.13 The adoption of better, more efficient technologies and innovation adapted to the comparative advantages of LAC endowments will be a key driver of productivity. But countries seeking to speed up their adoption need to pay attention to potential deleterious effects on employment and inequality. The introduction of automation technologies that replace some tasks performed by humans (like computers, software, industrial robots, or artificial intelligence [AI]) increases productivity, but may displace workers (Acemoglu and Restrepo, 2019). The positive effects on employment created by higher productivity could be offset by the losses caused by the displacement effects. The outcome depends on which of the two effects dominates. At the same time, however, new technologies can also create new tasks and occupations for humans, such as, digital marketing, robot repairer, or software design. Given all these counterbalancing effects, different technologies might have varying effects on employment, and their effects may fluctuate both over the short and long run. The evidence, so far, suggests differential effects of information and communications technologies (ICTs), AI, and industrial robots, but evidence is scarce for developing countries.
- 3.14 The introduction of ICTs and other digital technologies increases productivity and employment but may increase inequality. The adoption of ICTs by companies in LAC is still far behind their adoption in OECD or East Asian countries. The available evidence indicates that firms' investments in ICTs increase productivity growth, and this is also true for the region (Dutz, Almeida, and Packard, 2018). But such policies ought to be accompanied by the right investments in skills because the evidence suggests that, although ICTs have positive impacts on the employment of workers of all skill levels, they can also raise inequality (Bessen, 2017; Acemoglu and Restrepo, 2020). In developed economies, the use of ICTs and other digital technologies has been associated with a faster rise in wages and demand for skilled workers and a decline for workers in occupations that rely on routine manual tasks that tend to be performed by middle- and low-skilled workers (Acemoglu and Autor, 2011; Autor and Dorn, 2013; Goos Manning, and Salomons, 2014). But these trends have been less pronounced in LAC and in other developing economies (Amaral et al., 2019; Maloney and Molina, 2019). This could be due to a slower rate of adoption of technology in the region, which in turn could be associated with a less-favorable business environment for technology adoption and innovation and lower levels of human capital (Maloney and Molina, 2019). A policy strategy aimed at developing the right skills and improving the business environment could stimulate faster technology adoption without

further increases in income inequality. In that sense, key investments in digitalization and digital talent could improve the business environment and enhance productivity growth.<sup>43</sup>

- 3.15 Investments in robotics enhance productivity, but analyses of the impact of their introduction shows adverse effects on employment. In developed countries, the introduction of robots in production has had a significant positive impact on productivity (Graetz and Michaels, 2018); there is little evidence, so far, on their impacts on productivity in developing economies. The evidence is less encouraging with regards to employment; most available studies for developed countries suggest that the substitution of robots for human labor depresses labor demand, particularly in manufacturing (Acemoglu and Restrepo, 2020; Chiacchio, Petropoulos, and Pichler, 2018; Borjas and Freeman, 2019). There is also some evidence in China and Mexico of substitution of robots for human labor (Giuntella and Wang, 2019; Artuc, Christiaensen, and Winkler, 2019). As in the case of ICTs, robots were found to compete more directly with people employed in routine-based occupations (Acemoglu and Restrepo, 2020; Borjas and Freeman, 2019) and low- and medium-skilled workers. One final note: while studies found that the introduction of robots increased labor productivity, worker wages did not rise. In other words, the growth of robotics has caused a decline in the fraction of income going to workers, thereby increasing inequality (Dauth et al., 2018). In LAC, the adoption of robots is still relatively minimal and their direct effects on employment may not be felt for some time. However, there are some indications that the introduction of robots in developed economies reduces exports of developing countries to advanced economies, as robots allow production to be re-shored in the latter (Artuc, Christiaensen, and Winkler, 2019; Kugler, Kugler, Ripani and Rodrigo, 2020). Because AI is at a relatively early stage of deployment, there are few studies yet on its impact on labor markets. Some simulations predict large negative effects on employment (Frey and Osborne, 2017; Armtz, Gregory, and Zierahn, 2016).
- 3.16 Increasing technology adoption in LAC requires helping firms overcome market failures, liquidity constrains and closing knowledge gaps. The literature identifies three main policies that can increase innovation and technology adoption in firms; (i) Research and Dissemination (R&D) matching grants have been shown to correct market failures, that prevent firms from investing in technology, but their intervention's design is key so their benefits are not concentrated in one firm (Cerulli, 2010; Cerulli, Gabrile, and Poti, 2016; Crespi, Maffioli, and Rastelletti, 2014); (ii) access to credit might also be an effective approach. Liquidity constraints are an important ailment that hinders private investment in innovation. Over time several public programs have been deployed in LAC either providing dedicated credit lines for firm level innovation (also called technological modernization) or guarantees (Binelli and Maffioli; 2007); and (iii) technology extension programs have been shown to close knowledge gaps in SMEs, a central barrier for innovation (Castillo et al., 2016).<sup>44</sup>
- 3.17 Technology adoption and enhanced agricultural productivity is key to improving working conditions in rural areas. Agricultural GDP growth is more than twice as effective at cutting rural poverty as non-agricultural GDP growth. Empirical evidence shows that

The first two quintiles of firms that invest in digital technologies grow between 25% and 30% faster than the rest (Van Reenen, et al, 2010; Andrews, Nicoletti and Timiliotis, 2018). Greater access to broadband would accelerate growth and job creation in LAC: a 10% increase in fixed broadband penetration is associated with a 3.2% increase in GDP per capita in 6 years. Connecting 11 million homes would contribute to the creation of 378,000 direct jobs (Katz, 2009). Investing in digital talent is key to improving the efficiency of the adoption of digital technologies and realizing the productivity gains associated with them.

<sup>44</sup> These polices are covered in depth in the Innovation, Science, and Technology sector framework (GN-2791-8).

agricultural research and rural infrastructure generate high returns. On average, investments in agricultural research generate a return of 48% (Alston et al, 2000). In Peru, a fruit fly eradication program quadrupled fruit production and increased agricultural sales more than ten-fold (Salazar et al. 2020). In Brazil, rural electrification increased the likelihood of employment by 13% to 15% (Barham et al., 2011). In Nicaragua, road construction increased employment by 10 to 12 hours per week (Rand, 2011). A 10% increase in traderelated infrastructure has the potential to increase agricultural exports from developing countries by 30% (Moïsé and Le Bris, 2013). A 10% reduction in international freight costs in LAC would boost export values by at least 30%, and increase the number of products exported by 25%, both within the region and to the United States (Mesquita Moreira, Volpe Martincus and Blyde, 2007). In Peru, access to irrigation systems increased household consumption by 17%, the value of production by 72%, and sales by 83% (Del Carpio et al., 2011).

Policies to promote an environment where productive firms can grow, and capital and labor can be allocated to the most productive use

- 3.18 Policies that affect the regulatory environment of firms and workers can also have large effects on productivity. Labor laws must balance workers' protection and the need to correct market failures, providing the right incentives for firms to create formal jobs in a low-productivity context. If labor laws are too strict or costly, firms will either hire no salaried workers or increase the use of technology (Packard et al., 2019), reducing formal job creation (Caballero et al., 2013) or creating more informal labor, which widens the chasm between workers protected by labor laws and informal workers who are unprotected. An international literature review shows that labor legislation that is too permissive may lead to insecure employment or have no impact on wage levels or job quality. Labor legislation that is too burdensome on firms may slow productivity growth through at least three channels: it may discourage firms from investing in new technology; it may create large incentives for firms to hire short-term, temporary workers and because of it, deter companies from investing in workers' skills development; and it may reduce the reallocation of workers from low productivity, informal companies to high productivity, formal ones (Betcherman, 2019; Martin and Scarpetta, 2012; OECD, 2010; Micco and Pagés, 2006). Furthermore, tax policies that shift away from payroll and corporate taxes could enhance productivity growth via increased investment and formal job creation (Fretes Ciblis et al.; 2017).
- 3.19 Policies aimed at making credit available to firms can help increase output, employment, and productivity. These policies focus on financing firms' productive structure, and in LAC they are mostly associated with SMEs. Examples of financial instruments comprise long-term financing, credit and agricultural insurance, and public guarantee systems. Evidence of the latter policies includes Chile's Fondo de Garantías para Pequeños Empresarios (FOGAPE), a program that helped increase by 14% the probability of small businesses obtaining loans from banks (Larraín and Quiroz, 2006), and Colombia's beneficiaries of Bancóldex credit resources that achieved growth in output, employment, and productivity of over 34%, 19%, and 22%, respectively (Eslava et al., 2012).
- 3.20 International trade, integration, and the reallocation of global value chains could present opportunities for LAC to boost productivity, but also require reskilling of the labor force to reallocate workers across sectors and occupations. International trade can raise a country's productivity by affecting firms' productivity directly through checks on their market power and gains in managerial efficiency or by reallocating resources to more productive firms. Furthermore, recent changes in global value chains, accelerated by the pandemic, are creating a unique opportunity for LAC. The increasing effort of firms to

improve the resilience of their value chains against natural and geopolitical shocks can translate into valuable regional value chain opportunities in the hemisphere. These opportunities can play a key role in the region's recovery. However, productivity-enhancing policies like international trade agreements could displace some workers who may suffer long-standing welfare losses if they do not have the skills to enter a different sector or occupation (Zegarra and Volpe, 2019). Governments should seek to mitigate the adjustment costs for such workers out of consideration for social equity on the one hand and to avoid a political backlash on the other, as repercussions could endanger reform and hinder welfare gains. Training workers can accelerate the reallocation of labor. For instance, a study on vocational classes in Brazil after trade shocks showed that training eased the reentry of workers into the formal labor market, mainly through switching sectors and occupations (Blyde et al., 2020).

Policies to ensure productivity gains are shared equitably.

- 3.21 Mechanisms that increase the bargaining power of workers can improve working conditions without necessarily causing employment declines in the labor market. When employers have power to control wages (monopsony power), unions can balance bargaining power between employers and workers. Acemoglu (2019) points to the importance of unions in creating quality jobs, and attributes part of the low quality of employment in the United States to the erosion of union power. Rodrik and Sabel (2019) also point out the importance of collective bargaining for the generation of quality jobs, emphasizing the importance of transparency in collective bargaining to facilitate public scrutiny. Benmelech, Bergman, and Kim (2018) found that the presence of unions mitigated the negative effect on wages of a greater concentration of losses. Finally, Doucouliagos, Freeman, and Laroche (2017) reviewed the results of 300 studies and found that unions reduce labor inequality by increasing wages in less qualified occupations without having a clear effect on productivity. For these reasons, having strong unions, with sufficient transparency to ensure that unions do not collude with companies and to allow sufficient supervision of their activities, can contribute to the creation of quality jobs and the reduction of inequality without affecting productivity. However, the significance of collective bargaining structures in developing countries is low, due to high informality. Unionization rates in Latin America vary between 15% and 20% of workers in Brazil to less than 10% of workers in Guatemala, compared to 32% in industrialized countries. The effects of increased union power in the presence of informality are not well understood. In the case of gig-economy workers, and other workers classified as independent workers, the extension of labor rights in general and union rights in particular may improve their working conditions without affecting productivity (Alaimo, Chaves, and Soler, 2019).
- 3.22 Evidence exists from LAC that the prudent use of the minimum wage, particularly in countries with low minimum wages, can lead to lower levels of inequality. The minimum wage is one of the traditional policies that are used to strengthen worker power. Bosch and Manacorda (2010) found that the decline of the real value of the minimum wage in Mexico explains a large part of the increase in wage inequality, especially at the bottom of the wage distribution. Messina and Silva (2019) argue that there is growing evidence suggesting that increases of the real value of the minimum wage in several countries in the region have played an important role in the reduction of inequality. In Mexico, Campos-Vazquez et al (2020) show that doubling the minimum wage combined with a lower tax rate substantially increased labor income by approximately 9% with little or no effect on employment. However, minimum wages have also been shown to have unemployment effects in LAC. Neumark and Corella (2019) conduct a meta-analysis of minimum-wage

- studies from developing countries including LAC countries, concluding that negative employment effects are often found, particularly when the minimum wage is binding and likely to be enforced.
- C. Interventions to achieve adequate, equitable and sustainable social insurance systems
- 3.23 The response to the pandemic has pushed LAC countries to consider mechanisms to protect all workers (not just formal workers) against risks, opening an opportunity for a new design that provides universal coverage. The rapid effort to provide income support programs to informal workers in many countries has opened up the possibility for countries to rethink key elements of the social protection system such as who is entitled to benefits and protections as well as how to finance them. In this section, we cover the evidence on policies aimed at expanding the coverage of social insurance as well as improving key programs such as unemployment insurance and pension systems.
- 3.24 Countries with universal coverage in health and anti-poverty pensions have delinked (completely or in part) the benefits from formal employment. The risk of falling ill is not connected to one's employment condition. Historically, Europe's health systems began as an employment-linked benefit, and most European countries still have payroll tax health insurance (France, Germany, the Netherlands, and Switzerland, among others); however, they have reduced reliance on labor taxes over time so that general revenues have become the most important contributor to health care expenditure. Now Europe has systems that give access to care regardless of employment status. In LAC, access to high-quality contributory health care depends on a family member holding a formal job. However, similarly to European countries, they are gradually delinking access to health care from the employment condition. Costa Rica, Colombia, Chile, and Uruguay have assured access to most services for most people by registering noncontributors or creating systems with multiple insurers that cover noncontributors and contributors while still mandating payroll taxes. Similarly, assured basic income during old age (anti-poverty, or noncontributory pension) has been delinked from employment in most countries. Today, 120 countries have established noncontributory pensions (HelpAge, 2020). In LAC, 16 countries have noncontributory pensions (Bosch, Melguizo and Pagés, 2013).
- 3.25 Shrinking the set of benefits linked to employment would allow for lower payroll contributions, which in turn, could increase the share of formal employment, but new sources of financing will be required to compensate for the decline in revenues. In developed countries, most studies suggest that total employment shows a limited response to lower labor costs (Pagés, 2019). In developing economies, the evidence is quite heterogeneous across countries, but some studies suggest a higher response. Studies for Chile and Argentina indicate that lowered social security contributions are passed on to workers in full in the form of higher wages, without any effect on formal employment (Gruber, 1997; Cruces, Galiani, and Kidyba, 2010). In Turkey and Colombia, studies found that these reductions increased formal employment (Betcherman, Daysal, and Pagés, 2010; Kugler and Kugler, 2003). Similarly, in the case of Colombia, the 2012 tax reform which reduced social security contributions and payroll taxes by 13.5 pp (from 53.3% to 44.8%) over less than a year, was associated with an increase in formality (from 30% to 35% of employment) and a 2.7% increase in average wages (Antón, 2014; Bernal, Eslava, and Melendez, 2015; Steiner and Forero, 2015; Kugler and Kugler, 2015). Analysis of the international literature suggests that reductions in social security contributions have a bigger effect on formal employment in countries with high minimum wages, where social security contributions cannot be passed on in the form of lower wages. However, reducing payroll contribution

- would come at a cost, presenting a trade-off for countries engaging this policy to formalize workers. For instance, eliminating health contributions from workers and firms will reduce revenues (to finance health services) by, on average, 1.1% of GDP.<sup>45</sup>
- 3.26 Expanding the mandate of social insurance beyond salaried workers (including self-employed, domestic workers, and the growing cohort of gig economy workers) is a key policy to increasing the coverage of social insurance. To increase the reach of social insurance outside of high-paying salaried jobs, and cover nonstandard work (self-employed, and commission, contract, gig economy and domestic workers) social insurance enrollment should aim to protect all forms of employment (Bosch, Melguizo and Pagés, 2013). In many countries, workers in nonstandard occupations are not required to contribute to social security. This creates incentives for employers to hire workers in these categories because it saves them the cost of social insurance (Levy, 2008). Alaimo, Chaves, and Soler (2019) suggest that although regulation must recognize the differences between nonstandard work (including the gig economy) and traditional work, regulations should minimize the possibility of arbitration between these categories as much as possible. Brazil and Uruguay have already regulated and classified these workers as self-employed, and in both countries, employers have to fully comply with social security contributions for the self-employed.
- 3.27 Increasing enforcement is necessary to achieve high levels of coverage of the social insurance system. Expanding the mandate of social insurance to all workers is a first step toward creating more formal, protected jobs. But without strict enforcement, achieving a quasi-universal coverage against risks will be difficult. There is strong evidence that better enforcement will increase participation of workers and firms in social security (De Andrade et al., 2013; Bruhn and McKenzie, 2014). Enforcement can be particularly effective among large firms that employ informal workers (Bosch et al., 2020). However, a less permissive approach to informal work may result in more formal employment, but possibly also in higher unemployment (Almeida and Carneiro, 2012; Amengual, Coslovsky, and Yang, 2017; Kanbur and Ronconi, 2016). To minimize this adverse effect, enhanced oversight could be combined with other pro-formalization measures. Furthermore, the potential to increase revenues is important. If all workers in the region earning above the minimum wage in their respective country could be formalized, contributions to social insurance would increase by 0.9% of GDP, with a range that varies as a function of the size of the informal labor, minimum wage compliance, and the level of contribution rates in each country.<sup>46</sup>
- 3.28 The expansion of noncontributory benefits has increased pension coverage considerably while reducing poverty and inequality. Two of every ten older adults receive noncontributory pensions (Bosch, Melguizo and Pagés, 2013) and this figure has been rising, reducing poverty and inequality (Attanasio et al., 2015; Osorio et al., 2011; Berlinksi et al., 2009; Gasparini et al., 2007b; Gertler and Bando, 2016; Lustig, Pessino and Scott, 2013; Levy and Schady, 2013; Rofman et al., 2014). Noncontributory pension spending ranges from 0.7% of GDP in Uruguay, to 2.4% in Brazil, 1.2% in Bolivia, and 3.7% in Argentina (Izquierdo, Pessino and Vuletin, 2018). However, noncontributory pillars could be costly. A universal anti-poverty noncontributory pension<sup>47</sup> for citizens 65 and over would cost on average 0.9% of GDP in LAC today; varying from 0.5% of per capita GDP in Trinidad and Tobago, Mexico or Belize, to 1.4%, and 1.2% in Nicaragua and Honduras, respectively. However, rapid aging could impose additional pressure on spending. If the benefits adjust

<sup>45</sup> See Table 4 for country estimates.

See Table 5 for all country estimates.

The lower-middle income international poverty line of US\$3.2 per day.

as countries develop (e.g., indexed to GDP per capita) average cost in 2050 would be 1.9% of GDP.

3.29 Improving coverage of social protection systems and reducing disincentives to formal employment creation requires reversing the fragmentation that exists between contributory and noncontributory systems. It is important to effectively integrate noncontributory programs with contributory programs to provide adequate coverage and avoid disincentives to formality or savings. For instance, in pensions, the gold standard in the design of noncontributory and solidarity pillars is a universal or semi-universal antipoverty subsidized benefit. This benefit is progressively lower as citizens accumulate savings or contributions (see Packard et al., 2019; Majoka and Palacios, 2019) (Figure 13). This design balances the need for widespread coverage, progressivity, and incentive alignment. Universal noncontributory programs—that is, those where benefits are obtained by all workers regardless of their employment status and are financed from general revenues (for example, the universal pension in Bolivia)—do not alter workers' decisions to contribute. On the other hand, programs that grant benefits only if the worker is informal or does not reach retirement in the contributory system can generate incentives for informality. The literature for the region shows evidence that these effects are important enough to deserve special attention in the design of social security programs (Bosch and Campos-Vázquez, 2014; Bosch, Melguizo and Pagés, 2013; Frölich et al., 2014; Garganta and Gasparini, 2012; Kaplan and Levy, 2014; Levy, 2008; Camacho and Mejía, 2014). Therefore, decoupling health care from formal employment and establishing a basic universal noncontributory pension (as proposed by Antón et al., 2011, for Mexico), or establishing a basic noncontributory pension that gradually and smoothly declines with income in old age, as in Chile, can meet the double objective of protecting people against ill health and poverty in old age, while maintaining incentives to contribute.

# Policies to improve the functioning of unemployment insurance and other income support programs

3.30 Well-integrated instruments that protect workers against the risk of unemployment can improve coverage of unemployment risks for formal workers. Well-designed unemployment protection needs to consider instruments such as severance pay and unemployment insurance in an integrated manner (Blanchard and Tirole, 2008). Historically, severance pay has been a response to the state's inability to administer unemployment insurance. Severance pay protects formal workers' income against job loss (Rama and MacIsaac, 2001; Kugler and Kugler, 2003), but it has several design problems. First, it is a challenge for small employers, particularly in times of economic distress, to fund severance pay out of the company's existing cash flow. Second, dismissals often end up in court, creating uncertainty over the size and timing of the payment. Third, severance is paid as a lump sum, so individuals could run through funds before they find work. Finally, it is often difficult to collect compensation if a company goes bankrupt. Establishing an individual unemployment savings account where employers and employees make monthly deposits to cover unemployment and simplifying the law to reduce recourse to the courts, may help resolve some of these issues (Alaimo et al., 2015). However, given the low formality rates, these instruments, even if better designed, may fall short of providing widespread coverage. An alternative would be a well-designed income protection program that provides benefits to all workers, including informal workers, conditional on active labor market participation and that is funded by general taxes or contributions collected via consumption or domestic utility fees (Gonzalez-Velosa and Robalino, 2020).

- 3.31 A more structural way to cover unemployment risks caused by an aggregate shock (like a pandemic or a natural disaster) is to build sovereign funds that are activated to finance mitigation and reactivation policies. The use of these funds to finance long-term liabilities (like pensions) or transitory fiscal deficits is not uncommon in LAC. Chile has two sovereign funds for this purpose. These types of funds could be built to address transitory aggregate employment shocks. Alfaro et al. (2020) suggest that these resources could finance monetary support for families, with support withdrawn only in combination with concomitant declines in the unemployment rate. This should stimulate aggregate demand and contain unemployment, reinforcing existing programs and creating new ones.
- 3.32 Furthermore, as the nature of work changes, there is a need to think innovatively about solutions to protect workers from idiosyncratic shocks caused by rapid obsolescence due to automation and technological changes, changes in trade patterns, the transition to a green economy, and/or the advent of a task-based economy (digital platforms/gig economy). Evidence of instruments that can reach beyond formal workers, such as TWP and ALMPs, is mixed (Alaimo et al., 2015). This is one reason why new instruments such as universal basic income (UBI) are being explored. Indeed, a universal, unconditional cash transfer that provides income protection to all the workforce, regardless of their work situation and degree of formality, can have important advantages. The fact that UBIs delink eligibility from labor status eliminates disincentives to formalization observed in other cash transfer programs that explicitly exclude formal workers. Moreover, evidence from noncontributory cash transfer programs suggest these schemes have a limited impact on work participation (Bosch and Manacorda, 2012; Bosch and Schady, 2019). However, costs could be too high. A universal transfer of income that would eliminate extreme poverty in the region would cost 11% of GDP on average, although cost varies substantially by country and the design adopted.<sup>48</sup> In terms of impact, given the limited implementation of UBIs, important questions on policy design remain unanswered; only two countries in Asia have implemented UBIs on a national scale, so rigorous evidence can be obtained only from context-specific subnational pilots, none of which are in LAC (World Bank, 2020). Given the region's high vulnerability to climate change, social insurance systems will also have to anticipate and consider climate-change-related risks as well as changes in the demand for services and benefits and develop both effective preemptive measures and post-event responses.<sup>49</sup>

### Policies to improve the functioning of pension systems

3.33 The region needs substantive pension reform to achieve universal coverage with sustainability and equity. Interventions to address imbalances in pension systems will depend on each country's current position and aging curve, but will necessarily imply changes in the fundamental parameters of the system, such as retirement age, contribution rate, and pension level and indexation, as well as rethinking financing mechanisms. To increase coverage against a backdrop of fiscal constraints, differentiated strategies need to be analyzed, country by country, considering their specific conditions.

This estimate is based on the US\$1.9 per person per day international poverty line. Using the lower-middle income international poverty line of US\$3.2 per day results in an average regional cost of 19% of GDP. See Table 6 for country estimates. A literature review by Gentilini et al. (2019) found UBI costs estimates of 11% for India, 3% to 10% for USA, and 4% for Switzerland.

Measures could entail unemployment coverage for SMEs affected by extreme events or procedures for processing benefits when communication systems are interrupted. Such ex post interventions make a difference, but they are also costly. More frequent climate events can exhaust the assets unless disaster risks are managed. Preventive measures to reduce risks and impacts of climate change will be very important (Kuriakose et al., 2013).

- 3.34 Reforms to achieve sustainability in traditional defined-benefit systems are unavoidable. Population aging represents serious challenges to the sustainability and/or adequacy of pension systems. It implies an increase in the proportion of older adults (aged 65 and older) as a share of the population. Countries with pay-as-you-go defined-benefit systems face sustainability problems. This is because the pensions that such a system can offer (i.e., without requiring fiscal transfers) depend on population growth, an expanding workforce, and rising wages. Therefore, demography, changes in participation and employment, and productivity trends have major impacts on the ability to meet future commitments, and the parameters of the system need to be revised periodically to maintain sustainability (Berstein and Bosch, 2016; Izquierdo et al., 2018; Clements et al., 2015). Faced with population aging, countries have modified key parameters of their systems. Between 2003 and 2019, 96 pension reforms occurred in the world. In 41% of them, the retirement age was raised, in 39% the level of benefits changed, and in 20% there were changes in contributions. A number of countries have chosen a gradual change in parameters. For example, in Canada, the normal retirement age will gradually increase from 65 to 67 years between 2023 and 2029. In Ireland, the retirement age will increase from 67 in 2021 to 68 after 2028. In the United Kingdom, the retirement age will increase to 66 in 2020 and to 67 in 2026.
- 3.35 Fiscal sustainability can be improved in tandem with improving equity by mitigating the regressive features of the pension system and focusing subsidies at the bottom part of the income distribution, and in traditionally excluded groups such as women. There are well-known features that generate a regressive distribution of pension spending. Long vesting periods (years of contribution needed to obtain a benefit) leave many contributors without benefits, particularly low-income workers and women with low contribution densities In defined-benefit systems, benefits calculated on the basis of the last few years of salary tend to benefit high-income workers with steeper wage paths. Finally, replacement rates could remain high for high earners. The average vesting period in the OECD is 10 years vs. 17 years in LAC. Furthermore, OECD countries that reformed over the past 20 years have moved toward calculating the benefits using lifetime earnings (Holzman, Palmer and Robalino; 2013). At the same time, countries in the OECD have designed their benefits such that they decline rapidly (as a proportion of wages) as income increases. On average, benefits for workers with 1.5 times average wages are 40% lower than for workers with average wages (compared to 20% in LAC). In some LAC countries, for high-income workers, replacement rates remain relatively high. For instance, in Paraguay, Nicaragua, or Colombia, workers earning five times the average still enjoy replacement rates of 98%, 77%, and 71%, respectively (Altamirano et al., 2018).
- 3.36 Systems based on individual savings will also require reforms to generate adequate pensions in the short and long run. Population aging also poses a challenge for individually funded systems. In these systems, increases in life expectancy have a direct impact on pension values if the contribution rate and/or retirement age are not adjusted accordingly. For example, in Colombia, Costa Rica, El Salvador, Mexico, and Peru, where there are individual savings pillars, life expectancy at age 65 rose by more than five years from 1950 to 2000 and is expected to increase by two to three years more by 2050 (ECLAC, 2002). Financing seven additional years without reforms means that pension values would fall by up to 40%, depending on the expected returns of the system and the contribution history (Berstein and Bosch, 2016). Therefore, these systems also need gradual parametric adjustments so adequate pensions can be sustained. Low contribution densities make women particularly prone to obtaining low pensions. Countries like Chile have experimented

with providing subsidies linked to childbearing responsibilities which has helped reduce the gender gaps in pension levels (Joubert, 2020). Similarly, the 2019 Chile pension reform proposal considered pension subsidies targeted directly to women.

- 3.37 Countries can create modern voluntary savings pillars to increase coverage and the level of pensions by applying lessons from behavioral economics and taking advantage of new information technologies. Behavioral economics has some promising innovative strategies to increase coverage for self-employed workers and voluntary contributions. A large proportion of workers (the self-employed, commission agents, unpaid workers in family businesses, domestic and platform-economy workers) do not have an employment relationship allowing them to make automatic social security contributions. Behavioral economics suggests that the absence of automatic-contribution mechanisms like those in place for wage earners—may be one of the main causes of the low coverage and lack of pension savings among these groups (Choi, et al., 2004; Madrian and Shea, 2001). In developed countries, automatic-deposit mechanisms have been found to be much more effective at generating voluntary pension savings than tax incentives, which barely generate any new savings (Carroll et al., 2009; Chetty et al., 2014; Benartzi et al., 2017). Innovations are needed to automate payments to the social security system (e.g., via direct debit, tax returns, or with water or electricity bills) by these groups. The results from the IDB Retirement Savings Laboratory show digital on-demand platforms provide a great opportunity to implement automatic savings debits.<sup>50</sup> In Peru, drivers of Cabify, a ride-hailing app, were invited to voluntarily save part of their earnings, and 18% of them signed up for an automatic debit system (Bernal et al., 2020). When automated mechanisms of this kind are not feasible, other instruments can be used, such as simplified contribution methods or reminders via SMS. Evidence shows that these nudges are easy to scale up and can be highly cost-effective at increasing voluntary retirement savings. However, their impact on savings is smaller than that of automatic deposits (Karlan et al., 2010). In Colombia, low-income, self-employed workers received text messages inviting them to save. After 15 months of receiving text messages, workers increased their savings by US\$15.87 for every dollar invested in SMS (Bosch et al., 2020b).
- 3.38 Countries with pension systems with built-in adjustment mechanisms are better prepared to gradually adapt their systems to demographic changes, although those institutions may fail without social consensus and proper communication. Due to the political and social complexity of parametric adjustments, some countries are implementing self-correcting mechanisms for imbalances in pension systems. These types of mechanisms are generically called "sustainability factors" or adjustment rules. Early adoption of a sustainability factor that reinforces, clarifies, and ensures the balance of the system contributes to improving confidence in the sustainability of public finances, giving transparency to the need for adjustments and certainty to citizens. These adjustment rules allow modifications of key parameters of the system in an automatic way. They are based on a philosophy similar to the fiscal rules adopted by many countries in the region to maintain budget balances. The operational functioning of these mechanisms is relatively simple. A variable (life expectancy, financial balance, or other factors) is monitored, and a parametric adjustment rule is established in the face of changes in that variable (retirement age, contribution rate, changes in the indexation of benefits). Countries like Sweden, Japan, and Spain have implemented such rules. To maintain them, however, social consensus is

In 2017, the IDB launched the Retirement Savings Laboratory to seek innovative ways to increase the number of people saving for retirement in LAC. Based on behavioral economics, the use of new technologies and digital solutions, these interventions generate reliable evidence through rigorous impact evaluations.

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necessary. Adjustment rules have not always withstood social pressure. For example, in Spain, the two adjustment mechanisms introduced in 2013 to provide fiscal sustainability to the pension systems (the sustainability factor and the pension revalorization rule) have been suspended due to lack of social and political acceptance of the rules (Arce, 2020).<sup>51</sup>

- 3.39 Improved institutional capacity is necessary for the implementation of measures to address the challenges of coverage and sustainability. Strengthening institutions (e.g., through improving data collection and dissemination, continuous policy debate and training for key decision makers) will facilitate reforms and ensure that the institutions that manage the systems will be ready when the reform window comes. Central to this strengthening is the ability of these institutions to collect data for the analysis of public policies. Chile, prior to the 2008 reform, developed a set of indicators through the implementation of the Longitudinal Social Security Survey which provided new information on key aspects of the pension system. Other countries such as Uruguay and El Salvador also began to implement this survey in order to be prepared for eventual pension reforms. Caribbean countries like Barbados and Jamaica conduct regular actuarial reviews that have been instrumental in establishing the need for parametric reforms of their defined benefit systems.
  - D. Interventions to increase access to good employment opportunities for specific groups
- 3.40 Specific groups of individuals face barriers to good employment opportunities. Women, persons with disabilities, Afro-descendants, Indigenous peoples, LGBTQ+ individuals have been affected by barriers to participation in the labor market and a positive employment trajectory. Larger barriers arise from the different inputs these groups bring to the market (such as lower education levels and fewer skills and contacts), or from specific conditions faced by each group, such as traditional roles and social norms, discrimination and lack of complementary services (such as child care) that reduce their wages and access to jobs.<sup>52</sup> These factors intensify the risks of inactivity, unemployment and increase the probability of not finding a job once unemployed due to COVID-19 (Lustig and Tommasi, 2020). Besides the traditionally excluded groups mentioned before, three other groups must be considered: migrants, young people, and the large group of newly unemployed individuals affected by COVID-19.53,54 This section focuses on the evidence of policies that support the ability of specific groups of individuals to pursue, access, and maintain a positive labor market trajectory.

Policies to change incentives for firms to hire and retain specific group of individuals

3.41 Wage subsidy programs have small, short-term impacts that generally increase in the medium and long terms, and the effects are greater for women (Card et al., 2010, 2018).

The sustainability factor was scheduled to be implemented in 2019 but postponed to 2023. The pension revalorization rule was in operation until 2018 and suspended indefinitely.

It is important to note that lower educational levels could also arise from discrimination.

There are multiple reasons why migrants are disproportionately employed in lower-quality jobs: restricted access to the formal labor market for those without regular immigration status, information failures regarding job opportunities, the fact that employers may not be familiar with the registration process or not have confidence in documents authorizing migrants to work (Seele and Bolter, 2020), and labor-market discrimination. Another restriction is the lack of recognition of their professional qualifications (competences and education) and lack of mechanisms to validate their previous work experience, that could lead migrants to seek opportunities for income generation in the informal sector.

This new group of unemployed individuals faces the risk of becoming long-term unemployed because the sectors where they used to work are being affected for a long period of time (e.g., tourism, retail).

A concern brought by some authors is that wage subsidies may help workers find jobs, but this may happen at the expense of those who are not subsidized (Betcherman, Dar, and Olivas, 2004; Dar and Tzannatos, 1999). Other authors, however, show that the net macroeconomic effect is usually positive. Furthermore, some evidence shows positive effects on the beneficiaries' ability to improve their job opportunities in the medium term (see Cockx, Goebel, and Robin 2013; Gerfin, Lechner, and Steiger, 2002). Evidence in the LAC region suggests that these programs are effective in improving the employability and formality of the targeted population groups (Galasso and Ravallion, 2004; Novella and Valencia, 2019). Subsidies for the employment of women in LAC have helped raise the employment rate of the beneficiaries in the short term, but their effects in the long term are not clear (Bruhn, 2020; Groh et al., 2016; Bravo and Rau, 2012; Castillo, Rojo Brizuela, and Schleser, 2012; Galasso, Ravallion and Salvia, 2004). Since 2009, Chile has had a subsidy to promote youth employment, and in 2012 adopted a similar mechanism to promote women's employment. The youth employment subsidy has been effective in promoting employment and participation, but it has not had an impact on wages (Bravo and Rau, 2012). The wage subsidy for women's employment has not yet been evaluated. Wage subsidies are also being offered in the context of the pandemic in a total of 67 countries (Gentilini et al., 2020) to support the newly unemployed that derived from the crisis.

- 3.42 There is little evidence of the impact of quotas to increase racial and ethnic diversity in the region. In Brazil, diversity has been achieved in entry-level apprenticeship programs that are subsidized by the public sector. Afro-Brazilians account for 58.2% of the apprentices at the 500 largest firms, however, their share among workers at these firms is only 35.7%, which falls to just 6.3% among managers and 4.7% among executives. While these cross-sectional data do not provide conclusive evidence, they suggest that retention and promotion possibilities for Afro-Brazilians are low, particularly without additional support. Despite the barriers facing Afro-Brazilians in the formal sector, few major corporations have policies to promote the participation of Afro-Brazilians (3.9%) (IDB-Ethos, 2016). Addressing labor force diversity is challenging due to preliminary evidence that employees may not self-identify by race due to concerns of bias.<sup>55</sup>
- 3.43 Across the region, for formal firms above a certain size, 14 countries have implemented employment quotas for persons with disabilities. Evidence regarding the effectiveness of these quotas is mixed. There is some evidence that employment quotas have resulted in firms employing a higher percentage of persons with disabilities in Peru, Austria, Japan, and Spain (Bosch et al., 2020; Lalive et al., 2013; Mori and Sakamoto, 2018; Malo and Pagan, 2013), but such studies have found that the direct effects on the employment of persons with disabilities are attenuated by firms reclassifying the disability status of workers and contracting employees with disabilities from other firms, reflecting changes within the existing workforce rather than new employment of persons with disabilities. Some civil society groups are opposed to quotas because of their stigmatizing effect as well as their application in jobs without opportunity for promotion. The United Kingdom abandoned its employment quota policy after finding it ineffective and unpopular among employers and disability advocates. Programs with positive incentives such as tax offsets for firms that hire persons with disabilities as implemented in the United States, wage subsidies, and programs that recognize firms for the inclusion of persons with disabilities such as Sello Begual in Spain and Sello Inclusivo in Chile, have not been rigorously evaluated. While studies have not been conducted in LAC, targeted, temporary wage

In Peru, an experimental design methodology showed that Afro-Peruvians were 38% less likely to receive calls for interviews than whites with similar human capital levels (Galarza et al., 2015).

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subsidies implemented through the Public Employment Service in Germany and Sweden were found to increase probability of employment in the short term (Jaenichen and Stephan, 2011; Angelov and Eliason, 2018).

- 3.44 Several policies have been implemented around the world to promote the recruitment of migrant workers. The Danish government implemented the Step Model for the integration of migrants into the labor market, providing support beyond the initial recruitment phase.56 The German government implemented a policy in 2016 for its asylum-seeker population, ensuring that during a vocational training period (up to three years) this group had all the rights to remain in the country, even if their application for asylum had been denied. If they find employment after the end of this period, they will have all legal permits to remain in Germany for two additional years.<sup>57</sup> When well designed, temporary labor migration programs can be a way to cover labor shortages while creating economic benefits for destination countries and migrants alike (Newland et al., 2008). New Zealand has a good example of this with its Recognized Seasonal Employer scheme, which created great economic benefits. Workers' household income increased by an average of about 35% per capita by introducing incentives for both employers and migrants to avoid extended stays (Gibson and McKenzie, 2014).58 Considered by the International Labor Organization (ILO) as an example of best practices, the scheme also includes a wide range of provisions to ensure that workers receive and are informed about adequate protections (ILO, 2015).
- 3.45 Currently, in the context of the pandemic, several governments have adopted specific policies to promote the recruitment of migrants. For example, Germany, Chile, Argentina, and Peru have allowed or are in the process of allowing, temporarily, migrant health workers who have a degree granted in their country of origin to cover the shortfall of health workers. <sup>59</sup> The closure of its borders has caused Spain to run a deficit of workers for agricultural production, and therefore has promoted a policy whereby migrants without work permits could still be hired. <sup>60</sup> In addition, several private companies have been actively involved in promoting the recruitment of migrants (for example, the partnership between the food-sales company Sierra Nevada and "Somos Panas Colombia," which promotes the hiring of refugees and migrants). <sup>61</sup>

Policies to overcome barriers to access good employment opportunities for individuals in specific groups

3.46 Parental leave policies allow women to better balance work and family responsibilities and increase women's likelihood of returning to the workforce. Women face greater difficulties in balancing work and/or training with the care of children or older adults (Blau and Kahn, 2016). Mothers entitled to maternity leave benefits are more

This program considers the skills of eligible refugees and other migrants, combining language courses with training and internships in companies. Once complete, companies have the option of offering permanent work to migrants, who are eligible for wage subsidies for up to one year and/or receive financial support for mentoring services. https://www.thelocal.dk/20170412/more-immigrants-finding-jobs-in-denmark-da-ministry.

https://www.oecd.org/els/mig/UNHCR-OECD-Engaging-with-employers-in-the-hiring-of-refugees.pdf.

The program allows workers in Pacific Island states to work seasonally for specific employers with work permits and to stay no more than 7 months within the 11-month seasonal period. It is designed to allow migrants to return continually, so employers in New Zealand have a reliable, family-friendly, and competent workforce.

https://www.elconfidencial.com/mundo/europa/2020-04-14/coronavirus-alemania-refugiados-sirios\_2548375/ and https://rpp.pe/politica/gobierno/coronavirus-minsa-y-cmp-acuerdan-que-medicos-extranjeros-puedan-atender-casos-de-covid-19-noticia-1261028.

https://www.heraldo.es/noticias/aragon/2020/04/16/avalancha-de-solicitudes-para-trabajar-en-el-campo-de-lasque-el-90-estan-presentadas-por-inmigrantes-sin-papeles-1369855.html.

https://sierranevada.co/.

likely to return to work than mothers without such benefits (Baum and Ruhm, 2016; Berger and Waldfogel, 2004; Espinola-Arredondo and Mondal, 2008). Moreover, policies that provide and encourage greater parity between maternity and paternity leave can accelerate the timing of return to work of mothers and contribute to changing underlying gender norms (Patnaik, 2015; Elborgh-Woytek, 2013; Johansson, 2009). In the case of LAC, all countries offer paid maternity leave of approximately 12 weeks, and maternity benefits are largely financed by the social security system. In contrast, parental leave for men is more limited. Only 15 countries in the region offer some paid paternity leave—financed mainly by the employer —and in most cases (12 countries) the leave lasts less than a week (Gasparini and Marchionni, 2015). Nonetheless, long parental leaves may have adverse effects on labor outcomes for women, and they may have a reduced overall impact in countries with high levels of informality. Studies for developed countries find a negative relationship between length of leave and salaries for labor force participation (Akgunduz and Plantenga, 2012; Budig et al., 2012; Pettit and Hook, 2005). A recent study for Colombia shows that extending the maternity leave period increases the likelihood of job inactivity for young women, as well as rates of informality and self-employment (Uribe et al., 2019).

- 3.47 Flexible labor agreements can help promote female employment. Literature from developed countries indicates that labor flexibility may be an instrument that attracts more women to the labor market, although it can encourage entry to lower-level positions (Blau and Kahn, 2013). Evidence for LAC suggests that labor flexibility also comes at a cost. A study by Bentancor and Robano (2014) shows that Chilean women who work part time have lower hourly wages. Contrary to the evidence for European countries (Booth and van Ours, 2007, 2013; Asadullah and Fernández, 2008; OECD, 2010), women in the region do not seem to derive higher job satisfaction by working part-time. López Bóo, Madrigal, and Pagés (2010) find that Honduran women working full time are more likely to report being satisfied at their work than women working part time. A similar study by Montero and Rau (2015) shows that there is no evidence in Chile that women in part-time employment are happier than those in full-time employment.
- 3.48 Provisions for childcare generally have a positive impact on female labor force participation. Evaluations of childcare interventions in LAC show a generally positive effect on female labor force participation. However, the provision of compulsory childcare—fully financed by the employer—can adversely affect the hiring of women or their wages (Prada, Rucci, and Urzúa, 2015). Additionally, low-quality services can potentially work against the policy objective of ensuring that children receive adequate attention and care during their first years to stimulate early development (Berlinski and Schady, 2015). Therefore, it is relevant to pay attention to the design and provision of these policies, to ensure quality childcare that is affordable and cost-effective (Mateo-Díaz and Rodriguez-Chamussy, 2016).
- 3.49 Reasonable workplace accommodations are an approach often required by legislation, changing the work environment to offer persons with disabilities the same access and opportunities to participate as others enjoy. For example, employees with

Berlinski et al. (2008), for instance, show that a preschool program in Uruguay greatly increased childcare provision and significantly increased women's participation in the workforce. Similarly, Martínez and Perticará (2017) show that the delivery of an after school care program in Chile increased the employment and labor force participation of mothers. Cardona-Sosa and Morales (2015) demonstrate that an increase in the availability of public nurseries facilitated the labor participation of vulnerable mothers in Medellin, Colombia, by 9 pp on average, and the effect for those who live close to program facilities was 31 pp. Barros et al. (2011) analyze a lottery for free publicly provided child care for low-income families in Rio de Janeiro finding that access to this care led to a 10 pp increase in the mothers' employment. In Nicaragua, Hojman and López Bóo (2019) find that access to subsidized care increases a mother's likelihood of being employed by one-third.

a visual disability may request specific technology, such as a screen reader, to facilitate their work. Accommodations are also made in the job application process. For example, an individual with autism or an auditory processing disorder may request that interview questions be written down or sent in advance. Firms can receive training on how to implement accommodations, with platforms such as the Job Accommodation Network. Most accommodations are not costly. In the United States, one-fifth of accommodations have no financial cost, and half cost less than a few hundred dollars. Whereas private firms are expected to cover the costs of providing reasonable accommodations, some countries also provide financial support for implementing accommodations in the public sector. To date, there are no evaluations of the effects of these measures.

- 3.50 Rather than making ex post adjustments, it is better to plan for the needs of a diverse population in the design phase of a project. Thus, while labor market intermediation or remote work programs, among others, can be adjusted to meet individual needs of workers with disabilities, it is more cost-effective to build inclusion into employment settings from the outset rather than retrofitting it. For example, websites to match talent with jobs should be digitally accessible and construction standards of workspaces, bathrooms, and shared spaces should support accessibility. Employing universal design does not eliminate the need for individual accommodations but is expected to lower overall costs for inclusion.
- 3.51 Providing adequate documentation is crucial to allowing immigrants to not only obtain good employment opportunities, but also access basic services, justice, and redress mechanisms, as well as finance and banking. Granting work permits to migrants as part of a regularization process is key to accessing basic services, including decent work, although it is a policy that can face resistance from governments for fears of political backlash. The literature on the impact on developing countries is scarce. A recent study for Colombia examined the labor market effects of granting temporary migratory status to more than 400,000 irregular Venezuelan migrants and found no significant effects on the nativeborn workers (Bahar, Ibanez and Rozo, 2020). Governments could also consider granting work permits on the grounds that allowing migrants access to the formal sector can ease the pressure on the most vulnerable native workers, who tend to be employed in the informal sector. Low-skilled workers, especially women, are more likely to be informally employed and, thus, might experience the brunt of the labor market displacement and wage declines from migration (Blyde et al., 2020). The inability of migrants to work formally can also place an additional burden on public finances because of the lost tax revenue or higher welfare benefits that need to be provided to the unemployed native-born workers.
- 3.52 Several initiatives by private organizations and civil society have been implemented around the world to reduce employment barriers faced by migrants in destination countries. When there are low barriers to entry, the gig economy brings greater labor inclusion of groups that might have otherwise been excluded, such as migrants. For instance, 39% of the LAC's "Glovers" (couriers for Glovo) were born in a country other than the one where they currently live. And according to a representative survey in 2019, among couriers from Rappi working in Colombia, 57% were born in Venezuela (Universidad del Rosario, 2019). Operation Welcome has worked in Brazil since 2018, offering Venezuelan migrants comprehensive support so that they can access basic services, including job matching. Complementing this initiative is one implemented by the organization Migraflix, which provides job matching and trains entrepreneurs, connecting them with platform-based companies. In fact, the platform economy opens work possibilities for many specific groups, particularly migrants. Several initiatives have implemented innovative tools to reduce the

barriers of access of migrants in host countries (see the Upwardly Global Organization.<sup>63</sup> "Cards Competence" 64 and the Social Self-IN-Learning Network). 65 There are several examples of regulations and good practices in host countries for cross-border labor migrants, especially from Central American countries, that facilitate the issuance of work permits. For example, there are labor agreements between Costa Rica and Nicaragua focused on supporting specific economic activities such as domestic service, primary activities and construction, among others, or with Panama, which allows the mobility of the binational Indigenous community called Ngöbe-Buglé at specific times of the year for the coffee and banana harvest in Costa Rica. Mexico has also created regulatory frameworks with Belize and Guatemala where work permits can be granted to migrant workers but are restricted to specific areas and states of the country. The EURES cooperation network in the European Union, created several decades ago to facilitate labor mobility, provides information and reduced barriers for the benefit of workers, job seekers and employers in border areas, which serves as a reference for the region. In LAC there are few mechanisms to obtain and exchange information between countries regarding cross-border workers to generate regional labor mobility strategies.

# Policies that support capacity building for specific groups

- 3.53 The adoption of ALMPs has produced mixed outcomes for women's employment. 66 Card, Kluve, and Weber (2018) find that women tend to benefit from specific types of ALMPs, particularly training programs for the long-term unemployed. In line with this, Bergemann and van der Berg (2008) find that training programs can boost women's employment in contexts where women's labor force participation is low. In contrast, in countries with high female labor force participation rates, job assistance and hiring subsidies can improve employment outcomes for women. An impact evaluation in Mexico shows that while services help unemployed men find better-paying jobs compared with other search strategies, they had no effect on women (Flores Lima, 2010; Escudero et al., 2019). In Peru, an experimental study found that labor intermediation has significant and positive effects on employment regardless of gender (Dammert, Galdo and Galdo, 2015). Evidence on whether training programs have differential gender effects is mixed. While some studies show better results for women than for men (Card, Kluve, and Weber, 2018; Attanasio et al., 2015), others have found beneficial results for men (Ibarraran et al., 2019) or have not been able to reject the hypothesis that the impacts are equal for both genders (Alzua et al., 2016).
- 3.54 Training policies can play an important role in migrants' employment inclusion. Among the policies to promote the development of migrant population capacities is Abanasi. an EU program for newly arrived refugees and asylum seekers, who often lack the skills to enter local labor markets, especially in the industrial sector.<sup>67</sup> For its part, UNINTEGRA, which is active in Spain, Greece, and Portugal, offers socio-educational, emotional, and early-stage empowerment support through the migration process.<sup>68</sup> This organization also trains professionals to understand and manage cultural integration and creates protocols for determining the academic competencies so refugees can access higher education. Finally,

63 https://www.upwardlyglobal.org/about-us/.

https://mipas.lt/en/2018/11/06/social-self-i/.

ALMPs include labor intermediation services, training, internships, public works jobs, and wage subsidies.

https://ec.europa.eu/spain/barcelona/news/un-projecte-amb-fons-europeus-desenvolupa-una-aplicaci%C3%B3m%C3%B2bil-millorar-les-condicions-de-vida es.

<sup>64</sup> https://www.myskills.de/en/.

Anabasi uses vocational guidance, civic education, and other strategies to promote integration into the labor market of asylum seekers and refugees who have newly arrived. https://ec.europa.eu/migrant-integration/intpract/anabasilabour-market-integration-in-the-industrial-sector.

CONNECTION prepares applicants for the Luxembourg labor market with a skills evaluation, career orientation, pre-employment workshops, unpaid internships, and intermediation services. <sup>69</sup> Investment in certification, validation, and accreditation of previously acquired skills is key for migrant workers, and it generates benefits for all parties. Germany's public employment service, for example, uses the IQ-Network to advise on how to recognize formally acquired qualifications, and the MySkills test to measure skills for migrants who do not have such qualifications. <sup>70</sup>

- 3.55 Young people have benefited from the region's training programs, but there is a need to experiment with longer-duration interventions such as apprenticeships. International evidence shows that youth training programs yield better results when they ensure quality of both classroom and on-the-job training, incorporate socioemotional skills training and integrate training programs for vulnerable groups into the wider lifelong training system. Experience for LAC shows that the most successful programs are ones that last longer than four months and take place during periods of rapid economic growth and low levels of unemployment (Card, Kluve, and Weber, 2018). Successful youth training programs also incorporate elements such as participation of employers in curriculum design, vocational guidance, on-the-job training, and financial incentives for service providers (González-Velosa et al., 2012; Berniell and de la Mata, 2016). Some LAC countries have started investing in apprenticeships, which are common in many developed countries, as an alternative to youth training programs. Evidence of their effectiveness is scarce, but overall evidence suggests that they can help youth improve their skills and employability, easing school-to-work transitions, increasing the probability of finding a job in the future, lowering the probability of unemployment, and shortening unemployment duration. There are mixed results regarding job turnover, the transferability of skills to other firms, and the match between skills and occupation. Evidence also suggests the need to address gender issues: apprenticeships do not appear to be as effective for women as they are for men and, in some cases, the impact on female wages appears to be negative. Among the possible reasons are that women are relegated to traditional occupations (e.g., hairstyling); and have limited access to training opportunities. While evidence from developed countries suggests that apprenticeships are a promising avenue, more rigorous evidence for LAC is required (Novella and Perez-Davila, 2017; Fazio et al., 2016; Reed et al., 2012).
- 3.56 **Providing performance incentives to service providers can increase the effectiveness of youth programs.** A systematic review of 113 impact evaluations of employment programs for vulnerable youth shows that programs that pay service providers based on results and performance are more likely to have positive impacts (Kluve et al., 2016). These programs incentivize a careful assessment of the characteristics of beneficiaries at entry, an identification of skills requirements from employers and a flexible response with differentiated services to close existing gaps (Alaimo et al., 2015, Kluve et al.; 2016).

# IV. LESSONS LEARNED FROM THE IDB GROUP'S EXPERIENCE IN THE LABOR SECTOR

4.1 The Bank contributes to the development of labor policies in the region through knowledge products, financing, and TA. This section presents lessons learned from a

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<sup>69</sup> https://www.asti.lu/connections/.

<sup>1</sup>Q-Network is a set of regional networks in Germany that offers counseling for migrants seeking credentials recognition and developing the skills necessary to attain full recognition of their foreign qualifications. Germany also has five "competence centers" at the federal level dedicated to migrant-specific concerns, where they develop training schemes and other instruments to integrate migrants into the labor market. MYSKILLS is a computerized test. It allows people without a professional qualification to identify and demonstrate their professional skills.

review of operations from the IDB, IDB Lab, and IDB Invest.<sup>71</sup> The Knowledge and Learning Division (KIC/KLD) supported the Labor Markets Division (SCL/LMK) with the analysis of a sample of 15 sovereign guaranteed operations. The operations analyzed are divided into two groups: (i) projects with an approved Project Completion Report (PCR) and (ii) projects in execution.<sup>72</sup> The main lessons learned in recent years are summarized below, based on contributions from Sector Specialists, Project Completion Reports (PCR), Monitoring Reports (PMR), Loan Proposals, Technical Notes, Impact Evaluations, OVE Evaluations and other relevant documentation.<sup>73</sup>

### A. Technical Lessons

For Challenge 1: Employment recovery and bringing people back to work

- 4.2 The region has never experienced a crisis like the COVID-19 pandemic, but previous crises have taught us that employment recovery requires a strategy that integrates several complementary policies, including: (i) supporting workers who have lost their jobs (income-support schemes, vocational orientation, labor intermediation, upskilling, and reskilling), especially those who are most affected (e.g., women and young individuals); (ii) helping companies to preserve jobs (work-sharing agreements, credit subsidies or guarantees, reduction or deferral of social security contributions or taxes); and (iii) supporting companies to create jobs (incentives, technical support for innovation, digital transformation and skills development).
- 4.3 The labor market and the fiscal agenda can be addressed simultaneously. For example, in the case of Chile, the IDB supported a policy agenda of fiscally responsible social equity that required collaboration among different stakeholders such as experts in labor markets, and social protection, and fiscal authorities. This agenda included implementation of measures to protect the income of the most vulnerable (improving employment services, increasing pensions, and reducing the cost of medicines) and improvement of the quality of spending through better evaluations of public policies.<sup>74</sup>
- 4.4 **User-centered technological platforms can be a powerful instrument to improve service delivery in the current recession**. Digital technologies can enhance the efficiency and efficacy of service delivery, and can be the basis to rapidly deploy labor market services during a crisis. <sup>75</sup> For intermediation services, operational experience underscores the importance of new data sources (e.g., big data) and labor and training-matching technologies enriched with AI. For training services, technology helps anticipate skills requirements through systems that collect and analyze information on labor market trends. <sup>76</sup> For example, in Costa Rica, the IDB Lab in collaboration with the LMK Division supported a

71 The lessons learned were phrased in a positive way but include a review of positive and negative experiences. The Bank's experience in interventions that aim to promote the development of skills is discussed in the SFD on Skills Development and is presented here only briefly.

<sup>75</sup> BH-L1037; 3787/OC-BH, ME-L1258; 4314/OC-ME, ME-L1114; 2736/OC-ME, PR-L1066; 2660/OC-PR; and ME-L1258; 4314/OC-ME.

See Table 7 for a list of operations analyzed. Operations were selected for their relevance in illustrating lessons learned concerning the four challenges covered in this SFD on the basis of the review of all LMK operations and interviews with specialists.

For detailed information about each individual lesson learned and the database used for this section please see: <u>SFD Labor Database</u> and <u>LMK Project Sheets</u>.

<sup>&</sup>lt;sup>74</sup> CH-L1149;5059/OC-CH.

This lesson learned from the previous Labor SFD, concerning the use of technology for both intermediation and training services, has been deeply taken into consideration by the IDB Group. In that regard, the Bank's action has been expanded by incorporating different technologies, such as artificial intelligence for matching job seekers and providers.

public-private partnership called Crystal Ball that uses AI and data analytics to support the unemployed people, students and workers. This project uses open-code technology to enhance skills assessment as well as an AI-enhanced algorithm to match users to existing occupations. During the COVID-19 pandemic, a pilot was launched with Coursera to create 50 learning paths to work in knowledge-intensive sectors for the benefit of 50,000 people.<sup>77</sup>

# For Challenge 2: Boosting labor productivity

- 4.5 Addressing low productivity requires a multisectoral approach. In Peru, the IDB used a PBL instrument to integrate diverse actions that address the challenge of low productivity, such as improving the quality and relevance of skills development policies, enhancing productive development policies, and reforming a taxation system that prevented the efficient allocation of productive factors. It also tackled interinstitutional coordination to execute productivity-boosting policies. The IDB's value proposition was based on crossfunctional teams with expertise from various sectors while articulating the views of the public sector.<sup>78</sup>
- 4.6 Involving the private sector in the development of skills improves the relevance of the skills developed and enhances productivity.<sup>79</sup> Even though this program is at an early stage of its implementation, the Skills Development for Global Services Program,<sup>80</sup> is already demonstrating the importance of integrating skills development interventions with a broader productivity-enhancing agenda at the sectoral level (in this case, the global services sector). During the design and the first phases of execution, the IDB deployed a multisectoral team with skills development and trade policy expertise that helped transform the global services industry. With the support of this project, Jamaica is reforming an industry perceived as a provider of low-level jobs, into a quickly evolving sector providing higher-value jobs and viable career paths to the Jamaican workforce. Additionally, it enables the country to attract investments, increase regional value chain opportunities, and boost exports of global services. The Career Pathways Framework platform, developed within the Jamaica Skills Board, establishes priority skills for industry and assists workers throughout their career transitions. Similarly, Uruquay's Global Export Services Support Program has produced a talent register for the industry and up-to-date information for the promotion of the industry.81 In Chile,82 a similar project promotes the development of the ecosystem for digital skills through the collaboration of trade (INT), skills development (LMK), and innovation specialists (CTI). The project works with training providers to update skills content and training methods (i.e., boot camps). It also supports firms on their digital transformation processes.
- 4.7 Competitive funding for skills development can lead to private sector leadership in the design of training programs, ensuring the relevance of the curricula. The IDB's

This lesson learned builds on the lessons learned from the previous Labor SFD, with respect to ensuring the involvement of the private sector in skills development, as well as supporting improvement in the quality of the skills development services through quality assurance mechanisms. In the last five years, the IDB Group has expanded on this issue, supporting sectorial skills councils, and supporting the development of certification-based training systems. A lesson learned from previous projects is that it is important to work at the sector level, since many times national projects that involve multiple sectors at the same time can be problematic in reaching the expected results in terms of involvement of the private sector and therefore, relevance of the skills training provision.

<sup>&</sup>lt;sup>77</sup> CR-T1174; ATN/ME-16673-CR.

<sup>&</sup>lt;sup>78</sup> PE-L1223; 4714/OC-PE.

<sup>80</sup> JA-L1079; 4645/OC-JA.

<sup>81</sup> CH-L1138; 4362/OC-CH; ME-L1114; 2736/OC-ME, JA-L1079; 4645/OC-JA, ME-L1258; 4314/OC-ME PE-L1152; 3547; OC-PE; BH-L1037; 3787/OC-BH; and CR-T1174.

<sup>82</sup> CH-L1138; 4362/OC-CH

operational experience with the Barbados Competency-based Training Fund, the Trinidad and Tobago Global Services Skills Initiative, and Peru's Ministry of Education indicates that bidding processes in which employers compete for resources to fund skill development projects are an efficient way to ensure an alignment between training contents and skills needed by employers. Some lessons arising from the operations' implementation are as follows: (i) technical support when employers prepare proposals may be required to expand the pool of applicants; (ii) promoting partnerships between employers and training providers in the preparation of proposals is key; and (iii) financing criteria should ensure allocation to skill development projects that have positive social externalities and minimize the allocation of public resources to training projects with no additionality (i.e., deadweight losses in which the training would have occurred even without the public funding).

- Reforming a skills development system benefits from a governance structure with a high-level mandate that can align the efforts of multiple stakeholders. The Bank's operational experience shows that when high-level authorities from different sectors commit to reforms and leadership, they can transform skills development institutions and promote sector reforms by aligning the efforts of all stakeholders.83 In Chile, the Board of Education and Labor drafted a constitution that allows the integration of educational and training learning paths as well as the generation of a common qualifications framework. In Uruquay, the Governing Council was structured so that it could articulate the goals of all institutions and actors in the education system, which is key for decision making and for adopting innovative tools by different stakeholders.84
- By providing financing to private sector educational institutions, IDB Invest can foster competition and indirectly catalyze systemic improvements in a country's educational offerings. For example, lessons learned from IDB Invest's support of a private university in Costa Rica showed that the private sector is in a good position to understand the needs of the labor market and offer training programs designed to fill such needs in a timely way (particularly with respect to STEM and technology based disciplines), thus complementing public education offerings. Furthermore, support to private sector institutions should be focused on those committed to delivering quality services.

For Challenge 3: Achieving adequate, sustainable, and equitable social insurance systems

4.10 Design and implementation of social insurance reforms require three key ingredients: high-level leadership to coordinate all stakeholders, clear definition of reform objectives, and a strong communication strategy. Over the past five years, the IDBG has participated in pension reform processes supported by technical cooperation in Peru, Colombia, Mexico, Chile, El Salvador, Paraguay, and Brazil<sup>85</sup> with important lessons: (i) High-level leadership is a necessary but not sufficient condition to push through pension reforms; (ii) It is key to clarify and make explicit the reform objectives and make this the center of discussion; and (iii) Governments find it difficult to communicate a compelling case for pension reform, so investing in strong communication strategies, with effective spokespeople, well-studied audiences, and smart use of mainstream and social media is

Lesson from the Sector Skills Framework Document.

<sup>84</sup> PR-L1066; 2660/OC-PR, BH-L1037; 3787/OC-BH, CH-L1095; 3539/OC-CH, BO-L1051; 2365/BL-BO, CH-L1138; 4362/OC-CH, PE-L1152; 3547/OC-PE, UR-L1060; 2590/OC-UR, AR-T1099; ATN/AT-13767-AR and JA-L1079;

RG-M1277; ATN/ME-15065-RG, PE-T1366; ATN/OC-16162-PE, CO-T1474; ATN/OC-16824-CO, DR-T1098; ATN/OC-14616-DR, PR-T1144; ATN/OC-14162-PR, PR-T1265; ATN/OC-17375-PR, ES-T1199; ATN/OC-14802-ES and ES-T1244; ATN/OC-15675-ES.

- essential. In various cases, the lessons outlined are drawn from unsuccessful reform processes, such as pension reforms in Colombia, Peru and Chile.
- 4.11 Strengthening the capacity to formulate and implement social insurance policies, and the efficient management of the pension system, are key elements for pension reform and implementation. The IDBG experience highlights the importance of: (i) strengthening pension systems' legal frameworks, operational aspects, and monitoring and information systems; (ii) improving the management of contributory and noncontributory benefits through greater integration, efficiency, and transparency of information systems; and (iii) systemic training of civil servants in management and supervisory institutions.
- 4.12 Developing a voluntary savings pillar for retirement—a crucial element to ensure the future level of pensions and the inclusion of low-income groups—requires institutional leadership to overcome market failures and regulatory and technological barriers. The Retirement Savings Lab<sup>86</sup> provides an implementation guide for universal voluntary savings. First, the creation of a favorable regulatory environment that makes voluntary savings easy and accessible is essential. To achieve this, restrictions to savings should be minimized, the implementation of automatic savings mechanisms should be allowed, and investments in financial education should be promoted. Second, a long-term savings product that responds to the reality and needs of many workers in the region should be designed: for example, one that incorporates liquidity elements that give people in emergency situations partial access to their savings. Third, reaching more citizens by leveraging technology is essential.
- 4.13 An integrated labor information system within and across labor and social insurance institutions improves the coverage, cost-effectiveness, and speed of deployment of interventions. The use of technology and the interoperability of databases strengthen the capacity to monitor and evaluate the quality and efficiency of the services provided. In Mexico, interinstitutional agreements to gather labor market data enabled the monitoring and evaluation of labor market policies. Interventions should plan data construction in logical sequences, from an early stage, to ensure that information can be integrated, and beneficiaries can be tracked (e.g., to verify the formality of job placements). To this end, it is recommended to: (i) develop databases that integrate information and are interoperable; and (ii) ensure that quality information is being recorded to avoid delays in operation and to allow the use of information in a timely manner.

For Challenge 4: Reducing barriers of specific groups to attain and sustain good employment opportunities

4.14 Attention to those with particular needs requires specific lines of action to modify practices that reproduce inequities and biases. We highlight the following good practices collected from the IDBG's experience, to exemplify that there is no silver bullet action for all disadvantaged groups but rather a very specific set of actions for individual groups (in the following examples, migrants, women and persons with disabilities). First, experience in Colombia shows that labor competency certifications are promising tools for the labor inclusion of migrants who need validation and recognition of their skills in the host country. This strategy, however, requires that benefits of certification are widely disseminated and that the liquidity constraints faced by immigrants are addressed. Second, in Jamaica, competitive funds can become policy tools that promote gender action in response to the Gender Imbalance Report, which provides key information on industry gender gaps. Finally,

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<sup>&</sup>lt;sup>86</sup> RG-M1277;ATN/ME-15065-RG.

inclusion of people with disabilities can be incentivized through public recognition, as in the awards provided in Colombia to public and private employment service providers that have high rates of job placement of persons with disabilities.87

- 4.15 Barriers faced by vulnerable groups to access and fully participate in labor market programs should be identified, and, addressed by PES and private actors who may have a broader and deeper impact on vulnerable populations. Detecting the factors that hinder the participation in labor intermediation and training programs of particular groups and incorporating these considerations in the design of the intervention (e.g., introducing childcare support measures with a view to promoting female participation) are crucial.88 It is recommended that: (i) labor intermediation services be complemented by ALMPs tailored to the characteristics and needs of beneficiaries to address obstacles to their labor market insertion; (ii) countries set special and appropriate performance targets for vulnerable groups; and (iii) labor intermediation and training services must be one-stop shops that serve the needs of beneficiaries and guide users to the correct services, modulating the intensity of the support in accordance with users' needs.89 The IDBG's actions underscore the importance of strengthening the role of employment counselors, improving their capacity to provide labor orientation- which must be tailored to the profile of job seekers-and understanding business dynamics. For that, programs should promote better profiling schemes, 90 using databases and AIL tools. Implicit biases and explicit discriminatory practices must be audited. Finally, skills development programs should have a deep understanding of the needs of the target population, be linked to labor intermediation services, and develop pilots in certain modalities and with certain economic sectors, to assess the best intervention mechanisms, and later consolidate design and execution.91
- 4.16 Results-based financing in employment programs can increase the quality of service delivery, public-private collaboration, and the accountability of government interventions targeted to vulnerable populations. The recent experience with Social Impact Bonds in Colombia has been quite transformative: (i) it has promoted a change from traditional payment schemes in which the government pays for a predetermined set of training services to providers, regardless of the outcome; (ii) it has compelled the adoption of information systems to monitor employment, formality and wage outcomes; (iii) it has mobilized funding from private investors willing to invest in social programs and assume operational risks; and (iv) it has given service providers the ability to innovate and tailor interventions to beneficiary needs, which is especially relevant for vulnerable populations. There is, however, an important challenge; the design, implementation and evaluation costs can be large and specific expertise is required. The creation of outcome funds, in which transaction costs are spread throughout different projects, can help reduce costs, as shown by the United Kingdom's experience. In line with this, the Colombian government with the

ME-L1004; 1936/OC-ME; CO-L1250; 4934/OC-CO; and JA-L1079; 4645/OC-JA.

The IDBG has learned that intermediation systems should be individualized to the targeted population, because the evidence shows that programs designed specifically to improve the employability of certain population groups yield better results than generic programs.

Profiling systems ensure better targeting of services, so that beneficiaries may receive the most suitable service

to access employment through an appropriate channel, in a cost-effective way.

<sup>88</sup> This lesson learned builds on the lessons learned identified in the previous Labor SFD.

BO-T1256; ATN/OC-15615-BO, BO-T1310; ATN/OC-16703-BO, AR-L1302; 4648/OC-AR, RG-T2607; ATN/OC-15038-RG, PR-L1066; 2660/OC-PR, BO-L1121; 3822/BL-BO, BO-L1051; 2365/BL-BO, BH-L1037; 3787/OC-BH, and ME-L1258; 4314/OC-ME.

support of the IDBLab and IDB, has launched an *Outcomes Fund* to finance employment projects for vulnerable population.<sup>92</sup>

4.17 Bootcamps could be a good tool for inclusion of specific groups, providing them with relevant skills in a short period of time. In LAC, bootcamps have a limited presence, although some vendors are offering their online courses in the region. IDB Lab pioneered funding Laboratoria in 2015, a high-impact bootcamp where low-income women may access better paid jobs in technology. In 2019, IDB Lab, in partnership with CTI and the IDB's Social Sector, launched the Bootcamps Challenge for Technology Fans, to identify and offer funding for the best ready-to-work bootcamps. In Brazil, Reprograma is piloting a high-impact online coding bootcamp modality and developing an online hiring platform for potential employers.<sup>93</sup> The project aims to allow vulnerable women, especially black and transgender women throughout Brazil, to have access to training and job opportunities as programmers.

# B. Cross-cutting and operational lessons

- 4.18 Institutional strengthening Interventions benefit from change management analysis and strategies developed during the design phase. Operational experience highlights the relevance of designing strategies that allow for gradual organizational change, developing pilots in certain modalities or economic sectors, identifying the best intervention mechanisms, and adjusting the institutional design accordingly. In Jamaica, the Skills Development for Global Services program highlights the importance of implementing change management and communication strategies to mitigate the risk of resistance to the activities envisaged in the reforms. In the design phase, it is best to consider the country's political economy and incorporate short-term products and results into the results matrix in order to ensure that long-term reforms are undertaken by key actors. Visibility of early benefits in the implementation of policies is especially key in countries with limited experience in implementing structural reforms.<sup>94</sup> When implementing digital solutions, it is key to accompany the implementation of new processes and systems with a change management strategy that allows staff to participate in the design and understand the benefits of its implementation.
- 4.19 Technical cooperation programs are key to supporting a constant dialogue with the authorities, building roadmaps that mitigate political risks, and providing the technical base for a successful intervention. Operational experience highlights the need to build trust with strategic partners and key people in ministries of labor, social security, and/or planning and at the highest levels, providing technical support on a continuous and strategic basis to ensure the implementation of operations during phases of change. For this purpose, technical cooperation programs are crucial. They allow piloting practices that can generate demonstrative effects for longer-term support, assist during the loan's preparation phase, and provide attentive follow-up to countries during project implementation (as in the case of Mexico). In the Dominican Republic, Chile, Colombia, Peru and the Bahamas, among other countries, loan operations originated after several

<sup>&</sup>lt;sup>92</sup> CO-T1434.

<sup>93</sup> BR-T1458; ME-18300-BR.

<sup>94</sup> CH-L1064; 2793/OC-CH, BO-L1051; 2365/BL-BO; CH-L1135; 4098/OC-CH, PE-L1152; 3547/OC-PE, and ME-L1289; 5026/OC-ME.

<sup>&</sup>lt;sup>95</sup> BH-L1037; 3787/OC-BH, CO-L1250; 4934/OC-CO, CH-L1064; 2793/OC-CH, ME-L1289; 5026/OC-MR, and CH-L1135; 4098/OC-CH.

- years of technical support to labor market programs, knowledge generation, and sectoral dialogue.<sup>96</sup>
- 4.20 The main lessons of promoting the digital transformation of labor market and social security institutions include: (i) the importance of having a general architecture of the institution so that all associated internal processes are considered when upgrading software and hardware; and (ii) the importance of having a regulatory framework on the use and protection of data, which guarantees the ethical use of the information for which a ministry is custodian while ensuring that the processes do not allow biases.<sup>97</sup>

# V. LINES of Action for the IDB Group's Work in THE Labor Sector

5.1 This SFD proposes that LAC countries focus on recovering pre-pandemic employment levels in the region with the overarching objective to create good employment opportunities for all. Based on the diagnosis presented in Section II, on the review of the evidence in Section III, and on lessons outlined in Section IV, four lines of action are proposed for countries and as a reference for the work of the IDBG, which should be adapted to the reality of each country. The lines of action proposed below should be consistent with those stipulated in others SFDs, in case there are overlaps, with the understanding that many of the challenges of the labor market must be addressed in a comprehensive and intersectoral manner.

# A. Action Line 1: Interventions to accelerate the recovery of employment and bring people back to work

Mitigation policies will still be a substantial part of the policy response after the pandemic. Given the impact of COVID-19 on the labor markets in the region, the IDB Group will support countries in the implementation of mitigation policies to help firms maintain or create jobs and reduce the impact of the recession on workers and their families. Policies to maintain the productive capacity of firms include providing liquidity as well as wage subsidies, and labor arrangements such as STW that minimize the impact on employment. For displaced workers, policies should include income support in the form of transfers, orientation, or intermediation services, as well as substantial investments in their upskilling and reskilling. It is likely that mitigation measures will remain for the foreseeable future or that they will have to be activated and deactivated through different infection waves. In the short term, it is also key to safely reopen schools and daycare centers, as their closure prevents many people, especially women, from returning to the labor market. The IDB Group will support countries establishing both critical roadmaps to return to face to face modalities, and mechanisms to ensure quality in the provision of education and care services. The IDB Group will also support preparing individuals to work in the platform economy, wherein the IDB Lab will have an important role supporting both the public and the private sectors in designing worker-tech services to complement public policies, and help independent workers cover risks.

<sup>97</sup> For example, an AI that does not consider an applicant's gender when analyzing her candidacy for a certain vacancy.

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<sup>96</sup> RG-T2611; ATN/KP-15014-RG; BH-T1035; ATN/OC-14040-BH and BH-T1021; ATN/OC-12597-BH, CH-T1152; ATN/OC-14632-CH, and CH-T1179; ATN/OC-15898-CH.

<sup>98</sup> The links between the review of the evidence in Section III, the lessons outlined in Section IV and the lines of action can be found in table 8.

<sup>&</sup>lt;sup>99</sup> Any IDB operation that pursues these action lines will be prepared and implemented in accordance with IDB's Environmental and Social Safeguard Policies.

- 5.3 Countries will have to shift from mitigation policies to full recovery efforts that address the key bottlenecks to create good jobs. The IDB Group will support countries to promote an ambitious agenda for employment recovery and job creation in the region, building on the policy response to the pandemic. Much of the response of countries to the pandemic has been by aid to workers and families through transfers, but now it is necessary to leverage those instruments to implement programs and investments that are of sufficient scale to accelerate aggregate economic recovery. On the worker side, an important effort should be dedicated to upskilling and reskilling newly unemployed and discouraged workers to get them back to work, taking into consideration specific actions for women to help develop skills necessary to access good employment opportunities. 100 These reskilling efforts should focus on high-return investments such as job readiness training as well as digital and soft skills. They should aim for employment stability by fostering technological upskilling of employees in companies to adapt to the "new normal." For firms, liquidity provision should be combined with a coordinated strategy of technical assistance for innovation and digital transformation, as well as the reskilling and adaptation of their labor force through workplace training and improving managerial practices. IDB Invest will support firms to help enable specific actions aimed at attracting, retaining and developing talent with an emphasis on promoting women and diversity, closing salary gaps and promoting greater participation of women in leadership positions.
- Knowledge gaps. The economic shock generated by the pandemic and the different policy responses by governments around the region have created an opportunity to learn about firm and worker responses in multiple dimensions, from labor supply decisions at both the individual and the household level, to decisions within a firm. An important part of the labor force has been required to telework, with unknown consequences for productivity, formality, and quality of work. Research should focus on understanding which policies and tools are more effective to support both workers and firms to recover and create employment, especially in contexts of high informality and reduced fiscal space. Research should also help understand specific actions to support the recovery of employment for youth and women, two groups highly affected by the pandemic. Beyond the gender analysis that needs to be done, research should also focus on the consequences of intrahousehold allocation of tasks and long-term labor market outcomes of the pandemic.
- B. Action line 2: Multi-sectoral approaches to increase productivity growth and ensure that gains are shared equitably
- 5.5 The key to the creation of good employment opportunities in the long run is the implementation of an ambitious productivity agenda in the region. The IDB Group will support countries in developing solutions to foster productivity growth in the long run, an essential precondition to reduce structural poverty. Key actions will include the following: (i) facilitating high-level multi-stakeholder dialogues for greater productivity, better and more efficient service delivery and the creation of good employment opportunities; (ii) implementing public-private partnerships and strategies for productivity growth that combine labor demand-side interventions (such as industry development<sup>101</sup>, infrastructure,

It is also important to use administrative records of cash transfer programs rolled out during the pandemic. These records could be employed to combine transfers with large scale reskilling programs, particularly for vulnerable populations, but also for middle class workers who have become recipients of these transfers.

Specific actions aimed at improving the skills set of the labor force are covered in depth in the skills SFD (Bos and Rucci, 2020). This SFD argues that enhancing productivity will imply complementing those actions with other labor supply and labor demand policies in addition to substantive labor and tax reforms.

investment attraction, TA to firms, better management practices, support for technology adoption, business environment regulatory reforms, research and development incentives, trade policy, labor reforms) with labor supply-side interventions (such as skills development, intermediation services, geographic mobility support, information on job opportunities), and/or protection/compensation to those who stand to lose from productivity-enhancing reforms in a context of decarbonization and energy transformation; and (iii) supporting structural changes in tax laws, labor regulations and social insurance systems, strengthening labor market institutions and creating an environment that facilitates productivity growth and the formalization of the economy.

- 5.6 This productivity agenda requires modern institutions that provide guidance for firms and workers on how to undertake skills upgrading of the labor force in LAC. The productivity agenda should have a strong focus on institutional strengthening activities. The IDB Group will support countries engaged in developing modern institutions that provide quidance to workers, firms and governments on labor market orientation and intermediation policies, upskilling and reskilling of the labor force in new business niches, strategies to eradicate workplace harassment, and programs that focus on meeting the needs of the most disadvantaged groups in a context of increased digitalization and post-covid normality. Priorities to modernize labor market institutions include: (i) the design or strengthening of services for jobseekers<sup>102</sup> and firms; (ii) the design of Al-based tools to assign services and provide personalized, differential attention to job seekers; (iii) implementation of a Labor Market Information System that uses big data as well as traditional information to anticipate labor market needs, and guides individuals to new tasks, occupations, and sectors, including those arising from a green transition; (iv) support education and training in institutions that implement curricula and learning approaches aligned with labor market demands and help mitigate climate change vulnerability; and (v) promotion of an efficient allocation of resources and mobilization of private investments through results-based financing.
- 5.7 **Knowledge gaps.** First, there is limited knowledge, particularly for LAC, about the right combination of supply- and demand-side policies to increase productivity and create good jobs. The scarce evidence available suggests the existence of strong policy complementarities, but more evaluations in the region of different policy packages in the region are needed, particularly regarding the type of technology innovation/adoption that will be best suited to promote the creation of good jobs given the endowments of LAC countries. Furthermore, more research is needed to understand the impact of investments in robotics and AI on productivity and labor market outcomes in developing countries. These evaluations should also identify potential differential effects by gender and across disadvantaged groups. Second, there is little knowledge of the extent to which reskilling and upskilling efforts in the region can be undertaken for large segments of the labor force and regarding the general equilibrium effects on productivity, employment, and wages of such efforts, particularly in a context of decarbonization and energy transformation. Third, there is very little evidence on the impact of the new forms of employment (such as telework and platform work and other forms of on-demand employment) on productivity and overall

Establish tools that are user-centered to articulate the support to people who have lost their job during the pandemic. These tools should be able to connect the unemployed with services such as labor market orientation, intermediation, upskilling and reskilling, and income support policies. It is important to support student enrollment and continuation in education and training institutions by enabling access to credit. It is also key to evaluate innovative ALMPs that support the unemployed and underemployed getting back to work or enhance their income opportunities, training them in the skills demanded by the productive sector and facilitating their transition to emerging sectors. Special attention should be provided to the groups that are being most affected by the crisis

(women, youth).

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- growth. Lastly, further research is needed to understand the set of institutions and tools that could be implemented to ensure an equitable distribution of productivity gains in a context of both low unionization rates and high informality.
- C. Action line 3: Actions to achieve adequate, equitable, and sustainable social insurance
- 5.8 The pandemic has shown the need for substantive reforms of social insurance systems in the region. These reforms are politically and technically complex, but countries should promote high-level technical and political dialogues for the design of a new generation of social insurance systems, labor laws and regulations, including the support of commissions or other instruments to generate consensus for reforms. It is important to note that creating the appropriate social dialogue between workers, firms and government is crucial to embarking on these complex reforms.
- 5.9 Increasing the coverage of social insurance will require the redesign of how workers access protection against risks, as well as policies to boost formalization. The IDB Group will support countries engaged in implementing strategies to improve the coverage of key social insurance programs, by: (i) delinking part of the social insurance from the employment condition; (ii) increasing the mandate of social insurance to ensure all workers (not only salaried workers) are included; (iii) finding complementary sources of financing, in addition to, or instead of, employers' and workers' contributions; (iv) integrating contributory and non-contributory benefits; and (v) strengthening the enforcement of contributions.
- 5.10 Key social insurance programs, such as unemployment insurance and pension systems, need reform to ensure their sustainability and equity. The IDB Group will support countries engaged in adapting and improving social insurance programs by: (i) deploying instruments to achieve more efficient, equitable and sustainable contributory and noncontributory unemployment and pension systems (such as equity enhancing parametric reforms, mechanisms to redistribute risks throughout one's life to include those who cannot enjoy stable labor market trajectories (in many cases, women who leave work to take care of small children), 103 automatic adjustment mechanisms and modern voluntary pillars); (ii) implementing parametric and efficiency-enhancing reforms and improving the overall performance of contribution-defined pension systems, lowering commissions and fees for unemployment insurance and pension administrators; (iii) improving the design of UI and its integration with ALMPs; and (iv) building knowledge to overcome the limitations that enable pension funds to invest in high returns, environmentally friendly assets.
- 5.11 Strengthening social insurance institutions is key for reform and future sustainability. It is important for countries in LAC to strengthen the capacity of social insurance institutions, so that they are able to provide relevant information to firms, workers and governments, enforce the payment of mandated contributions, and prepare for reform. The IDB Group will support countries to modernize social insurance institutions by: (i) strengthening the availability of online services to participants; (ii) enhancing operational management processes and the organizational structure of social insurance institutions; (iii) improving social security information and management systems; (iv) improving the institutional capacity to adapt to long-run trends, such as demographic developments or the transition

<sup>103</sup> These include, among other redistributive tools, care credits, which can be both transfers from the state and recognition of periods of time as if they had contributed, as well as minimum benefits for all those who reach retirement age.

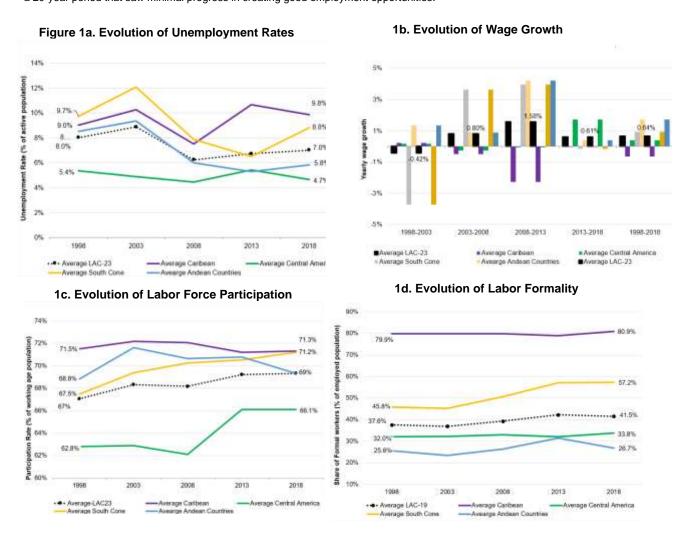
- to a green economy; (v) making social insurance systems more accountable; and (vi) promoting the implementation of evidence-based policies.
- 5.12 Knowledge gaps. First, an area that requires further knowledge development is how to implement and finance universal social insurance systems in high informality contexts, assessing the economic impact and the effects on informality of different financing sources. Second, although there is an understanding about the policies that are conducive to creating formal jobs, more research is needed to know the quantitative impact of key formalization policies, such as reduction in labor costs, increased enforcement and changes in tax and labor legislation, as well as the impacts on aggregate outcomes such as tax revenues, overall social insurance sustainability and productivity. A number of programs subsidizing formal employment implemented during the pandemic could provide further evidence of the effects of such policies. Third, research is needed on how to fully integrate traditionally excluded types of employment such as rural workers, self-employed and domestic workers, as well as new forms of employment such as platform and on-demand workers into social insurance systems. Fourth, further research is needed to understand how these policies impact gender equity of social insurance. Finally, research is needed to assess the political economy of social insurance reform, paying special attention to the identification of processes that are more conducive to successful reforms and policy implementation.
  - D. Action line 4: Strategies to promote a more inclusive labor market
- 5.13 Expanding the opportunities of women in the labor market requires addressing key constraints that limit their participation. The IDB Group will support countries engaged in promoting legislation that: (i) provides flexible work arrangements for both men and women that can have equalizing effects on the future of work; (ii) provides and encourages greater parity between maternity and paternity leave; (iii) expands and promotes childcare and long-term care facilities for older adults, as well as community programs, to facilitate female employment, provided that these facilities or services are good quality, affordable, and cost-effective; (iv) pilots and evaluates flexible work arrangements; (v) assesses the potential of digital platforms to include women in productive labor market opportunities; and (vi) assists companies with their human capital strategies to attract and retain the best talent with a focus on diversity and inclusion.
- 5.14 Countries should promote policies that advance reasonable accommodations in the workplace to promote the inclusion of persons with disabilities. The IDB Group will support countries engaged in promoting legislation and enforcing already-approved legislation regarding reasonable accommodations for persons with disabilities. These range from accessibility in workspaces and vocational classrooms to accessibility in digital employment services. Accessibility should be complemented with training of co-workers and front-line staff in employment services. Employment portals and services should have universal access. In general, policies should aim at inclusion; all job opportunities and training programs should be accessible to persons with disabilities, avoiding segregation into lesser quality services and jobs.
- 5.15 Countries need to provide migrants with the resources they need to exercise their full potential in the recipient country. The IDB Group will support countries engaged in an agenda to support migrants in achieving their full potential in the host country. To achieve this, it is important to provide quality information about labor market opportunities and career orientation; to evaluate and certify skills; and to connect with local businesses through pre-employment workshops, paid and unpaid internships, intermediation services, and, most importantly, certification, validation, and accreditation of previously acquired skills. It

- is also essential to work with employers to ease the restrictions they face in hiring migrant workers. ALMPs for migrants will often need to be complemented with broader social and psychological services for family groups to facilitate integration and inclusion.
- 5.16 Knowledge gaps. First, all research outlined in previous sections should have a gender perspective if they are to be a useful guide to formulating policies and programs that integrate gender equality in the labor market. Second, more data is needed about excluded groups, particularly for specific groups that are still not represented in national statistics (e.g., the LGBTQ+ community). Third, there is also a need to better understand how policies can help improve labor market outcomes for specific groups. To that end policy innovations should include rigorous impact evaluations. These evaluations should try to analyze the extent to which the differences in outcomes that we observe in the labor market are a product of unequal initial conditions, social norms, or discriminatory behavior, as well as understanding the potential unintended consequences of implementing policies to curb discrimination particularly for persons with disabilities, Afro-descendants, Indigenous peoples and the LGBTQ+ community, where research is scarce. Fourth, regarding crossborder labor migrants, there is a need for more information on the profile of migrants and the development of regulations to improve job matching in key economic sectors. An additional need for Latin America and the Caribbean is establishing mechanisms to obtain and exchange information between countries regarding cross-border workers to generate regional labor mobility strategies.

## **ANNEX: FIGURES AND TABLES**

Figure 1. Labor Market Indicators in LAC, 1998-2018

**Key message**: The progress in the first decade of the twenty-first century came to a halt well before the arrival of COVID-19, ending a 20-year period that saw minimal progress in creating good employment opportunities.



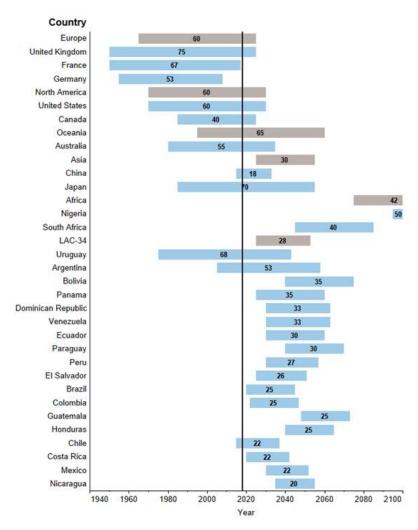
Note: Unemployment rate is the percentage resulting from dividing the number of unemployed people by the number of economically active individuals (labor force). Yearly wage growth uses average hourly wages in PPP dollars of 2011. Participation rate: percentage resulting from dividing the employed population by the working age population. Formality rate: percentage resulting from dividing the number of employed workers contributing to social security by the employed population. Table 1 details the list of countries included in LAC-23, LAC-20, and LAC-19. See Table 2 for data on individual countries.

Source: Labor Markets and Social Security Information System (SIMS).

Figure 2. Aging in LAC

Key message: The region's population is aging faster than the rest of the world and by 2085 it will be the oldest region in the planet.

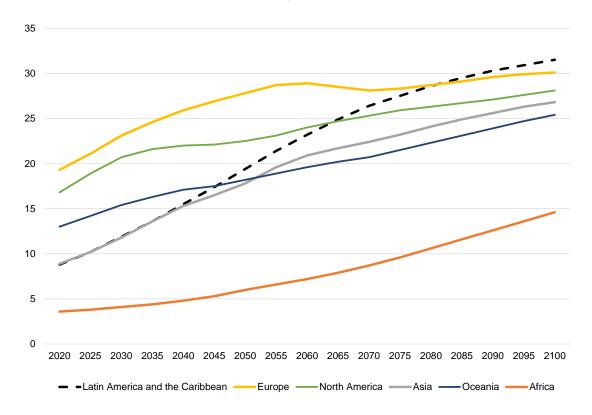
# 2a. Number of Years Required for people over 65 years old to increase from comprising 10% to 20% of the total population



*Note*: This Gant graph was built using the difference (in years) between the first year when the share of people 65 and older in each country reached or is expected to reach 10% of the total population, and the first year when this age group comprised or is expected to comprise 20% of the total population.

Source: based on data from the United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Prospects 2019, custom data acquired from website.

# 2b. Proportion of people aged 65+ in the total population



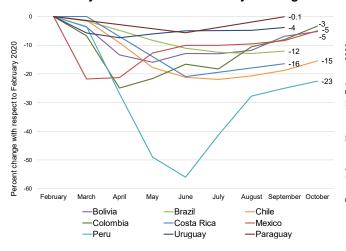
*Note*: For their respective UN regions (Sustainable Development Goals regions), each line represents the share of the population comprised by the age group of people 65 years and older.

Source: based on data from the United Nations, Department of Economic and Social Affairs, Population Division (2019).

# Figure 3. COVID-19 impact on formal and overall employment

**Key message:** COVID-19 has destroyed employment like no other crisis before, and affected disproportionally women and younger workers, exposing the vulnerabilities of LAC labor markets, and threatening to undo the gains made on poverty and inequality over the past two decades.

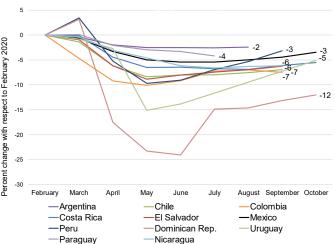
#### 3a. Total jobs loss between February and August



*Note*: Data comes from household surveys. February 2020 is taken as the baseline. Jobs loss is calculated as the percentage of difference in total employment for each month in comparison with the employment level observed in February.

Source: Observatorio Laboral COVID-19.

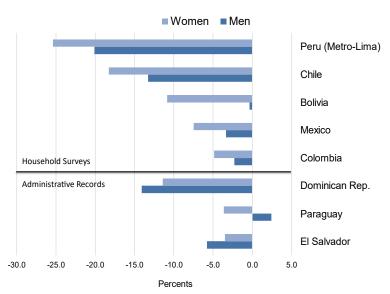
#### 3b. Formal jobs loss between February and August



Note: Data comes from administrative records. February 2020 is taken as the baseline. Job loss is calculated as the percentage of difference in formal employment for each month in comparison with the formal employment level observed in February. Formal employment refers to work for which contributions to social security are made. Data for Peru only includes Metropolitan Lima.

Source: Observatorio Laboral COVID-19.

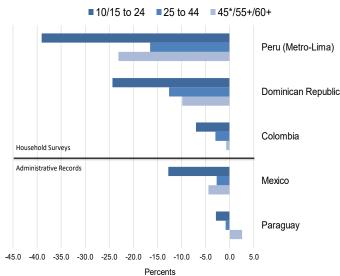
# 3c. Jobs lost between February and September 2020 (By gender)



*Note*: Data comes from household surveys and administrative records. February 2020 is taken as the baseline. Jobs loss is calculated as the percentage difference in total employment for each month in comparison with the employment level observed in February.

Source: Observatorio Laboral COVID-19.

# 3d. Jobs lost between February and September 2020 (By age groups)

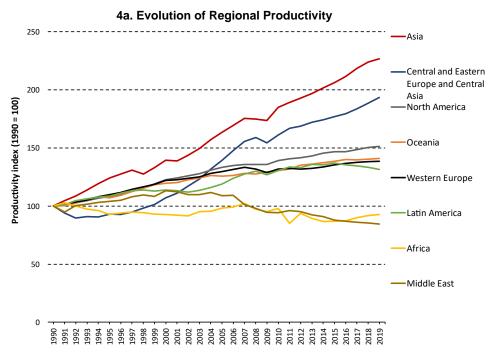


Note: Data comes from household surveys and administrative records. February 2020 is taken as the baseline. Jobs loss is calculated as the percentage difference in total employment for each month in comparison with the employment level observed in February. Data for Peru only includes Metropolitan Lima.\*Peru's highest age group refers to people 45 and older; Paraguay's to 60 and older.

Source: Observatorio Laboral COVID-19.

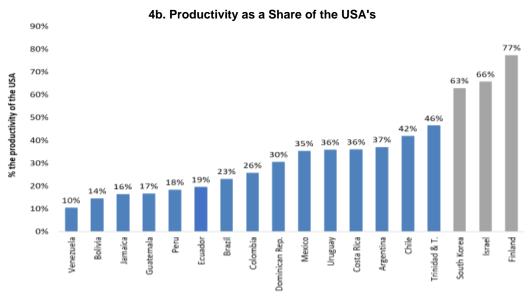
Figure 4. Productivity growth

**Key message**: Over the past 30 years labor productivity for most countries has grown at a scant pace, around 1% a year. Currently, it takes almost four LAC workers to produce what a U.S. worker can produce in a year.



Note: The index is built using labor productivity per person employed in dollars of 2019.

Source: based on data from the Conference Board.

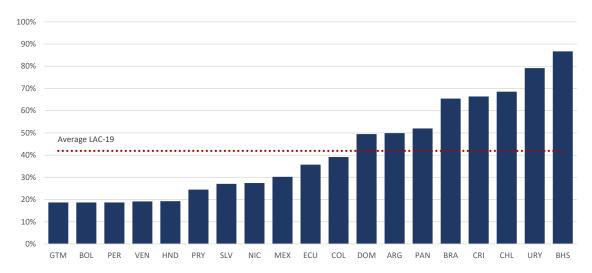


*Note*: Labor productivity denotes output per person employed in dollars in 2019. This figure displays productivity levels as a share of US workers productivity levels.

Source: based on data from the Conference Board.

Figure 5. Formal jobs across countries

**Key message:** Fewer than half of workers in the region are formally employed. In 2018, 42% of employment in the region was formal, although with large differences among countries.

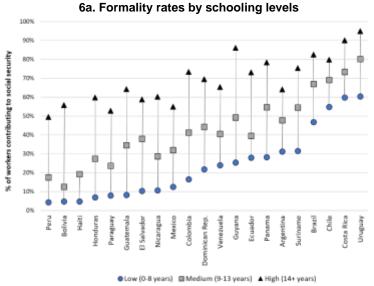


Note: Formality rates are calculated as the percentage resulting from dividing the number of employed workers who contribute to oldage social security national schemes by the employed population.

Source: Labor Markets and Social Security Information System (SIMS).

Figure 6. Differences in formality rates across income levels and occupation

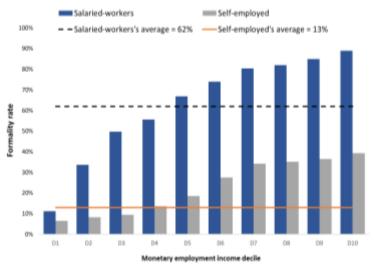
Key message: Large disparities exist in access to the protection of formal employment across educational levels and occupation.



*Note*: Formality rates are calculated as the percentage resulting from dividing the number of employed workers who contribute to the old-age social security national schemes by the employed population. Schooling levels are estimated using a continuous years of schooling variable harmonized across countries.

Source: Labor Markets and Social Security Information System (SIMS).



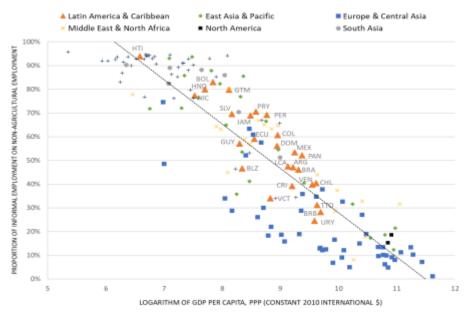


*Note*: Formality rates are calculated as the percentage resulting from dividing the number of employed workers who contribute to the old-age social security national schemes by the employed population. Income deciles use all compensantions derived from or related to remunerated work.

Source: IDB based on household surveys in each country circa 2018.

Figure 7. Formality in LAC compared to the rest of the world

**Key message:** Formality is intimately related to productivity and development. At the same time, the design of social insurance and policy matters. On average, LAC countries are 5 pp more informal than they should be, according to the level of development.

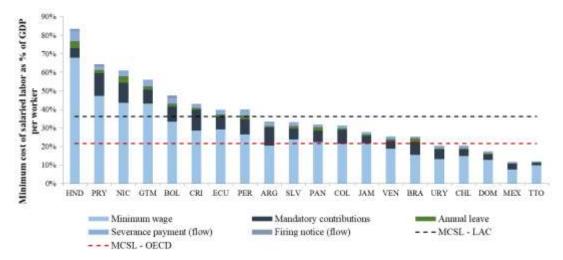


Note: Informal employment denotes work for which workers and employees do not contribute to social security systems. Data uses most recently available records for each country. The dotted line illustrates a simple linear regression depicting the relationship between informality and per capita GDP.

Source: Based on Loayza (2017), with data from the World Development Indicators (WDI).

## Figure 8. Minimum cost of salaried labor

**Key message:** The cost of social insurance plus the implicit cost of labor laws and regulations make formal labor expensive (relative to productivity), which reduces incentives for firms to hire formal workers. On average, minimum wages plus the contribution for pensions, health insurance, and unemployment insurance amount to 36% of GDP per worker vis-à-vis 22% of GDP in OECD countries.

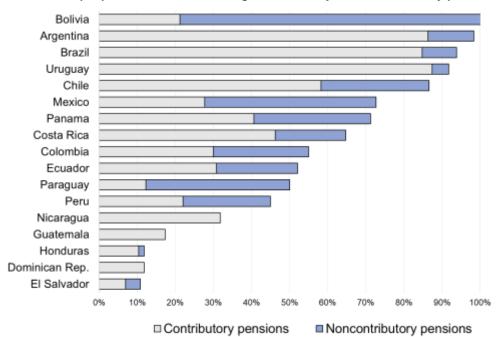


*Note*: Authors relied on OECD-Stat and OECD's 2019 Employment Protection Legislation (EPL) collection for OECD countries (excluding Latin American member countries). Both estimates assume workers have an average tenure of four years. OECD's average does not include Nordic countries for which there is no national minimum wage regulation. The Conference Board is the source for GPD per worker data. The average for both regions excludes bonus payments (13<sup>th</sup> month or *Aguinaldo*).

Source: based on Alaimo et al. (2017), with more recent data from the Labor Markets and Social Security Information System (SIMS) and OECD-Stat.

Figure 9. Pension parameters in LAC vs. OECD

**Key message:** Traditional, public, defined-benefit systems are generous per international standards and generate large fiscal imbalances, skewing social spending toward the rich and the old, at the expense of the poor and the young.

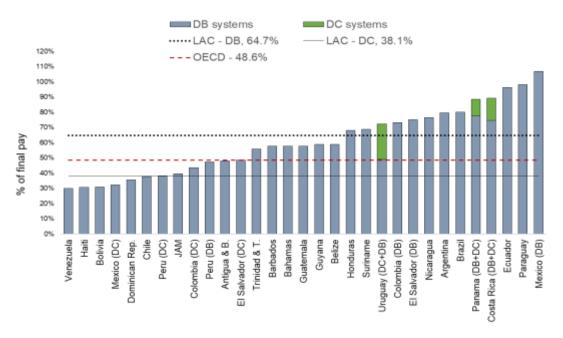


9a. Share of people 65 and older receiving a contributory or noncontributory pension

*Note*: Percentage resulting from dividing the number of people aged 65 or more who declared receiving an old-age pension benefit from a contributory or a non-contributory scheme by the population aged 65 or more.

Source: IDB-SCL, harmonized household surveys, circa 2019.

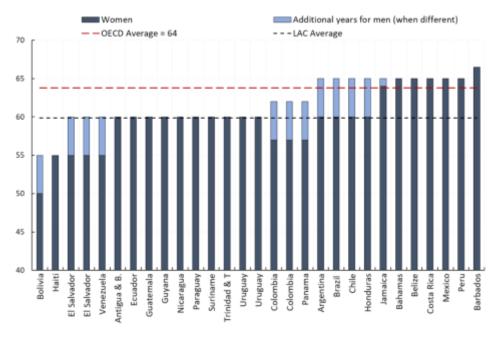
#### 9b. Gross replacement rates



Note: For Latin America, each point represents theoretical replacement rates for workers with full formal careers, retiring with the pension rules of 2015, after working without interruption since age 20 and retiring at each system's minimum legal retirement age. For DC systems, the returns to investments is an annual real rate of 3,5% with an annuity rate of 2%. For individuals earning the average formal wage, simple average across men and women is noted. OECD average excludes Latin American member countries.

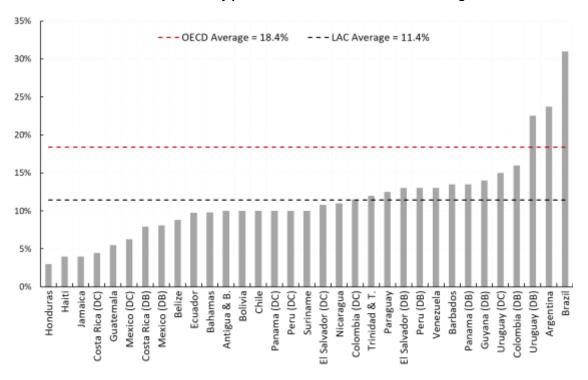
Source: Altamirano et al., 2018 and Pensions at a Glance, 2019. DC stands for Defined Contribution systems, DB for Defined Benefits.

#### 9c. Legal minimum retirement ages for public social security systems in Latin America and the Caribbean



*Note*: We assumed individuals that retire in 2019. OECD average excludes Latin American and the Caribbean member countries. *Source*: SSA, Social Security Programs Throughout the World: The Americas, 2019; Pensions at a Glance 2019. Altamirano et al., 2018.

## 9d. Mandatory pension contribution rates for the average worker



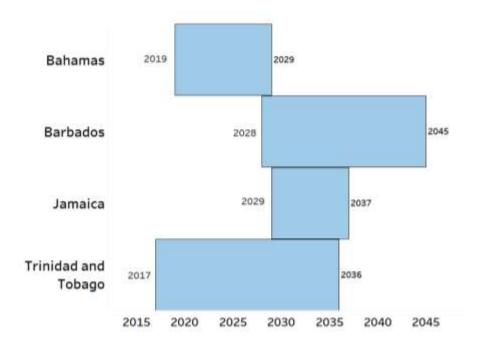
Note: DC stands for Defined Contribution systems, DB for Defined Benefits. In defined contribution systems the contribution rate corresponds to capitalizable contributions. For the most part, these rates also finance disability/ invalidity and survivor's pensions. OECD average excludes Latin American member countries.

 $Source: SSA, Social Security \ Programs \ Throughout \ the \ World: The \ Americas, 2019; \ Pensions \ at \ a \ Glance \ 2019. \ Altamirano \ et \ al., 2018.$ 

Figure 10. Depletion of pension reserves for Caribbean countries

**Key message:** Caribbean countries are facing acute aging processes that will significantly stress their defined benefit pension systems; contribution rates required to balance the systems would be between 30 and 40% of wages.

## Date span from each system's first deficit year to the year of total depletion of pension funds

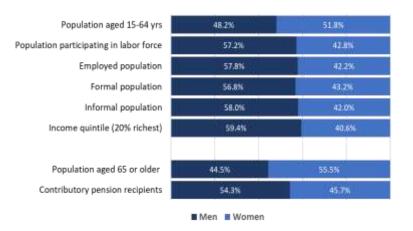


*Note*: These scenarios assume no future changes in each respective pension regime. For each rectangle, the left border represents the first year pensions payments are larger than pension contributions, and the right border is the year when reserves will be depleted and pension payments will need an additional source of funding.

Source: PLAC-Network based on public official actuarial studies.

Figure 11. LAC: Labor Market Outcomes, by Gender (circa 2019)

**Key message:** There are notable differences in outputs such as labor force participation, employment, unemployment, and formality rates, as well as in pay across groups of people with different personal characteristics (e.g., ethnicity, gender, disability status or sexual orientation and gender identity).



Note: Estimation based on 19 LAC countries including Argentina, Bahamas, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, Paraguay, El Salvador, Uruguay and Venezuela. The calculation of contributions of pension recipients excluded Argentina, Brazil and Uruguay because it is not possible to differentiate between types of pension.

Source: Authors, based on data from the Labor Markets and Social Security Information System (SIMS).

Figure 12. Earning differentials by groups

Key message: There are significant earning gaps between women, persons with disabilities, ethnic groups, and the rest of the population.

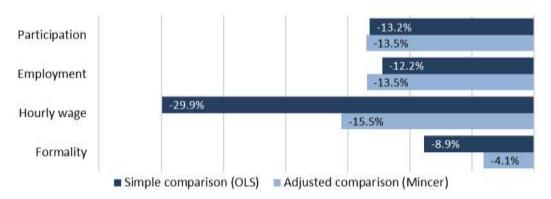
# Participation -26.2% -26.7% Employment -26.0% -26.5% Hourly wage -17.8% -7.4% -3.6% Simple comparison (OLS) Adjusted comparison (Mincer)

12a. Gender differences for selected labor markets indicators

Note: Estimations based on 18 LAC countries including Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, Paraguay, El Salvador, Uruguay and Venezuela.

Source: Authors' estimates.





Note : Estimations based on four LAC countries including Bolivia, Chile, Costa Rica and Mexico.

Source: Authors' estimates.

#### 12c. Ethnic differences for selected labor markets indicators

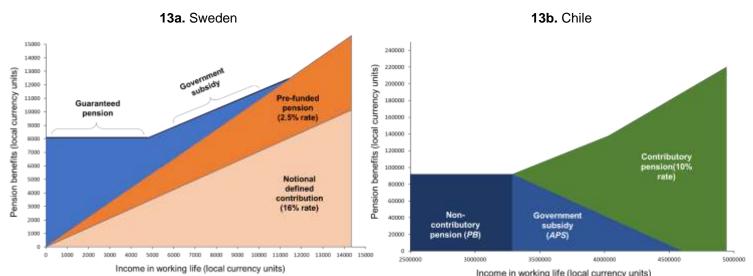


Note: Estimations based on 8 LAC countries including Bolivia, Brazil, Chile, Ecuador, Guatemala, Panama, Peru and Uruguay. Participation and employment is estimated over population aged 15-64 years old. Formality and hourly wage are estimated over employed (employee and self-employed) population aged 15-64 years old. The unconditional gaps (simple comparisons or OLS) denote the mean difference in log-wages. The conditional gaps are the result of a linear regression using a Mincer specification with years of education and experience as explanatory variables. The reference groups are female workers (vs. male workers), workers with disabilities (vs. workers without disabilities), and workers who indicated ethnic affiliation (vs. otherwise).

Source: Authors' estimates.

# Figure 13. The integration of pension pillars

**Key message:** It is important to adequately integrate noncontributory programs with contributory programs to provide adequate coverage and avoid disincentives to formality or savings. For instance, in the area of pensions, the gold standard in the design of noncontributory and solidarity pillars is a universal or semi universal anti-poverty subsidized benefit.



Income in working life (local currency units)

Note: Both income levels and pension benefits are expressed in local currency units, and convey the values and design structures that characterize an average worker/pensioner (based on available sources).

Source: Authors based on SSA, Social Security Programs Throughout the World: The Americas, 2019; Pensions at a Glance 2019, and Altamirano et al., 2018.

Table 1. List of countries included in groups LAC-23, LAC-20, and LAC-19

ISO 3166-1 alpha-3 country codes	LAC-23	LAC-20	LAC-19
ARG	Argentina	Argentina	Argentina
BHS	Bahamas	Bahamas	Bahamas
BLZ	Belize		
BOL	Bolivia	Bolivia	Bolivia
BRA	Brazil	Brazil	Brazil
BRB	Barbados	Barbados	
CHL	Chile	Chile	Chile
COL	Colombia	Colombia	Colombia
CRI	Costa Rica	Costa Rica	Costa Rica
DOM	Dominican Republic	Dominican Republic	Dominican Republic
ECU	Ecuador	Ecuador	Ecuador
GTM	Guatemala	Guatemala	Guatemala
HND	Honduras	Honduras	Honduras
JAM	Jamaica		
MEX	Mexico	Mexico	Mexico
NIC	Nicaragua	Nicaragua	Nicaragua
PAN	Panama	Panama	Panama
PER	Peru	Peru	Peru
PRY	Paraguay	Paraguay	Paraguay
SLV	El Salvador	El Salvador	El Salvador
TTO	Trinidad and Tobago	Trinidad and Tobago	
URY	Uruguay	Uruguay	Uruguay
VEN	Venezuela		Venezuela

Source: International Organization for Standardization (ISO).

Table 2. Labor market indicators in LAC, 1998-2018

i. Evolution of unemployment rates					
Country	1998	2003	2008	2013	2018
Argentina	13%	15%	8%	7%	9%
Bahamas	7%	11%	8%	16%	15%
Belize	10%	10%	7%	9%	9%
Bolivia	5%	4%	3%	3%	4%
Brazil	9%	10%	7%	7%	12%
Barbados	9%	8%	7%	11%	9%
Chile	10%	10%	10%	7%	8%
Colombia	12%	15%	12%	10%	10%
Costa Rica	6%	7%	5%	9%	8%
Dominican Rep.	16%	8%	5%	7%	7%
Ecuador	9%	6%	4%	3%	3%
Guatemala	1%	2%	3%	2%	2%
Honduras	3%	5%	4%	6%	3%
Jamaica	10%	16%	12%	15%	14%
México	3%	4%	5%	5%	3%
Nicaragua	3%	4%	6%	5%	5%
Panamá	11%	12%	5%	4%	6%
Perú	6%	5%	5%	4%	4%
Paraguay	7%	8%	6%	5%	6%
El Salvador	6%	5%	4%	4%	4%
Trinidad & Tobago	9%	7%	3%	3%	2%
Uruguay	10%	17%	8%	7%	9%
Venezuela	11%	17%	7%	7%	9%
Average-LAC23	8%	9%	6%	7%	7%

Source: Labor Markets and Social Security Information System (SIMS). Unemployment rate: percentage that results from dividing the total unemployed people and the economically active population (labor force).

Table 2. Labor market indicators in LAC, 1998-2018, continued

ii. Evolution of wage growth						
Country	1998-2003	2003-2008	2008-2013	2013-2018	1998-2018	
ARG	-7%	7%	3%	-1%	0%	
BHS	0%	0%	0%	0%	0%	
BOL	6%	-4%	6%	0%	2%	
BRA	-2%	3%	6%	-1%	1%	
BRB	0%	-2%	-3%	0%	-2%	
CHL	1%	5%	3%	-2%	2%	
COL	0%	4%	2%	0%	2%	
CRI	1%	0%	3%	1%	1%	
DOM	-4%	-1%	-1%	3%	-1%	
ECU	0%	3%	4%	0%	2%	
GTM	5%	-2%	-2%	-2%	0%	
HND	3%	-1%	-2%	-1%	0%	
MEX	3%	0%	-1%	1%	1%	
NIC	-2%	3%	-1%	4%	1%	
PAN	-2%	0%	4%	4%	1%	
PER	-1%	2%	4%	1%	2%	
PRY	-4%	0%	4%	1%	0%	
SLV	0%	-2%	1%	2%	0%	
Average-LAC20	-0.42%	0.80%	1.58%	0.61%	0.64%	

Source: Labor Markets and Social Security Information System (SIMS). Yearly wage growth uses average hourly wages in PPP dollars of 2011.

Table 2. Labor market indicators in LAC, 1998-2018, continued

iii. Evolution of labor force participation					
Country	1998	2003	2008	2013	2018
Argentina	64%	69%	68%	67%	69%
Bahamas	82%	82%	81%	78%	80%
Belize	60%	63%	60%	61%	61%
Bolivia	73%	74%	73%	71%	70%
Brazil	71%	72%	74%	71%	70%
Barbados	78%	79%	78%	78%	77%
Chile	60%	62%	62%	64%	67%
Colombia	66%	72%	68%	74%	74%
Costa Rica	64%	64%	65%	66%	65%
Dominican Rep.	65%	60%	61%	63%	69%
Ecuador	67%	68%	68%	65%	69%
Guatemala	63%	62%	54%	58%	62%
Honduras	64%	63%	61%	65%	67%
Jamaica	74%	73%	72%	69%	69%
México	63%	64%	65%	67%	69%
Nicaragua	58%	64%	64%	81%	68%
Panamá	64%	65%	68%	67%	72%
Perú	70%	71%	75%	75%	75%
Paraguay	69%	71%	73%	74%	75%
El Salvador	63%	63%	64%	64%	62%
Trinidad & Tobago	63%	65%	69%	69%	69%
Uruguay	73%	72%	75%	76%	74%
Venezuela	68%	72%	68%	68%	60%
Average-LAC20	67%	68%	68%	69%	69%

Source: Labor Markets and Social Security Information System (SIMS). Participation rate: Percentage that results from dividing the employed population and the working age population.

Table 2. Labor market indicators in LAC, 1998-2018, continued

iv. Evolution of labor formality						
Country	1998	2003	2008	2013	2018	
Argentina	45%	38%	49%	52%	50%	
Bahamas	80%	80%	80%	79%	81%	
Bolivia	13%	12%	13%	22%	20%	
Brazil	47%	49%	55%	63%	64%	
Chile	65%	64%	64%	71%	70%	
Colombia	28%	34%	34%	35%	39%	
Costa Rica	65%	62%	68%	72%	72%	
Dominican Rep.	37%	37%	34%	35%	43%	
Ecuador	33%	26%	29%	45%	38%	
Guatemala	20%	21%	21%	20%	20%	
Honduras	19%	19%	21%	17%	17%	
México	34%	37%	35%	33%	32%	
Nicaragua	18%	19%	20%	19%	23%	
Panamá	53%	53%	51%	56%	52%	
Perú	15%	14%	16%	21%	22%	
Paraguay	14%	13%	17%	23%	24%	
El Salvador	31%	31%	32%	30%	29%	
Uruguay	58%	62%	69%	77%	77%	
Venezuela	38%	32%	40%	34%	15%	
Average-LAC19	38%	37%	39%	42%	42%	

Source: Labor Markets and Social Security Information System (SIMS). Formality rate: percentage that results from dividing the number of employed workers contributing to social security by the employed population.

Table 3. Assessment of the Evidence

Paragraph	Statement	Papers cited			Region	Assessment of the evidence
		D	IE	M	-	
3.2	Emergency social assistance programs introduced by LAC countries to sustain the income of informal workers and their families during shelter-in-place orders to contain COVID19 have had limited effectiveness	1			LAC countries	Some evidence, but more research needed for LAC
3.3	Experience from developed economies as well as for the region shows that short-time work (STW) schemes are especially helpful in the face of temporary shocks	1	6		Developed countries and LAC countries	Some evidence, but more research needed for LAC
3.4	Temporary work programs can help mitigate the effects of the shock and can act as unemployment insurance to informal workers, but they are unlikely to increase long run employability		5	1	Developed countries and LAC countries	Relative strong evidence for LAC
3.5	Hiring incentives can be effective measures to promote the recovery of employment; however, blanket subsides could be a very expensive policy tool	1	6		Developed countries and LAC countries	Some evidence, but more research needed for LAC
3.6	The platform-based economy could create quick and flexible employment opportunities during the recovery			3	LAC countries	Some evidence, but more research needed for LAC
3.7	PES play a key role in bringing the unemployed back to work and helping firms find the right talent		6	1	Developed countries and LAC countries	Relative strong evidence for LAC
3.8	Training programs to upskill and reskill the population could also help relocate workers to growing occupations	3	2	1	Developed countries and LAC countries	Relative strong evidence for LAC
3.11	Combining skills-development interventions with demand-side interventions, such as TA or extension services, multiplies their impact on productivity and employment	1	4	3	Developed and and Developing countries including LAC	Relative strong evidence for LAC
3.12	Skills-development programs are also essential in the transition to a green and climate-resilient economy with low greenhouse gas (GHG) emissions and reduced vulnerability to climate change and shocks	1			Developed and and Developing countries including LAC	Some evidence, but more research needed for LAC

Paragraph	Statement		Pape cited		Region	Assessment of the evidence	
		D	IE	М	-		
3.13	The adoption of better, more efficient technologies and innovation adapted to the comparative advantages of LAC endowments will be a key driver of productivity. But countries seeking to speed up their adoption need to pay attention to potential deleterious effects on employment and inequality		1		Developed countries	Some evidence, but more research needed for LAC	
3.14	The introduction of ICTs and other digital technologies increases productivity and employment but may increase inequality.	2	5	1	Developed and and Developing countries including LAC	Some evidence, but more research needed for LAC	
3.15	Investments in robotics enhance productivity, but analyses of the impact of their introduction shows adverse effects on employment	8	4		Developed and and Developing countries including LAC	Some evidence, but more research needed for LAC	
3.16	Increasing technology adoption in LAC requires helping firms overcome market failures, and liquidity constraints and closing knowledge gaps		5		Developed and and Developing countries including LAC	Some evidence, but more research needed for LAC	
3.17	Technology adaption and enhanced agricultural productivity is key to improving working conditions in rural areas		7		LAC countries	Relative strong evidence for LAC	
3.18	Policies that affect the regulatory environment of firms and workers can also have large effects on productivity	1	4	1	Developed and and Developing countries including LAC	Some evidence, but more research needed for LAC	
3.19	Policies aimed at making credit available to firms can help increase output, employment, and productivity			1	LAC countries	Some evidence, but more research needed for LAC	
3.20	International trade, integration and the reallocation of global value chains could present opportunities for LAC to boost productivity, but also require reskilling of the labor force to reallocate workers across sectors and occupations	2			LAC countries	Some evidence, but more research needed for LAC	
3.21	Mechanisms that increase the bargaining power of workers can improve working conditions without necessarily causing employment declines in the labor market	1	3	1	Developed countries and LAC countries	Some evidence, but more research needed for LAC	

Paragraph	Statement	Papers cited				Assessment of the evidence
		D	IE	М	-	
3.22	Evidence exists from LAC that the prudent use of the minimum wage, particularly in countries with low minimum wages, can lead to lower levels of inequality	1	3	1	Developing countries including LAC	Relative strong evidence for LAC
3.24	Countries with universal coverage in health and anti-poverty pensions have delinked (completely or in part) the benefits from formal employment	1	1		Developed countries and LAC countries	Some evidence, but more research needed for LAC
3.25	Shrinking the set of benefits linked to employment would allow for lower payroll contributions, which in turn, could increase the share of formal employment, but new sources of financing will be required to compensate for the decline in revenues		7	1	Developing countries including LAC	Some evidence, but more research needed for LAC
3.26	Expanding the mandate of social insurance beyond salaried workers (including self-employed, domestic workers, and the growing cohort of gig-economy workers) is a key policy to increasing the coverage of social insurance	1	2		LAC countries	Some evidence, but more research needed for LAC
3.27	Increasing enforcement is necessary to achieve high levels of coverage of the social insurance system	1	6	1	Developed countries and LAC countries	Relative strong evidence for LAC
3.30	Well-integrated instruments that protect workers against the risk of unemployment can improve coverage of unemployment risks for formal workers	3	1		Developed and LAC countries	Some evidence, but more research needed for LAC
3.31	A more structural way to cover unemployment risks caused by an aggregate shock (like a pandemic or a natural disaster) is to build sovereign funds that are activated to finance mitigation and reactivation policies	1			LAC countries	Some evidence, but more research needed for LAC
3.32	There is a need to think innovatively about solutions to protect workers/jobs from idiosyncratic shocks caused by rapid obsolescence due to automation and technological changes, changes in trade patterns, the transition to a green economy, and/or the advent of a task-based economy. Innovationative instruments can include ALMP, UBIs, and mechanisms to make social security more resilient to external shocks.	2	2	1	Developed and and Developing countries including LAC	Some evidence, but more research needed for LAC
3.34	Social Security parameter in traditional defined-benefit systems need to be revised periodically to maintain sustainability	3			Developed and LAC countries	Relative strong evidence for LAC

Paragraph	agraph Statement Papers cited				Region	Assessment of the evidence	
		D	IE	M	-		
3.35	Fiscal sustainability can be improved in tandem with improving equity by mitigating the regressive features of the pension system and focusing subsidies at the bottom part of the income distribution	2			Developed and LAC countries	Relative strong evidence for LAC	
3.36	Systems based on individual savings will also require reforms to generate adequate pensions in the short and long run	2			Developed and LAC countries	Relative strong evidence for LAC	
3.37	Behavioral economics has some promising innovative strategies to increase coverage for self-employed workers and voluntary contributions	2	4		Developed and LAC countries	Relatively strong evidence for LAC	
3.38	Countries with pension systems with built-in adjustment mechanisms are better prepared to gradually adapt their systems to demographic changes, although those institutions may fail without social consensus and proper communication	1			Developed countries	No evidence for LAC	
3.40	Women, persons with disabilities, Afro-descendants, Indigenous peoples, and LGBTQ+ individuals have been affected by barriers to participate in the labor market and to enjoy a positive employment trajectory	1			LAC countries	Some evidence, but more research needed for LAC	
3.41	Wage subsidy programs have small, short-term impacts that generally increase in the medium and long terms, and the effects are greater for women	1	9	3	Developed and and Developing countries including LAC	Relatively strong evidence for LAC	
3.42	There is little evidence of the impact of quotas to increase racial and ethnic diversity in the region	1	1		LAC countries	Some evidence, but more research needed for LAC	
3.43	There is evidence that employment quotas result in firms employing a higher percentage of persons with disabilities, but the direct effects on employment occur due to changes within the existing workforce rather than new employment of persons with disabilities	1	5		Developed and LAC countries	Some evidence, but more research needed for LAC	
3.44	When well designed, temporary labor migration programs can be a way to cover labor shortages while creating economic benefits for destination countries and migrants alike	4			Developed countries	No evidence for LAC	
3.46	Parental leave policies allow women to better balance work and family responsibilities and increase women's likelihood of returning to the workforce	6	8		Developed and and Developing countries including LAC	Relatively strong evidence for LAC	

Paragraph	Statement	Papers cited			Region	Assessment of the evidence
		D	IE	M		
3.47	Flexible labor agreements can help promote female employment	1	6		Developed and LAC countries	Some evidence, but more research needed for LAC
3.48	Provisions for childcare generally have a positive impact on female labor force participation	1	2		Developed and LAC countries	Some evidence, but more research needed for LAC
3.51	Providing adequate documentation is crucial to allow immigrants not only to obtain good employment opportunities, but also to access basic services, justice, and redress mechanisms, as well as access to finance and banking	1	1		LAC countries	Some evidence, but more research needed for LAC
3.52	When there are low barriers to entry, the gig economy has brought greater labor inclusion of groups that might have otherwise been excluded, like migrants	1			Developed and LAC countries	Some evidence, but more research needed for LAC
3.53	The adoption of ALMPs has produced mixed outcomes for women's employment. ALMPs boost women's employment in contexts where women's labor force participation is low, with stronger effects for skillstraining programs	1	4	2	Developed and LAC countries	Relatively strong evidence for LAC
3.55	Young people have benefited from the region's training programs, but there is a need to experiment with longer-duration programs like apprenticeships	3	2	2	Developed and LAC countries	Some evidence, but more research needed for LAC
3.56	Providing performance incentives to service providers can increase the effectiveness of youth programs	1		1	Developed and and Developing countries including LAC	Some evidence, but more research needed for LAC

Note: D= Descriptive evidence, IE=Impact Evaluation, M=Meta-analysis.

Table 4. Estimated Annual Reduction in Tax Revenue through elimination of Health Contributions (% GDP)

Country	% GDP
Argentina	1.5%
Bolivia	1.6%
Brazil	0.0%
Chile	1.1%
Colombia	0.5%
Costa Rica	3.5%
Dominican Republic	1.0%
Ecuador	0.7%
El Salvador	0.7%
Guatemala	0.7%
Honduras	1.5%
Mexico	0.9%
Panama	0.0%
Paraguay	1.2%
Peru	1.5%
Uruguay	1.9%
Venezuela	0.0%
LAC	1.1%

Note: Estimate is based on Alaimo et al. (2017) using the average payroll from the Labor Markets and Social Security Information System (SIMS) for Latin American Countries.

Source: Authors.

Table 5. Estimated Annual Increase in contributions from formalizing workers earning at or above the minimum age (% GDP)

Country	% GDP
Argentina	1.0%
Bolivia	2.6%
Brazil	1.6%
Chile	0.4%
Colombia	0.8%
Costa Rica	0.1%
Ecuador	0.6%
El Salvador	1.4%
Guatemala	0.4%
Honduras	0.2%
Mexico	0.6%
Nicaragua	1.6%
Panama	0.5%
Paraguay	1.2%
Peru	1.3%
Uruguay	0.4%
LAC	0.9%

Note: Only salaried and independent workers earning at least a monthly legal minimum wage were included. The average mandatory contribution rate was used for all workers, disregarding their occupational category or income level.

Source: Authors.

Table 6. Estimated Annual Cost of an Universal Basic Income (UBI) Transfer to All Citizens (% GDP)

	Pover	Poverty lines				
Country	\$1.9 per person per day	\$3.2 per person per day				
Antigua and Barbuda	4%	7%				
Argentina	6%	10%				
Bahamas	2%	3%				
Barbados	4%	6%				
Belize	15%	25%				
Bolivia	20%	34%				
Brazil	8%	13%				
Chile	4%	7%				
Colombia	11%	18%				
Costa Rica	6%	10%				
Dominican Rep.	9%	15%				
Ecuador	11%	19%				
El Salvador	17%	29%				
Guatemala	16%	27%				
Guyana	10%	18%				
Haiti	29%	48%				
Honduras	29%	49%				
Jamaica	13%	22%				
Mexico	7%	12%				
Nicaragua	35%	59%				
Panama	5%	8%				
Paraguay	12%	20%				
Peru	10%	17%				
Suriname	5%	8%				
Trinidad and Tobago	4%	6%				
Uruguay	4%	7%				
LAC	11%	19%				

*Note*: This calculation assumes every citizen would receive a monetary transfer corresponding to the respective poverty line during one year, without regards to their socioeconomic status or age.

Source: Authors based on United Nations population estimates for 2020; and GDP, exchange rates and poverty lines published in the World Development Indicators database.

**Table 7. Operations Analyzed** 

Sovereign Guaranteed Loans		
Name	Number	Stage
Programa de Apoyo al Empleo para Joóvenes y Adultos	BO-L1051	Approved PCR
Programa Multifase de Apoyo a la Capacitación y al Empleo (PACE)- Fase III	ME-L1114	Approved PCR
Programa de Apoyo a la efectividad del SENCE	CH-L1064	Approved PCR
Aptitutes para el Trabajo Actual y Futuro en las Bahamas	BH-L1037	Execution
Programa de Apoyo al Empleo II	BO-L1121	Execution
Modelo Intercultural de Inserción Laboral para Jóvenes Indígenas de El Alto	BO-M1064	Execution
Programa para Fortalecer Políticas de Empleo	CO-L1250	Execution
Programa de Apoyo al Sistema Nacional de Empleo	DR-L1036	Execution
Programa de Desarrollo de Competencias para la Prestación de Servicios Globales	JA-L1079	Execution
Programa de Apoyo a la Capacitación y al Empleo Fase II	ME-L1004	Execution
Programa de Formación de Recursos Humanos (Proforhcom)	ME-L1142	Execution
Fortalecimiento de la gestión de las políticas de promoción al empleo	ME-L1258	Execution
Mejoramiento y Ampliación de los Servicios del Centro de Empleo para la Inserción	PE-L1152	Execution
Programa de Apoyo a la Inserción Laboral	PR-L1066	Execution
Fortalecimiento Institucional de los Sistemas de Pensiones a cargo del Ministerio de Hacienda	PR-L1158	Execution
Non-Sovereign Guaranteed Operations		
IDB Lab Operations	T	T
La Bola de Cristal para los Trabajos del Futuro en Costa Rica	CR-T1174	Execution
Reprogramar el Sector Tecnológico: Inclusión de Mujeres Negras y Trans mediante la Educación en Línea	BR-T1458	Approved
Financiamiento de Pago por Resultados para Innovaciones en el Desarrolo de la Fuerza Laboral Urbana	CO-T1434	Execution
Inclusive Pension Savings	RG-M1277	Execution
IDB Invest		
Texas Tech University Costa Rica Campus Building	12274-01	Execution

Table 8 . Evidence of Lines of Action for the IDB Group's Work in the Labor Sector

Line of action	International Evidence	Laccomalicannt					
Line of action	International Evidence (Paragraphs)	Lessons Learnt					
Action Line 1: Interventions to accelerate the recovery of employment and bring the unemployed back to work:							
Mitigation policies will still be a substantial part of the policy response after the pandemic.	3.3 and 3.4	4.2					
Countries will have to shift from mitigation policies to full recovery efforts that address the key bottlenecks to create good jobs.	3.5, 3.6, 3.7 and 3.8	4.3 and 4.4					
Action Line 2: Multisectoral approaches to equitably:	increase productivity growth and ens	ure that gains are shared					
The key to the creation of good employment opportunities in the long run is the implementation of an ambitious productivity agenda in the region	3.9, 3.11, 3.12, 3.16, 3.18, 3.19 and 3.22	4.5, 4.6 and 4.17					
This productivity agenda requires modern institutions that provide guidance for firms and workers on how to undertake skills upgrading of the labor force in LAC	3.10 and Skills SFD	4.7, 4.8 and 4.9					
Action Line 3: Actions to achieve adequate	e, equitable, and sustainable social ins	urance:					
The pandemic has shown the need for substantive reforms of social insurance systems in the region	3.23	4.10					
Increasing the coverage of social insurance will require the redesigning of how workers access protection against risks, as well as policies to boost formalization.	3.24, 3.25, 3.26, 3.27 and 3.28	4.12					
Key social insurance programs, such as unemployment insurance and pension systems, need reform to ensure their sustainability and equity.	3.30, 3.33, 3.34, 3.35 and 3.36	4.11					
Strengthening social insurance institutions is key for reform and future sustainability.	3.38 and 3.39	4.13					
Action Line 4: Strategies to promote a mo	re inclusive labor market:						
Expanding the opportunities of women in the labor market requires addressing key contraints that limit their participation.	3.41, 3.46, 3.47, 3.48, and 3.59	4.2, 4.7, 4.14, 4.15, and 4.16					
Countries should promote policies that advance reasonable accommodations in the workplace to promote the inclusion of persons with disabilities.	3.43 and 3.49	4.14, 4.15, and 4.16					
Countries need to provide migrants with the resources they need to exercise their full potential in the recipient country.	3.44, 3.45, 3.51, 3.52, and 3.54	4.14, 4.15, and 4.16					

## BIBLIOGRAPHIC REFERENCES

- Acemoglu, D., 2019. It's good jobs, stupid. EfIP Policy Brief 13. Economics for Inclusive Prosperity.
- Acemoglu, D. and Autor, D., 2011. Skills, tasks and technologies: Implications for employment and earnings. *Handbook of Labor Economics* 4:1043–1171.
- Acemoglu, D. and Restrepo, P., 2018. Demographics and automation (No. w24421). National Bureau of Economic Research.
- Acemoglu, D., and Restrepo, P., 2019. Automation and new tasks: How technology displaces and reinstates labor. Journal of Economic Perspectives 33(2): 3–30.
- Acemoglu, D., and Restrepo, P., 2020. Robots and jobs: Evidence from U.S. labor markets. Journal of Political Economy 128 (6): 2188–2244.
- Acevedo, I., Castellani, F., Flores, I., Lotti, G., & Székely, M. (2020). Social effect of Covid-19: Estimates and alternatives for Latin America and the Caribbean. *Latin American Economic Review*, 29, 1-44.
- Addati, L., Cattaneo, U, Esquivel, V. and Valarino I., 2018. Care Work and Care Jobs for the Future of Decent Work. Geneva: International Labour Organization.
- Aguerrevere, G.; Amaral, N.; Bentata, C.; Rucci, G. 2020. Desarrollo de habilidades para el mercado laboral en el contexto de la COVID-19. Washington, DC: Inter-American Development Bank.
- Akgunduz, Y. E., and Plantenga, J., 2013. Labour market effects of parental leave in Europe. *Cambridge Journal of Economics*, 37 (4), 845-862.
- Alaimo, V., Bosch, M., Kaplan, D., Pagés, C. and Ripani, L., 2015. *Jobs for Growth.* Washington, DC: Inter-American Development Bank.
- Alaimo, V., Bosch, M., Gualavisí, M. and Villa, J.M., 2017. Measuring the cost of salaried labor in Latin America and the Caribbean. *Technical Note 1291*. Inter-American Development Bank, Washington, DC.
- Alaimo, V., Chaves, M.N. and Soler, N., 2019. El futuro del trabajo en América Latina y el Caribe: ¿Cómo garantizar los derechos de los trabajadores en la era digital?. (versión interactiva) Inter-American Development Bank, Washington, DC.
- Alfaro, L., Calvo, G., De la Torre, A., De Gregorio, J., Fernandez, R. B., Guidotti, P., Leme, P., Mendoza, E., Rojas-Suarez, L. and Velasco, A., 2020. The COVID-19 Attack on Latin America: Proposals for an Effective Response. *Comité Latinoamericano de Asuntos Financieros CLAAF Statement*, No. 43.
- Almeida, R., and Carneiro, P., 2012. Enforcement of labor regulation and informality. *American Economic Journal*: Applied Economics, 43, 64-89.
- Alon, T. M., Doepke, M., Olmstead-Rumsey, J. and Tertilt, M., 2020. The impact of COVID-19 on gender equality. *CRC TR 224 Discussion Paper Series*. University of Bonn and University of Mannheim.

- Alonso Puelles, A., Ferreira Gonzalez, S. and Alonso González, D., 2016. Middle Class Evolving To Precariat: Labour Conditions for the 21st Century. Social Work and Society, 14(1).
- Altamirano, A., S. Berstein, M. Bosch, M. García-Huitrón, and M. L. Oliveri., 2018. *Presente y futuro de las pensiones en América Latina y el Caribe*. Inter-American Development Bank. Washington DC.
- Alston, J., C. Chan-Kang, M. Marra, P. Pardey and TJ Wyatt. 2000. A Meta-Analysis of Rates of Return to Agricultural R&D Ex Pede Herculem? Research Report 113, IFPRI.
- Alzúa, M.L., Cruces, G. and Lopez, C., 2016. Long-run effects of youth training programs: Experimental evidence from Argentina. Economic Inquiry, 54(4), pp.1839-1859.
- Amaral, N., N. Eng, C Ospino, C. Pagés, G. Rucci, and N. Williams., 2018. How far can your skills take you? *Technical Report 01501*. Inter-American Development Bank, Washington DC.
- Amaral N., O. Azuara, S. Gonzalez, C. Ospino, C. Pagés, G. Rucci, and J. Torres., 2019. El futuro del trabajo en América Latina y el Caribe. Inter-American Development Bank, Washington, DC.
- Amarante, V., Arim, R. and Dean, A., 2011. Protecting workers against unemployment in Uruguay (No. IDB-WP-267). IDB Working Paper Series.
- Amengual, M., Coslovsky, S., and Yang, D., 2017. Who opposes labor regulation? Explaining variation in employers' opinions. Regulation & Governance, 114, 404-421.
- Andrews, D., Nicoletti, G. and Timiliotis, C., 2018. Going digital: What determines technology diffusion among firms. In The 3rd Annual Conference of the Global Forum on Productivity—Ottawa, 2018.–71 p.
- Angelov, N., and M. Eliason., 2018. Wage subsidies targeted to jobseekers with disabilities: subsequent employment and disability retirement. *IZA Journal of Labor Policy* 7(1): 12.
- Antón, A. and Hernandez, F., 2011. Financing universal social security in Mexico.
- Antón, A., 2014. The effect of payroll taxes on employment and wages under high labor informality. IZA Journal of Labor and Development, 3(1), p.20.
- Arce, O. 2020. La economía española ante la crisis del COVID: situación, perspectivas y retos. Intervención de Óscar Arce en el Foro Económico El Norte de Castilla. Banco de España.
- Armtz, M., T. Gregory, and U. Zierahn., 2016. The risk of automation for jobs in OECD countries: A comparative analysis. OECD Working Paper. Organisation for Economic Co-operation and Development, Paris.
- Artuc, E., L. Christiaensen, and H. J. Winkler., 2019. Does automation in rich countries hurt developing ones?: Evidence from the U.S. and Mexico. *Policy Research Working Paper 8741*. World Bank, Washington DC.
- Asadullah, M. N., and Fernandez, R. M., 2008. Work-life balance practices and the gender gap in job satisfaction in the UK: Evidence from matched employer-employee data No. 3582. IZA Discussion Papers

- Asset Owners Disclosure Project, 2018. The AODP Global Climate Index. United Kingdom, London.
- Atal, J., H. Ñopo, and N. Winder., 2009. New century, old disparities: Gender and ethnic wage gaps in Latin America. Working Papers 109. Inter-American Development Bank, Washington, DC.
- Attanasio, O., Bonfatti, A., Kitao, S., and Weber, G., 2015. Global Demographic Trends, Capital Mobility, Saving and Consumption in Latin America and the Caribbean LAC No. IDB-WP-586. IDB Working Paper Series.
- Autor, D.H. and Dorn, D., 2013. How technology wrecks the middle class. The New York Times, 24(2013), pp.1279-1333.
- Autor, D., Dorn, D., Katz, L.F., Patterson, C. and Van Reenen, J., 2020. The fall of the labor share and the rise of superstar firms. The Quarterly Journal of Economics, 135(2), pp.645-709.
- Azmat, Ghazala, and Barbara Petrongolo. 2014. "Gender and the Labor Market: What Have We Learned from Field and Lab Experiments?". Labor Economics 30: 32-40.
- Azuara Herrera, O., I. Keller, and S. González. 2019. ¿Quiénes son los conductores que utilizan las plataformas de transporte en América Latina?: Perfil de los conductores de Uber en Brasil, Chile, Colombia y México. Technical Note 1779. Inter-American Development Bank, Washington, DC.
- Azuara, O., Fazio, M.V., Hand, A., Keller, L., Rodriguez, C., and Silva-Porto, M.T. 2020. The future of work in Latin America and the Caribbean: How can technology facilitate job recovery after COVID-19?" Serie of articles about the Future of Work. Inter-American Development Bank.
- Badgett, M.L., Waaldijk, K. and van der Meulen Rodgers, Y., 2019. The relationship between LGBT inclusion and economic development: Macro-level evidence. World Development, 120, pp.1-14. Barr, N., 1999. A public-private partnership in pensions: getting the balance righ. London School of Economics and Political Science, Centre for Analysis of Social Exclusion, London, pp. 30-45
- Bahar, D., Ibanez, A. and Rozo, S., 2020. Give Me Your Tired and Your Poor: Impact of a Large-Scale Amnesty Program for Undocumented Refugees. IZA Discussion Paper No. 13743.
- Barham, T., M. Lipscomb and A. Mobarak. 2011. Development Effects of Electrification: Evidence from the Geologic Placement of Hydropower Plants in Brazil. American Economic Journal: Applied Economics. 5. doi: 10.1257/app.5.2.200.
- Barro, R.J., 2001. Human capital and growth. American economic review, 91(2), pp.12-17.
- Barros, R. P. D., Olinto, P., Lunde, T., & Caralho, M. (2013). The impact of access to free childcare on women's labor market outcomes: evidence from a randomized trial in low-income neighborhoods of Rio de Janeiro (No. 81498, pp. 1-2). The World Bank.
- Bartik, T. J., 2018. What Works to Help Manufacturing-Intensive Local Economies?

- Baum, C. L., and Ruhm, C. J., 2016. The effects of paid family leave in California on labor market outcomes. Journal of Policy Analysis and Management, 35(2), 333-356.
- Benartzi, S., Beshears, J., Milkman, K. L., Sunstein, C. R., Thaler, R. H., Shankar, M., ... and Galing, S. 2017. Should governments invest more in nudging? Psychological science, 288, 1041-1055
- Benavente, J. M., G. Crespi, and A. Maffioli. 2007. Public support to firm-level innovation: An evaluation of the FONTEC program. Office of Evaluation and Oversight, Working Paper 05-07. Inter-American Development Bank, Washington, DC.
- Benavente, J. M., G. Crespi, and J. C. Navarro. 2016. The new imperative of innovation: Policy perspectives for Latin America and the Caribbean. Inter-American Development Bank, Washington, DC.
- Benmelech, E., Bergman, N. and Kim, H., 2018. Strong employers and weak employees: How does employer concentration affect wages? (No. w24307). National Bureau of Economic Research.
- Bergemann, A., and Van den Berg, G. J. 2008. Active labor market policy effects for women in europe—a survey. Annales d'Économie et de Statistique, 385-408
- Berger, L. M., and Waldfogel, J., 2004. Maternity leave and the employment of new mothers in the United States. Journal of Population Economics, 17 (2), 331-349.
- Bergolo, M. and Cruces, G., 2021. The anatomy of behavioral responses to social assistance when informal employment is high. Journal of Public Economics, 193, 104313. <a href="https://doi.org/10.1016/j.jpubeco.2020.104313">https://doi.org/10.1016/j.jpubeco.2020.104313</a>
- Berlinski, S., Galiani, S., and Manacorda, M., 2008. Giving children a better start: Preschool attendance and school-age profiles. Journal of Public Economics, 92(5-6), 1416-1440.
- Berlinski, S., Galiani, S., and Gertler, P., 2009. The effect of pre-primary education on primary school performance. Journal of Public Economics, 93(1-2), 219-234.
- Berlinski, S., and Schady, N., 2015. A Report Card on Early Childhood Development. In The Early Years (pp. 25-54). Palgrave Macmillan, New York.
- Bernal, R., Eslava, M., and Meléndez, M., 2015. Taxing where you should: Formal employment and corporate income vs. payroll taxes in the Colombian 2012 tax reform. Bogotá: Universidad de los Andes.
- Bernal Lobato, Noelia et al. 2020. "The impact of digital saving account on savings and welfare: Evidence from gig-economy workers in Peru." AEA RCT Registry. October 02.
- Berniell, L., and De la Mata, D., 2016. Habilidades para el trabajo y la vida: definiciones y medición. Banco de Desarrollo de América Latina (eds.), Más habilidades para el trabajo y la vida: los aportes de la familia, la escuela, el entorno y el mundo laboral, 22-50.
- Berstein S. and Bosch, M., 2016. Promised and affordable replacement rates in LAC Pension Systems in 2015 and 2100: methodology and determinants. Inter-American Development Bank, Washington DC.

- Bessen, J. E., 2017. Automation and jobs: When technology boosts employment. Law and Economics Research Paper 17-09. Boston University School of Law.
- Bentancor, A., and Robano, V., 2014. The part-time premium enigma: an assessment of the Chilean case. Economía, 14(2), 29-54.
- Bertrand, Marianne. 2018. "The Glass Ceiling." Economica 85(338): 205-231.
- Betcherman, G., Daysal, N. M., and Pagés, C., 2010. Do employment subsidies work? Evidence from regionally targeted subsidies in Turkey. Labour Economics, 17(4), 710-722.
- Betcherman, G., 2019. Designing labor market regulations in developing countries. IZA World of Labor 57 doi: 10.15185/izawol.57.v2
- Betcherman, G., A. Dar, and K. Olivas. 2004. Impacts of active labor market programs: New evidence from evaluations with particular attention to developing and transition countries. Social Protection Discussion Paper Series. World Bank, Washington, DC.
- Binelli, C and A. Maffioli. 2007. A micro-econometric Analysis of Public Support to Private R&D in Argentina. International Review of Applied Economics 21, 3,339-359.
- Blanchard, O. J., and Tirole, J., 2008. The joint design of unemployment insurance and employment protection: A first pass. Journal of the European Economic Association, 61, 45-77.
- Blau, F.D. and Kahn, L.M., 2013. Female labor supply: Why is the United States falling behind?. American Economic Review 103(3): 251–56.
- Blau, F. D., and Kahn, L. M. 2017. The gender wage gap: Extent, trends, and explanations. Journal of economic literature, 55(3), 789-865.
- Bloom, N., B. Eifert, A. Mahajan, D. McKenzie, and J. Roberts. 2013. Does management matter? Evidence from India. Quarterly Journal of Economics 128 (1): 1–51.
- Bloom, N., E. Brynjolfsson, L. Foster, R. Jarmin, M. Patnaik, I. Saporta-Eksten, and J. Van Reenen. 2019. What drives differences in management practices?. *American Economic Review* 109(5): 1648–83.
- Blyde, J. A., D. Pierola, C. Cortes, F. Morales 2020. The profiles of immigrants in Latin America and the Caribbean: A focus on economic integration. Discussion Paper 00787. Migration Unit. Inter-American Development Bank, Washington, DC.
- Bonavida Foschiatti, C. and Gasparini, L., 2020. El impacto asimétrico de la cuarentena. Documentos de Trabajo del CEDLAS.
- Booth, A. L., and Van Ours, J. C., 2009. Hours of work and gender identity: Does part-time work make the family happier?. *Economica*, 76301, 176-196
- Booth, A. L., and Van Ours, J. C., 2013. Part-time jobs: What women want?. *Journal of Population Economics*, 261, 263-283
- Borjas, G., and R. Freeman. 2019. From immigrants to robots: The changing locus of substitutes for workers. w25438. National Bureau of Economic Research, Cambridge, MA.

- Bos, M. S. and Rucci, G., 2020. Skills Sector Framework Document. Inter-American Development Bank. Washington, DC.
- Bosch, M. and Manacorda, M., 2012. Social policies and labor market outcomes in Latin America and the Caribbean: a review of the existing evidence. *CEP Occasional Papers (CEPOP32)*. The London School of Economics and Political Science, Center of Economic Performance, London, UK.
- Bosch, M., Melguizo, Á., and Pagés, C., 2013. Better pensions, better jobs: Towards universal coverage in Latin America and the Caribbean. Inter-American Development Bank.
- Bosch, M. and Campos-Vazquez, R.M., 2014. The trade-offs of welfare policies in labor markets with informal jobs: The case of the *Seguro Popular* program in Mexico. American Economic Journal: Economic Policy, 6(4), pp.71-99.
- Bosch, M. and Schady, N., 2019. The effect of welfare payments on work: Regression discontinuity evidence from Ecuador. Journal of Development Economics, 139, pp.17-27.
- Bosch, M., C. Felix, M. García-Huitrón, and M. T. Silva-Porto. 2020a. *Políticas Sociales en Respuesta al Coronavirus: Acceso al ahorro obligatorio para el retiro en tiempos de COVID-19: Consideraciones de política pública*. Inter-American Development Bank, Washington, DC.
- Bosch, M., Caballero, G., and M. T. Silva-Porto. 2020b. *Pequeños empujones para el ahorro: la experiencia de una campaña de SMS en Colombia. FactorTrabajo*. Retrieved at: https://blogs.iadb.org/trabajo/es/pequenos-empujones-para-el-ahorro-la-experiencia-de-una-campana-de-sms-en-colombia/
- Bosch, M., González, S., and M.T. Silva-Porto. 2020. Intervención conductual para mejorar el cumplimiento de la cuota de empleo de personas con discapacidad: Evidencia de una Evaluación de Impacto en Perú. Washington, D.C.: IDB. (Mimeo.)
- Bottan, N. L., D. A. Vera-Cossio, and B. Hoffmann. 2020. The unequal impact of the coronavirus pandemic: Evidence from seventeen developing countries. Discussion Paper 785. Inter-American Development Bank, Washington, DC.
- Bravo, D., and T. Rau. 2012. Effects of large-scale youth employment subsidies: Evidence from a regression discontinuity design. Unpublished manuscript.
- Bravo, D., Castillo, E., and Hughes, E. 2020. Estudio Longitudinal Empleo-Covid19: Datos de empleo en tiempo real. Centro UC de Encuestas y Estudios Longitudinales. Septiembre.
- Bruhn, M., 2020. Can wage subsidies boost employment in the wake of an economic crisis? Evidence from Mexico. Journal of Development Studies 1–20.
- Bruhn, M., and D. McKenzie. 2014. Entry regulation and the formalization of microenterprises in developing countries. World Bank Research Observer 29(2): 186–201.
- Bruhn, M., D. Karlan, and A. Schoar. 2018. The impact of consulting services on small and medium enterprises: Evidence from a randomized trial in Mexico. Journal of Political Economy 126(2): 635-687.

- Budig, M.J., Misra, J. and Boeckmann, I., 2012. The motherhood penalty in cross-national perspective: The importance of work–family policies and cultural attitudes. Social Politics, 19(2), pp.163-193.
- Busso, M., Bassi, M. and Urzúa, S., 2011. Disconnected: Skills, Education, and Employment in Latin America. InterAmerican Development Bank. Washington, DC.
- Busso, M., Levy, S., Neumeyer, A. and Spector, M., 2012. Skills, informality and the size distribution of firms. Universidad Torcuato di Tella, Buenos Aires, Argentina:
- Busso, M., L. Madrigal, and C. Pagés. 2013. Productivity and resource misallocation in Latin America. The B.E. Journal of Macroeconomics, 13(1): 1–30. June. De Gruyter.
- Busso, M., J. Cristia, D. Hincapié, J. Messina, and L. Ripani, eds., 2017. Learning better: Public policy for skills development. Inter-American Development Bank, Washington, DC.
- Busso, M., Camacho, J., Messina, J., Montenegro, G., Bayona, M., Muñoz, P., Leaño, J.M., Pedraza, L., Caldo, A., Ribeiro, K. and Sosa, M., 2020. The Challenge of Protecting Informal Households during the COVID-19 Pandemic: Evidence from Latin America.
- Busso, M., and J. Messina, 2020. The Inequality Crisis: Latin America and the Caribbean at the Crossroads.IDB Monograph. October.
- Bustelo, M., A. Suaya, and M. Viollaz. 2019. El futuro en América Latina del trabajo y el Caribe. ¿Cómo será el mercado laboral para las mujeres? Inter-American Development Bank, Washington, DC.
- Caballero, R. J., Cowan, K. N., Engel, E. M., and Micco, A., 2013. Effective labor regulation and microeconomic flexibility. Journal of Development Economics, 101, 92-104.
- Cafagna, G., N. Aranco, P. Ibarrán, M. L. Oliveri, N. Medellín, and M. Stampini. 2020. Age with Care: Long-term care in Latin America and the Caribbean. Inter-American Development Bank, Washington, DC.
- Cahuc, P, F Kramarz and S Nevoux (2018), "When short-time work works", CEPR Discussion Paper 13041.
- Calderon, G., J. M. Cunha, and G. De Giorgi. 2020. Business literacy and development: Evidence from a randomized controlled trial in rural Mexico. Economic Development and Cultural Change 68(2): 507–40. University of Chicago Press.
- Camacho, A., and Mejía, D., 2014. Consecuencias de la aspersión aérea en la salud: evidencia desde el caso colombiano. Costos Económicos y Sociales del Conflicto en Colombia: ¿Cómo construir un posconflicto sostenible?, 117-138.
- Campos-Vazquez, R. M., Delgado, V., and Rodas, A. (2020). The effects of a place-based tax cut and minimum wage increase on labor market outcomes, *IZA Journal of Labor Policy*, 10(1), 20200012.
- Canigueral, Albert. 2020. Worker Tech in Latin America and the Caribbean. Washington DC: Inter-American Development Bank Discovery Paper. December.

- Card, D., J. Kluve, and A. Weber. 2010. Active labour market policy evaluations: A meta-analysis. The Economic Journal 120(548): F452–F477.
- Card, D., J. Kluve, and A. Weber. 2018. What works? A meta-analysis of recent active labor market program evaluations. Journal of the European Economic Association 16(3): 894–931.
- Cardona-Sosa, L., Morales, L. 2015. Efectos laborales de los servicios de cuidado infantil: evidencia del programa Buen Comienzo. Borradores de Economía; No. 882.
- Carroll, C.D. and Toche, P., 2009. A tractable model of buffer stock saving (No. w15265). National Bureau of Economic Research.
- Castillo, V., A. Maffioli, A. P. Monsalvo, S. Rojo, and R. Stucchi. 2010. Can SME policies improve firm performance? Evidence from an impact evaluation in Argentina. Inter-American Development Bank, Washington, DC.
- Castillo, V., S. Rojo Brizuela, and D. Schleser. 2012. El impacto de las políticas laborales contracíclicas sobre el empleo asalariado registrado. In Ministerio de Trabajo, Empleo y Seguridad Social, and ILO Country Office for Argentina, ed., Macroeconomía, empleo e ingresos: Debates y políticas en Argentina frente a la crisis internacional 2008-2009 (pp. 217–58). Buenos Aires: ILO Country Office for Argentina.
- Castillo, V., L. Figal Garone, A. Maffioli, S. Rojo and V. Ochaco. 2016. Asistencias tecnicas y Competitividad de las MIPYMES. Evidencia de Argentina. IDB-WP-759.
- Cathles, A., and J. C. Navarro. 2019. Disrupting talent: The emergence of coding bootcamps and the future of digital skills. Inter-American Development Bank, Washington, DC.
- Cavallo, E.A., Serebrisky, T., Frisancho, V., Karver, J., Powell, A., Margot, D., Suárez-Alemán, A., Fernández-Arias, E., Marzani, M., Berstein, S. and Bosch, M., 2016. Ahorrar para desarrollarse: cómo América Latina y el Caribe puede ahorrar más y mejor. Inter-American Development Bank, Washington, DC.
- Cerulli, G., 2010. Modelling and Measuring the Effect of Public Subsidies on Business R&D: A Critical Review of the Econometric Literature. Economic Record (274)86: 421–449.
- Cerulli, G., R. Gabrile and B. Poti. 2016. The Role of Firm R&D Effort and Collaboration as Mediating Drivers of Innovation Policy of Innovation Policy Effectiveness. Industry and Innovation 23(5): 426–47.
- Chetty, R., Friedman, J. N., and Rockoff, J. E., 2014. Measuring the impacts of teachers I: Evaluating bias in teacher value-added estimates. *American Economic Review*, 104(9), 2593-2632.
- Chevalier, A., C. Harmon, I. Walker, and Y. Zhu. 2004. Does education raise productivity or just reflect it? The Economic Journal 114 (November): F499–F517.
- Chiacchio, F., G. Petropoulos, and D. Pichler. 2018. The impact of industrial robots on EU employment and wages: A local labour market approach. Bruegel working paper. Brussels European and Global Economic Laboratory, Brussels.

- Choi, J. J., Laibson, D., and Madrian, B. C., 2004. Plan design and 401 k savings outcomes No. w10486. National Bureau of Economic Research.
- CIDH. 2015. Violencia contra Personas Lesbianas, Gay, Bisexuales, Trans e Intersex en América.

  Organization of American States, Washington, DC.
- Clements, B., Dybczak, K., Gaspar, V., Gupta, S., and Soto, M. 2015. The fiscal consequences of shrinking populations. Washington: IMF Staff Discussion Note.
- Cockx, B., C. Goebel, and S. Robin. 2013. Can income support for part-time workers serve as a stepping-stone to regular jobs? An application to young long-term unemployed women. Empirical Economics 44(1): 189–229.
- Cortes, G. M., and D. M. Morris. 2019. Are routine jobs moving south? Evidence from Changes in the occupational structure of employment in the U.S. and Mexico. *Working Paper series* 19-15, Rimini Centre for Economic Analysis, Waterloo, Ontario.
- Cravo, T., S. Lodato, J. C. Pires, and S. Vellani. 2014. A comparative analysis of IDB approaches supporting SMEs: Assessing results in the Brazilian manufacturing sector. Office of Evaluation and Oversight Papers Series. Inter-American Development Bank, Washington DC.
- Crespi, G., A. Maffioli, and A. Rastelletti. 2014. Investing in Ideas: Policies to Foster Innovation. In E. Fernández Arias, G. Crespi, and E. Stein (eds), Rethinking Productive Development: Sound Policies and Institutions for Economic Transformation. Washington, DC and New York: Inter-American Development Bank, Palgrave Macmillan.
- Croson, Rachel, and Uri Gnezy. 2009. "Gender differences in preferences." Journal of Economic Literature 168 (1): 1–27.
- Cruces, G., Galiani, S., and Kidyba, S., 2010. Payroll taxes, wages and employment: Identification through policy changes. Labour economics, 17(4), 743-749.
- Cruces, G., Ham, A. and Viollaz, M., 2012. Scarring effects of youth unemployment and informality: Evidence from Brazil. documento de trabajo del CEDLAS, Facultad de Ciencias Económicas, Universidad Nacional de la Plata, Argentina.
- Cruz-Aguayo, Y., Fuertes, N., Kang, M., Robles, M., Schady, N., Zuluaga, D., 2019. Analizando la evolución del empleo y salarios de trabajadores del sector social en América Latina y el Caribe. Inter-American Development Bank.
- Cunningham, W., 2009. Unpacking Youth Unemployment in Latin America. Policy Research working paper; no. WPS 5022. World Bank.
- Cusolito, A. P., and W. Maloney. 2018. Productivity Revisited: Shifting Paradigms in Analysis and Policy Productivity. World Bank Group, Washington, DC.
- Davis, S., Michaelides, M., Poe-Yamagata, E., and Davis, A., 2013. Evaluation of the GATE II Grants: Is Self-Employment Training Effective for Rural and Older Dislocated Workers?. Final report submitted to the US Department of Labor, Employment and Training Administration. Columbia, MD: IMPAQ International.

- Dar, A., and Z. Tzannatos. 1999. Active labor market programs: A review of the evidence from evaluations. Social Protection Discussion Paper 9901. World Bank, Washington, DC.
- Dauth, W., S. Findeisen, J. Suedekum, and N. Woessner. 2018. Adjusting to robots: Worker-level evidence. Institute Working Paper 13. Opportunity and Inclusive Growth Institute, Federal Reserve Bank of Minneapolis.
- Dammert, A.C., Galdo, J. and Galdo, V., 2015. Integrating mobile phone technologies into labor-market intermediation: a multi-treatment experimental design. IZA Journal of Labor and Development, 4(1), p.11.
- Davis, S J, and T Von Wachter. 2011. Recessions and the costs of job loss. Brookings Papers on Economic Activity 43(2): 1–72.
- De Andrade, G. Henrique, M. Bruhn, and D. J. McKenzie. 2013. A helping hand or the long arm of the law? Experimental evidence on what governments can do to formalize firms. World Bank, Washington, DC.
- De Buen Unna, C., M. Bosch, and D. Kaplan. 2012. "Propuesta de Reforma a la Ley Federal del Trabajo para el Sistema de Protección al Desempleado en México." Washington, D.C.: IDB. (Mimeo.)
- De Diego, M., C. Gonzalez-Velosa, S. Rieble-Aubourg, and G. Rucci. 2017. Public financing of vocational training through competitive funds: A promising option for Latin America and the Caribbean. Technical Note 1280. Labor Markets and Social Security Division. Inter-American Development Bank, Washington DC.
- De la Torre, A., Messina, J. and Silva, J., 2017. The inequality story in Latin America and the Caribbean: Searching for an explanation. In Has Latin American inequality changed direction? (pp. 317-338). Springer, Cham.
- Del Carpio, X. V., N. Loayza and G. Datar, G. 2011. Is Irrigation Rehabilitation Good for Poor Farmers? An Impact Evaluation of a Non Experimental Irrigation Project in Peru. Journal of Agricultural Economics, 62(2), 449 473.
- Del Ninno, C., Subbarao, K., and Milazzo, A. 2009. How to make public works work: A review of the experiences.
- Demirguc-Kunt, A., Klapper, L., Singer, D., Ansar, S. and Hess, J., 2018. The Global Findex Database 2017: Measuring financial inclusion and the fintech revolution. The World Bank.
- Díaz Cassou, J., Beverinotti, J. and Andrian Leandro, G., 2020. CAN Departamento de países del Grupo Andino: El impacto del covid-19 en la economía de la región. Inter-American Development Bank.
- Dolton, P., and O'Neill, D., 1996. Unemployment duration and the restart effect: some experimental evidence. The Economic Journal, 106435, 387-400.
- Doucouliagos, H., Freeman, R.B. and Laroche, P., 2017. The economics of trade unions: A study of a research field and its findings. Taylor & Francis.
- Drydakis, N., 2019. Sexual orientation and labor market outcomes. IZA World of Labor.

- Durán Valverde, F., and Pena, H., 2011. Determinantes de las tasas de reemplazo de pensiones de capitalización individual: escenarios latinoamericanos comparados. CEPAL.
- Duryea, S., and M. Robles., 2016. Social pulse in Latin America and the Caribbean 2016: Realities and perspectives. Inter-American Development Bank, Washington DC.
- Dutz, M. A., R. K. Almeida, T. G. Packard. 2018. The Jobs of Tomorrow: Technology, Productivity, and Prosperity in Latin America and the Caribbean. (English). Directions in Development, Communication, and Information Technologies. World Bank Group, Washington, DC.
- ECLAC. 2002. Demographic Bulletin No. 69. Latin America and Caribbean: Population Estimates and Projections. 1950-2050.
- ECLAC. 2019. Four-year progress report on the progress and regional challenges of the Agenda 2030 for Sustainable Development in America Latin America and the Caribbean. Santiago de Chile: ECLAC.
- ECLAC. 2020. The social challenges in times of COVID-19. Special Report. May. Economic Commission for Latin America and the Caribbean, Santiago.
- Elborgh-Woytek, M. K., Newiak, M. M., Kochhar, M. K., Fabrizio, M. S., Kpodar, M. K., Wingender, M. P., and Schwartz, M. G., 2013. Women, work, and the economy: Macroeconomic gains from gender equity. International Monetary Fund.
- Elsby, M. W., Hobijn, B., and Şahin, A., 2015. On the importance of the participation margin for labor market fluctuations. Journal of Monetary Economics, 72, 64-82.
- Eliason, M., and D. Storrie. 2006. Lasting or latent scars? Swedish evidence on the long-term effects of job displacement. Journal of Labor Economics 24(4): 831–856.
- Escudero, V., Kluve, J., López Mourelo, E. and Pignatti, C., 2019. Active labour market programmes in Latin America and the Caribbean: Evidence from a meta-analysis. The Journal of Development Studies, 55(12), pp.2644-2661.
- Espinola-Arredondo, A., & Mondal, S., 2008. The effect of parental leave on female employment: evidence from state policies. Washington State University School of Economic Sciences working paper series WP, 15, 2008.
- Eslava, M.; Maffioli, A. & Meléndez Arjona, M. (2012). 'Second-tier Government Banks and Access to Credit: Micro-Evidence from Colombia,' Technical Note 294, Washington, D.C.; Inter-American Development Bank.
- Fazio, M.V., Fernández-Coto, R., & Ripani, L., 2016. Aprendices para el siglo XXI¿ Un modelo para América Latina y el Caribe?. Inter-American Development Bank, Washington, D.C.
- Fichtenbaum, R., 2011. Do unions affect labor's share of income: Evidence using panel data. American Journal of Economics and Sociology, 70(3), pp.784-810.
- Flores Lima, R., 2010. Innovaciones en la evaluación de impacto del servicio de intermediación laboral en México. Nota técnica IDB-TN-118. Washington, DC: BID Forslund, A., Fredriksson, P., & Vikström, J., 2011. What active labor market policy works in a recession?. Nordic Economic Policy Review, 12011, 171-201.

- Forslund, A., Fredriksson, P., & Vikström, J., 2011. What active labor market policy works in a recession?. Nordic Economic Policy Review, 1(2011), 171-201.
- Frederiksen, A., Ibsen, R., Rosholm, M., & Westergaard-Nielsen, N., 2006. Labour market signalling and unemployment duration: an empirical analysis using employer-employee data.
- Freire, G., C. Diaz-Bonilla, S. Schwartz Orellana, J. Soler Lopez, F. Carbonari. 2018. Afrodescendants in Latin America: Toward a framework of inclusion. World Bank, Washington, DC.
- Fretes Cibilis, V., García, G., Suescú, R., Pimenta, C. Ardanaz, M., Barreix, A., Armendáriz, E., Rasteletti, A., Azuero, R., Reyes-Tagle, G., Harper, L., Pineda, E., Munoz, A., De Micheli, R., Fernández, I. M., Hernández, M.J., Orjuela, J., and García, L. A., 2018 Fiscal Policy and Management Sector Framework Document. Inter-American Development Bank. Washington, DC.
- Frey, C. B., and M. A. Osborne. 2017. The future of employment: How susceptible are jobs to computerisation?. *Technological Forecasting and Social Change* 114: 254–80.
- Frölich, M., Kaplan, D., Pagés, C., Rigolini, J., and Robalino, D. (Eds.), 2014. Social insurance, informality, and labour markets: how to protect workers while creating good jobs (No. 7879). Oxford University Press.
- Galarza, F., G. Yamada, and C. Zelada. 2015. Cuesta arriba para los afroperuanos: evidencia de la discriminación en el acceso al mercado laboral de Lima Metropolitana. Lima: Universidad del Pacífico, Centro de Investigación.
- Galasso, E., and M. Ravallion. 2004. Social protection in a crisis: Argentina's Plan Jefes y Jefas. *World Bank Economic Review* 18(3): 367–99.
- Galasso, E., M. Ravallion, and A. Salvia. 2004. Assisting the transition from workfare to work: A randomized experiment. *ILR Review* 58(1): 128–42.
- Galiani, S., Gertler, P., and Bando, R., 2016. Non-contributory pensions. *Labour Economics*, 38, 47-58.
- Gamboa, A. M., Montoya, D. L., and Herrera, J. H. 2014. La travesía laboral de la población Ngäbe y Buglé de Costa Rica a Panamá: características y desafíos. Facultad Latinoamericana de Ciencias Sociales-Sede Costa Rica (FLACSO Costa Rica).
- Garganta, S., and Gasparini, L., 2012. El impacto de un programa social sobre la informalidad laboral: el caso de la AUH en Argentina (No. 133). Documento de Trabajo.
- Gasparini, L., Haimovich, F., and Olivieri, S. 2007a. Labor informality effects of a poverty-alleviation program (No. 53). Documento de Trabajo, CEDLAS.
- Gasparini, L., Alejo, J., Haimovich, F., Olivieri, S., and Tornarolli, L., 2007b. Poverty among the elderly in Latin America and the Caribbean. Documentos de Trabajo del CEDLAS.
- Gasparini, L., Cruces, G. and Tornarolli, L., 2008. Is income inequality in Latin America falling?. CEDLAS, Universidad Nacional de La Plata, August version.

- Gasparini, L., Marchionni, M., Badaracco, N., Busso, M., Gluzmann, P.A., Romero Fonseca, D., Serrano, J. and Vezza, E., 2015. Bridging gender gaps?.
- Gentilini, U., Almenfi, M., Orton, I. and Dale, P., 2020. Social protection and jobs responses to COVID-19: A real-time review of country measures. Live document. World Bank, Washington, DC.
- Gentilini, U., Grosh, M., Rigolini, J. and Yemtsov, R. eds., 2019. Exploring universal basic income: A guide to navigating concepts, evidence, and practices. The World Bank.
- Gerard, F. and Gonzaga, G.M., 2013. Informal labor and the cost of social programs: Evidence from 15 years of unemployment insurance in brazil. *Available at SSRN 2289880*.
- Gerfin, M., M. Lechner, and H. Steiger. 2002. Does subsidised temporary employment get the unemployed back to work? An econometric analysis of two different schemes. Discussion Paper 2002-22. Universität St. Gallen. Volkswirtschaftliche Abteilung.
- Gibson, J., and D. McKenzie. 2014. The development impact of a best practice seasonal worker policy. *Review of Economics and Statistics* 96 (2): 229–43.
- Giuntella, O., and T. Wang. 2019. Is an army of robots marching on Chinese jobs? IZA Discussion Paper 12281. Available at SSRN: https://ssrn.com/abstract=3390271
- Giupponi, G, and C Landais. 2018. "Subsidizing labor hoarding in recessions: The employment and welfare effects of short-time work", CEPR Discussion Paper 13310.
- Giupponi, G. and Landais, C., 2020. Building effective short-time work schemes for the COVID-19 crisis. VoxEU.
- Goldin, Claudia. 2014. "A Grand Gender Convergence: Its Last Chapter." American Economic Review 104(4): 1–30.
- Gómez Sabaini, J. C., Jiménez, J. P., and Rossignolo, D. 2012. Imposición a la renta personal y equidad en América Latina: nuevos desafíos.
- Gonzalez-Rozada, M. and Pinto, F.L., 2011. The effects of a conditional transfer program on the labor market: The Human Development Bonus in Ecuador. Washington, DC, United States: Inter-American Development Bank. Mimeographed document.
- González-Velosa, C., Ripani, L., and Rosas Shady, D., 2012. ¿Cómo mejorar las oportunidades de inserción laboral de los jóvenes en América Latina?. Inter-American Development Bank, Washington DC.
- González-Velosa, C. and Rucci, G., 2016. Methods to anticipate skills demand. Technical Note No. IDB-TN-954 (Inter-American Development Bank).
- González-Velosa, Carolina; Robalino, David. 2020. Hacia mejores mecanismos de protección de riesgos para la clase media y vulnerable: Un analisis para los países andinos. Inter-American Development Bank, Washington DC.
- Goos, M., A. Manning, and A. Salomons. 2014. Explaining job polarization: Routine-biased technological change and off-shoring. *American Economic Review* 104(8): 2509–26.

- Graetz, G., and G. Michaels. 2017. Robots at work. CEP Discussion Paper 1335. Centre for Economic Performance, London School of Economics and Political Science.
- Groh, M., N. Krishnan, D. McKenzie, and T. Vishwanath. 2016. Do wage subsidies provide a stepping-stone to employment for recent college graduates? Evidence from a randomized experiment in Jordan. Review of Economics and Statistics 98(3): 488–502.
- Gruber, J., 1997. The incidence of payroll taxation: evidence from Chile. *Journal of labor economics*, 15(S3), S72-S101.
- Güemes, C. and Paramio, L., 2020. El porvenir de una ilusión: clases medias en América Latina. Nueva Sociedad, (285), pp.47-59.
- Hanushek, E.A. and Woessmann, L., 2012. Do better schools lead to more growth? Cognitive skills, economic outcomes, and causation. *Journal of economic growth*, 17(4), pp.267-321.
- Hatayama, M., Viollaz, M. and Winkler, H., 2020. Jobs' Amenability to Working from Home: Evidence from Skills Surveys for 53 Countries.
- Heckman, J. J., and Kautz, T., 2012. Hard evidence on soft skills. Labour economics, 19(4), 451-464.
- HelpAge International. 2020. Data on ageing. Available at: https://www.helpage.org/resources/ageing-data/
- Hernani, W. L., Villegas, M. A., and Yáñez, E. 2011. Unemployment in Bolivia: Risks and Labor Market Policies.
- Herrera, Diego. 2020. MSME Financing Instruments in Latin America and the Caribbean during COVID-19." Washington DC: Inter-American Development Bank.
- Hershbein, B., and Kahn, L. B., 2018. Do recessions accelerate routine-biased technological change? Evidence from vacancy postings. American Economic Review, 108(7), 1737-72
- Hojman, A., and López Bóo, F., 2019. Cost-Effective Public Daycare in a Low-Income Economy Benefits Children and Mothers. IZA Discussion Paper No. 12585.
- Huneeus, C., Leiva, S. and Micco, A., 2012. Unemployment insurance and search effort in chile.
- Holzmann, R., Palmer, E., Robalino, D., 2013. Nonfinancial Defined Contribution Pension Schemes in a Changing Pension World: Volume 2. Gender, Politics, and Financial Stability. Washington, DC: World Bank. © World Bank.
- IDB and the Ethos Institute. 2016. Social, Racial, and Gender Profile of the 500 Largest Brazilian Companies. Inter-American Development Bank, Washington, DC.
- IDB. 2020a. COVID-19 Labor Observatory. https://observatoriolaboral-bid.herokuapp.com/
- IDB. 2020b. Social Policy Responses to the Effects of COVID-19. Available at: http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=EZSHARE-1132863027-3.
- IDB. 2020c. Sistema de Información de Mercados Laborales y Seguridad Social (SIMS). https://www.iadb.org/en/sector/social-investment/sims/home.

- IDB. 2020d. Skills Development Sector Framework Document (GN-3012-3). Social Sector, Inter-American Development Bank, Washington, DC.
- ILO. 2015. The Recognized Seasonal Employers Scheme (RSE). New Zealand, International Labour Organization, Good Practices Database—labour migration policies and programmes.
- ILO, 2016. Non-standard employment around the world: Understanding challenges, shaping prospects.
- ILO. 2019. Panorama Laboral Temático 5: Mujeres en el mundo del trabajo. Retos pendientes hacia una efectiva equidad en América Latina y el Caribe. Lima: OIT / Regional Office for Latin America and the Caribbean.
- ILO. 2019. Women in the world of work. Pending Challenges for Achieving Effective Equality in Latin America and the Caribbean. Thematic Labour Overview, 2019. Lima: ILO / Regional Office for Latin America and the Caribbean, 188 p.
- ILO. 2020. ILO Monitor: COVID-19 and the world of work. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/briefingnote/wcms\_745963.pdf
- IMF. 2020a. Outlook for Latin America and the Caribbean: An intensifying pandemic. https://blogs.imf.org/2020/06/26/outlook-for-latin-america-and-the-caribbean-an-intensifying-pandemic/
- IMF. 2020b. Policy Responses to COVID-19. <a href="https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19">https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19</a>
- INEGI, 2020. Encuesta telefónica sobre COVID-19 y Mercado Laboral (ECOVID-ML). https://www.inegi.org.mx/investigacion/ecovidml/2020/
- Izquierdo, A., Pessino, C., Vuletin, G. and de Desarrollo, B.I. eds., 2018. Mejor gasto para mejores vidas: cómo América Latina y el Caribe puede hacer más con menos (Vol. 10). Inter-American Development Bank.
- Izquierdo, Alejandro; Keefer, Philip; Blackman, Allen; Busso, Matías; Cavallo, Eduardo A.; Elacqua, Gregory; Ibáñez, Ana María; Messina, Julián; Mesquita Moreira, Mauricio; Scartascini, Carlos; Schady, Norbert; Serebrisky, Tomás. 2020. Emerging from the Pandemic Tunnel with Faster Growth and Greater Equity: A Strategy for a New Social Compact in Latin America and the Caribbean. Inter-American Development Bank, Washington, DC.
- Jaenichen, U., and G. Stephan. 2011. The effectiveness of targeted wage subsidies for hard-to-place workers. Applied Economics 43(10): 1209–25.
- Jarmin, R. 1999. Evaluating the impact of manufacturing extension on productivity growth. Journal of Policy Analysis and Management 18(1): 99–119.
- Johanson, R. 2009. A review of national training funds. World Bank, Washington, DC.

- Jones, P., 2001. Are educated workers really more productive? Journal of Development Economics 64(1): 57–79.
- Joubert, C., 2020 Gender Pension Gaps in a Private Retirement Accounts System: A Dynamic Model of Household Labor Supply and Savings. POLICY RESEARCH WORKING PAPER, World Bank.
- Kaplan, D. S., and Levy, S., 2014. The evolution of social security systems in Latin America. Social Insurance, Informality, and Labor Markets: How to Protect Workers While Creating Good Jobs, 33-57.
- Karabarbounis, L., and Neiman, B., 2014. The global decline of the labor share. The Quarterly journal of economics, 129(1), 61-103
- Karlan, D., and Zinman, J., 2010. Expanding credit access: Using randomized supply decisions to estimate the impacts. The Review of Financial Studies, 23(1), 433-464.
- Katz, R.L., 2009. El papel de las TIC en el desarrollo (Vol. 19). Raul Katz.
- Khandker, S., Bakht, Z. and Koolwal, G. 2009. The poverty impact of rural roads: evidence from Bangladesh. Economic development and cultural change, 57 (4), 685–722.
- Kleven, H., Landais, C., and Søgaard, J. E. (2019). Children and gender inequality: Evidence from Denmark. American Economic Journal: Applied Economics, 11(4), 181-209.
- Kluve, J. (2006). The effectiveness of European active labor market policy.
- Kluve, J., Puerto, S., Robalino, D., Romero, J.M., Rother, F., Stöterau, J., Weidenkaff, F. and Witte, M., 2016. Do youth employment programs improve labor market outcomes? A quantitative review. World Development, 114, pp.237-253.
- Kopp, D, and M Siegenthaler. 2019. "Short-time work and unemployment in and after the Great Recession", KOF Swiss Economic Institute Working Paper 462.
- Kugler, A. D., and Kugler, M., 2003. The labour market effects of payroll taxes in a middle-income country: evidence from Colombia.
- Kugler, A. D., 2004. The effect of job security regulations on labor market flexibility: Evidence from the Colombian Labor Market Reform. In Law and Employment: Lessons from Latin America and the Caribbean, pp. 183–228. University of Chicago Press.
- Kugler, A., and Kuler, M., 2015. Impactos de la ley 1607 sobre el empleo formal en Colombia. Georgetown University.
- Kugler, A., Kugler, M., Saavedra, J., and Prada, L. O. H., 2015. Long-Term Educational Consequences of Vocational Training in Colombia: Impacts on Young Trainees and Their Relatives (No. w21607). National Bureau of Economic Research.
- Kugler, A., Kugler, M., Ripani, L, and Rodrigo, R., 2020. U.S. Robots and their Impacts in the Tropics: Evidence from Colombian Labor Markets. NBER Working Paper Series w28034. October.

- Kuriakose, A. T., Heltberg, R., Wiseman, W., Costella, C., Cipryk, R., and Cornelius, S., 2013. Climate-responsive social protection. Development Policy Review, 31, o19-o34
- Lalive, R., J. P. Wuellrich, and J. Zweimüller. 2013. Do financial incentives affect firms' demand for disabled workers? Journal of the European Economic Association 11(1): 25–58.
- Lederman, D., Messina, J., Pienknagura, S. and Rigolini, J., 2014. El emprendimiento en América Latina: muchas empresas y poca innovación. The World Bank.
- Levy, S., 2008. Social policy, informality, and economic growth in Mexico.
- Levy, S., and Schady, N., 2013. Latin America's social policy challenge: Education, social insurance, redistribution. Journal of Economic Perspectives, 27(2), 193-218.
- Loayza, N.V., 2020. Costs and Trade-Offs in the Fight Against the COVID-19 Pandemic: A Developing Country Perspective.
- López Bóo, F., L. Madrigal, and C. Pagés. 2010. Part-time work, gender, and job satisfaction: Evidence from a developing country. IDB Working Paper 1114. Inter-American Development Bank, Washington, DC.
- Lustig, N., 2020. Desigualdad y descontento social en América Latina. Nueva Sociedad, (286), pp.53-61.
- Lustig, N., Pessino, C., and Scott, J., 2013. The Impact of Taxes and Social Spending on Inequality and Poverty in Argentina, Bolivia, Brazil, Mexico and Peru: An Overview. Public Finance Review, forthcoming.
- Lustig, N., Lopez-Calva, L.F., Ortiz-Juárez, E. and Monga, C., 2016. Deconstructing the decline in inequality in Latin America. In Inequality and growth: Patterns and policy (pp. 212-247). Palgrave Macmillan, London.
- Lustig, N. and Tommasi, M. 2020. Covid-19 and social protection of poor and vulnerable groups in Latin America: a conceptual framework. UNDP Latin America and the Caribbean.
- Madariaga, J., C. Buenadicha, E. Molina, and C. Ernst. 2019. "Economía de plataformas y empleo: ¿Cómo es trabajar para una app en Argentina?" 718. CIPPEC2, Buenos Aires.
- Madariaga, J., Molina, E., Rucci, G., Ripani, L. and Vazquez, C., 2020. COVID-19: Estrategias de adaptación en la economía de plataformas. Washington DC.: BID.
- Madrian, B.C. and Shea, D.F., 2001. The power of suggestion: Inertia in 401 (k) participation and savings behavior. The Quarterly Journal of Economics, 116(4), pp.1149-1187.
- Majoka, Z., and Palacios, R., 2019. Targeting versus Universality.
- Malo, M. A., and R. Pagan. 2013. Hiring workers with disabilities when a quota requirement exists: The relevance of firm's size. MPRA Paper 44277. University Library of Munich.
- Maloney, W.F. and Nunez, J., 2000. Measuring the impact of minimum wages: Evidence from Latin America. The World Bank.

- Maloney, W. F., and Molina, C., 2019. Is Automation Labor-Displacing in the Developing Countries, Too? Robots, Polarization, and Jobs.
- Manning, A., 2003. Monopsony in motion: Imperfect competition in labor markets. Princeton University Press.
- Mateo Díaz, M., and Rodriguez-Chamussy, L., 2016. Cashing in on education: Women, childcare, and prosperity in Latin America and the Caribbean. The World Bank.
- Martin, J. P., and S. Scarpetta. 2012. Setting it right: Employment protection, labour reallocation, and productivity. De Economist 160: 89–116.
- Martínez, C., and Perticará, M., 2017. Childcare effects on maternal employment: Evidence from Chile. *Journal of Development Economics*, 126, 127-137
- McKenzie, D., and C. Woodruff. 2015. Business practices in small firms in developing countries. NBER Working Papers 21505. National Bureau of Economic Research, Cambridge, MA.
- Medina, C., J. Núñez, and J. A. Tamayo. 2013. The unemployment subsidy program in Colombia: An assessment. Working Paper 369. Inter-American Development Bank, Washington, DC.
- Mesquita Moreira, M., Volpe Martincus, C. and Blyde, J. S., 2020. Unclogging the Arteries: The Impact of Transport Costs on Latin American and Caribbean Trade. Inter-American Development Bank. Washington, DC.
- Micco, A., and C. Pagés. 2006. The economic effects of employment protection: Evidence from international industry-level data. *IZA Discussion Paper* 2433. Bonn.
- Mongey, S., Pilossoph, L. and Weinberg, A., 2020. Which workers bear the burden of social distancing policies? (No. w27085). National Bureau of Economic Research.
- Moïsé, E., Le Bris, F. 2013. Trade Costs-What Have We Learned?: A Synthesis Report. OECD Trade Policy Papers No. 150. Paris: Organization for Economic Coperation and Development.
- Montero, R., and Rau, T., 2015. Part-time work, job satisfaction and well-being: evidence from a developing OECD country. The Journal of Development Studies, 51(4), 370-385.
- Mora Román, A. and Guzmán, M. 2018. Aspectos de la migración nicaragüense en Costa Rica. Inter-American Development Bank, Washington, DC.
- Mori, Y., and N. Sakamoto. 2018. Economic consequences of employment quota system for disabled people: Evidence from a regression discontinuity design in Japan. Journal of the Japanese and International Economies 48: 1–14.
- Navarro, J. C., Benavente, J. M., Grazzi, M., Salazar, M., Martínez, G., Henríquez, M., Briceno, B., González, B., 2017. Innovation, Science and Technology Sector Framework Document. Inter-American Development Bank. Washington, DC.
- Nedelkoska, L., and G. Quintini. 2018. Automation, skills use, and training. *OECD Social, Employment, and Migration Working Papers*. Organisation for Economic Co-operation and Development, Paris.

- Neumark, D. and Grijalva, D., 2013. The employment effects of state hiring credits during and after the Great Recession (No. w18928). National Bureau of Economic Research.
- Neumark D, Grijalva D. 2017. The Employment Effects of State Hiring Credits. *ILR Review*.;70(5):1111-1145. doi:10.1177/0019793916683930
- Neumark, D., and Corella, L. F. M., 2019. Do Minimum Wages Reduce Employment in Developing Countries? A Survey and Exploration of Conflicting Evidence (No. w26462). *National Bureau of Economic Research*.
- Newland, K., D. R. Mendoza, and A. Terrazas. 2008. Learning by doing: Experiences of circular migration. Migration Policy Institute, Washington, DC.
- NIS. 2016. National Insurance Scheme (NIS). Ministry of Labour and Social Security. Government of Jamaica.
- Ñopo, H., 2012. New century, old disparities: Gender and ethnic earnings gaps in Latin America and the Caribbean. Inter-American Development Bank, Washington, DC.
- Novella, R., Pérez-Dávila, Y. S. 2017. Are Apprenticeships Programs Effective?: Lessons for Latin America and the Caribbean. Inter-American Development Bank, Washington, DC.
- Novella, R., Repetto, A., Robino, C. and Rucci, G., 2018. Millennials en América Latina y el Caribe: ¿Trabajar o estudiar?. InterAmerican Development Bank. Washington, DC.
- Novella, R., and H. Valencia. 2019. Active labor market policies in a context of high informality: The effect of PAE in Bolivia. Working Paper 1062. Inter-American Development Bank, Washington, DC.
- Novella, R., Rosas, D. and Alvarado, A., 2019. *Are we nearly there yet? New technology adoption and labor demand in Peru* (No. IDB-WP-1013). IDB Working Paper Series. Inter-American Development Bank.
- OECD. 2010. *Employment Outlook*. Paris: Organisation for Economic Co-operation and Development.
- OECD. 2019. Pensions at a Glance 2019: OECD and G20 Indicators, OECD Publishing, Paris, https://doi.org/10.1787/b6d3dcfc-en.
- OECD. 2020a. Productivity gains from teleworking in the post COVID-19 era: how can public policies make it happen?.
- OECD. 2020b. Effective adult learning policies: Challenges and solutions for Latin American countries. OECD Skills Studies. Organisation for Economic Co-operation and Development, Paris.
- OIM. 2019. Displacement Tracking Matrix (DTM).
- Oreopoulos, P., T. Von Wachter, and A. Heisz. 2012. The short- and long-term career effects of graduating in a recession. *American Economic Journal: Applied Economics* 4(1): 1–29.
- Osorio, R. G., Soares, S. S. D., and Souza, P. H. G. F. D. 2011. Erradicar a pobreza extrema: um objetivo ao alcance do Brasil.

- Packard, T., Gentilini, U., Grosh, M., O'Keefe, P., Palacios, R., Robalino, D., and Santos, I. 2019. Protecting all: Risk sharing for a diverse and diversifying world of work. The World Bank.
- Pagés, C., 2010. The age of productivity. In *The Age of Productivity: Transforming Economies from the Bottom Up,* (pp. 1–21), ed. Carmen Pagés. New York: Palgrave Macmillan.
- Pagés, C., 2017. Do Payroll tax cuts boost formal jobs in developing countries. IZA World of Labor, pp.345-345.
- Pagés, C., 2019. Institutions, policies, and technologies for the future of work. In *Work in the Age of Data*. Madrid: BBVA.
- Palacios, R.J. and Robalino, D.A., 2020. Integrating Social Insurance and Social Assistance Programs for the Future World of Labor.
- Parro, F. and Pohl, V., 2018. Health shocks, human capital, and labor market outcomes.
- Patnaik, A., 2015. Parental Leave Policies and Their Consequences for Inequality.
- Pavcnik, N., 2002. Trade liberalization, exit, and productivity improvements: Evidence from Chilean plants. The Review of Economic Studies, 69(1), 245-276.
- Pettit, B., and Hook, J., 2005. The structure of women's employment in comparative perspective. Social Forces, 84(2), 779-801
- Petrongolo Barbara and Maddalena Ronchi. 2020. Gender Gaps and the Structure of Local Labor Markets. IZA DP No. 13143. April.
- Pignatti, N., 2016. Encouraging women's labor force participation in transition countries. IZA World of Labor.
- Pissarides, C.A., 1994. Search unemployment with on-the-job search. The Review of Economic Studies, 61(3), pp.457-475.
- Piza, C., T.A. Cravo, L. Taylor, L. Gonzalez, I. Musse, I. Furtado, A. C. Sierra, and S. Abdelnour. 2016. The impact of business support services for small and medium enterprises on firm performance in low- and middle-income countries: A systematic review. *Campbell Systematic Reviews* 12(1): 1–167.
- Prada, F., G. Rucci, and S. Urzua. 2015. *Training, Soft Skills and Productivity: Evidence from a Field Experiment in Retail.* Working Paper IDB-WP-1015. Inter-American Development Bank, Washington, DC.
- Presidential Advisory Commission on the Pension Systems. 2015. Informe Final. Chile
- Rand, J. 2011. Evaluating the employment-generating impact of rural roads in Nicaragua. Journal of Development Effectiveness, 3:1, 28-43, doi: 10.1080/19439342.2010.545890
- Rama, M., and MacIsaac, D. 2001. Mandatory Severance Pay: Its Coverage and Effects in Peru.
  The World Bank

- Reed, D., Liu, A. Y. H., Kleinman, R., Mastri, A., Reed, D., Sattar, S., and Ziegler, J. 2012. An effectiveness assessment and cost-benefit analysis of registered apprenticeship in 10 states. Mathematica Policy Research.
- Rodrik, D., and C. Sabel. 2019. Building a good jobs economy. Harvard Kennedy School Faculty Working Paper RWP-20-001.
- Rofman, R., Apella, I., and Vezza, E. (Eds.), 2014. Beyond contributory pensions: Fourteen experiences with coverage expansion in Latin America. The World Bank.
- Ronconi, L., and Kanbur, R., 2016. Enforcement Matters: The Effective Regulation of Labor (No. 642-2016-44453).
- Rossiasco Uscategui, Paula. 2019. Una Oportunidad para Todos : Los Migrantes y Refugiados Venezolanos y el Desarrollo del Perú (Vol. 2) (Spanish, English). Washington, D.C. : World Bank Group.
- Sabia, J. J., Dills, A. K., and DeSimone, J. (2013). Sexual violence against women and labor market outcomes. American Economic Review, 103(3), 274-78.
- Saget, C., A. Vogt-Schilb, and T. Luu. 2020. Jobs in a net-zero emissions future in Latin America and the Caribbean. Inter-American Development Bank, Washington, DC.
- Salazar, L., Aramburu, J., Agurto, M., Maffioli, A., Fahsbender, J. 2020. Sweeping the flies away: evidence from a fruit fly eradication program. European Review of Agricultural Economics. jbaa015, <a href="https://doi.org/10.1093/erae/jbaa015">https://doi.org/10.1093/erae/jbaa015</a>
- Salvia, A., Ravallion, M., and Galasso, E., 2004. Assisting the transition from workfare to work: a randomized experiment. *Industrial and Labor Relations Review*, 57(5), 1-32.
- Schmieder, J, T Von Wachter and J Heining. 2019. "The costs of job displacement over the business cycle and its sources: Evidence from Germany", working paper.
- Secretaria de Gobernacion de Mexico. 2020. Boletín Mensual de Estadísticas Migratorias de la Unidad de Política Migratoria, Diciembre.
- Seele, A., and J. Bolter. 2020. An uneven welcome: Latin American and Caribbean responses to Venezuelan and Nicaraguan migration. Migration Policy Institute, Washington, DC.
- Sehnbruch, K., P. González, M. Apablaza, R. Méndez, and V. Arriagada. 2020. The quality of employment (QoA) in nine Latin American countries: A multidimensional perspective. *World Development* 127 (March).
- SensorTower, 2020. Available at: <a href="https://sensortower.com/blog/top-apps-worldwide-august-2020-by-downloads">https://sensortower.com/blog/top-apps-worldwide-august-2020-by-downloads</a>
- Serpas, Luz Maria. 2014. Sistema de pensiones salvadoreño: diagnóstico y opciones de solución a sus dilemas. FUSADES. Documento de Trabajo.
- Silva, J. and Messina, J., 2020. Twenty Years of Wage Inequality in Latin America (No. 9734). Inter-American Development Bank.

- Stampini, M., Laura O., Pablo I., Ho June, R., and Gillinda, J., 2020. Working Less to Take Care of Parents? Labor Market Effects of Family Long-Term Care in Latin America. Washington, DC: Inter- American Development Bank: Forthcoming
- Stansbury, A., and Summers, L. H., 2020. The Declining Worker Power Hypothesis: An Explanation for the Recent Evolution of the American Economy (No. w27193). *National Bureau of Economic Research*.
- Stein, E., and Crespi, G. Eds., 2014. Rethinking productive development: sound policies and institutions for economic transformation. InterAmerican Development Bank.
- Steiner, R., and Forero, D., 2015. Evaluación del Impacto de la Reforma Tributaria de 2012 a través de equilibrio general.
- Uribe, A. M. T., Vargas, C. O., & Bustamante, N. R. 2019. Unintended consequences of maternity leave legislation: The case of Colombia. World Development, 122, 218-232.
- Trivelli, C., and Berdegué, J.A. 2019. Rural transformation. Thinking about the future of Latin America and the Caribbean. 2030 Food, agriculture and rural development in Latin America and the Caribbean, No. 1. Santiago de Chile. FAO.
- United Nations. 2017. World Population Prospects: The 2017 Revision, Key Findings and Advance Tables (No. ESA/P/WP/248). Retrieved from https://population.un.org/wpp/Publications/Files/WPP2017 KeyFindings.pdf
- United Nations. 2018. The speed of urbanization around the world, in Population Facts.
- United Nations. 2019. World Population **Prospects** 2019. from Retrieved https://population.un.org/wpp/ United Nations. 2020. The impact of COVID in Latin America and the Caribbean. Policy Brief July. https://www.un.org/sites/un2.un.org/files/sg\_policy\_brief\_covid\_lac.pdf
- Universidad del Rosario. 2019. Encuesta para trabajadoras y trabajadores de Rappi. Observatorio Laboral de la Universidad del Rosario. Available at: <a href="https://www.urosario.edu.co/Documentos/Nova-Et-Vetera/Encuesta-completa-rappitenderos-Observatorio-Labor.pdf">https://www.urosario.edu.co/Documentos/Nova-Et-Vetera/Encuesta-completa-rappitenderos-Observatorio-Labor.pdf</a>
- UNRISD, C.P., 2010. Inequality: Structural Change. Social Policy And Politics, p.87.
- Uribe, A. M. T., Vargas, C. O., and Bustamante, N. R., 2019. Unintended consequences of maternity leave legislation: The case of Colombia. World Development, 122, 218-232.
- Van den Berg, G. J., and Van der Klaauw, B., 2006. Counseling and monitoring of unemployed workers: Theory and evidence from a controlled social experiment. *International economic review*, 47(3), 895-936
- Van Reenen J, Bloom, N., Draca, M., Kretschmer, T. and Sadun, R., 2010. The Economic Impact of ICT", SMART 2007/0020, Final Report from the EU Commission project "Economic Impact of ICT", Centre for Economic Performance, London School of Economics, January.

- World Bank. 2007. World Development Report 2008. Agriculture for Development. In World Development Report, Agriculture for Development (Vol. 54). <a href="https://doi.org/10.1596/978-0-8213-7233-3">https://doi.org/10.1596/978-0-8213-7233-3</a>
- World Bank. 2018a. Indigenous Latin America in the twenty-first century. The World Bank Group, Washington, DC.
- World Bank. 2018b. Coding bootcamps for youth employment: Evidence from Colombia, Lebanon, and Kenya. (English). World Bank, Washington, DC.
- World Bank. 2020. Gender dimension of the COVID-19 pandemic. Policy Note. World Bank, Washington, DC.
- Zegarra, L. and Volpe, C., 2019. Integration and Trade Sector Framework Document. Inter-American Development Bank. Washington, DC.