Fast Tracking poverty reduction and prosperity for all Dominican Republic Poverty Assessment 2023

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Executive Summary

In many respects, the Dominican Republic has been a success story in the past two decades. At the macro-level, the country has accomplished a remarkably high and sustained GDP per capita while embracing structural transformation, with services emerging as the leading sector. The economy expanded by 5.7 percent per year on average from 2004 to 2019. GDP per capita grew almost three times faster than average for Latin America and the Caribbean (LAC) during the same period, making the DR rapidly converge with the regional average. Growth has been coupled with an impressive urbanization process: the share of the population living in urban areas rose from 57 in 1994 to 82 percent in 2020, on par with the LAC average.

Growth has been mostly pro-poor. Between 2004 and 2013, per-capita income for individuals in the bottom 40 percent grew at an average annual rate of 2.1 percent, compared to 1.2 percent for the top 60 percent. Growth was not pro-poor between 2013-16, but incomes increased for everyone (including the poor) by much more than in the previous decade. Growth returned to a pro-poor slant between 2017-21, even as the crisis originated by the Covid-19 pandemic saw the entire urban population and the upper half of the rural population experience negative growth in real income. As a result, per-capita income for the B40 grew at an average annual rate of 1.7 percent, but fell by 0.9 percent for the T60.

Poverty and inequality have fallen sharply, and the middle class has grown up to 2019. Using the LAC regional poverty line (\$6.85/day), poverty was slashed from 57 to 20 percent between 2004 and 2019. Meanwhile, the proportion of the middle class rose from 16 to 39 percent, outnumbering the poor for the first time in 2014. Economic growth has brought prosperity and a growing supply of infrastructure and services so the population suffering nonmonetary poverty (overlapping deprivations in education, dwelling materials and housing, access to services and lack of durable goods) has declined from 47 percent in 2007 to 25 percent in 2021. Inequality as measured by the Gini coefficient gradually fell from a peak of 0.519 in 2006 to 0.42 in 2019.

Despite growth being pro-poor, the pace of monetary poverty reduction has not always been commensurate with its growth performance. Economic growth in the DR between 2004 and 2019 was nearly three times the speed of LAC and was favorable to the poor overall. Yet the pace of poverty reduction in the Dominican Republic was not as fast relative to LAC as a whole, particularly between 2004 and 2013. In other words, the elasticity of growth to poverty has been low in the DR, particularly between 2004 and 2013, where a percentage point increase in mean (per capita) income for LAC reduced the poverty rate by 1.3 percentage points, but by only 0.7 percentage point in the DR. The poverty rate dropped faster after 2013 up to 2019 so the country's elasticity of growth to poverty improved relative to LAC as a whole, but is still below the rate of aspirational peers in the region like Uruguay.

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¹ Based on the national poverty line, after increasing from 32 to 50 percent between 2002 and 2004, in the aftermath of the banking crisis, monetary poverty declined steadily after 2004, reaching 21 percent in 2019. After the hit of the pandemic crisis, poverty increased and reach 23.9 percent in 2021.

² The Dominican Republic has no official measure of nonmonetary poverty. However, the country has been tracking the living standards of a large part of its population through a quality-of-life index (ICV) since 2004. This index measures the non-monetary wellbeing of the population, based on 17 indicators grouped into four categories: ownership of durable goods; access to utilities and basic services; dwelling materials and quality of housing condition; and selected education and socio-demographic characteristics of household members. The indicators are continuous or categorical and each has a corresponding weight depending on the level of deprivation observed. The indicators are combined to produce a score which runs from zero (fully deprived) to 100 (not deprived). The scores are obtained through a statistical technique of principal components analysis and vary by urban (metropolitan and non-metropolitan) and rural areas, with a unique cutoff point for each (see Figure 1). The score groups households into four categories of nonmonetary poverty: ICV-1: Extreme Poor; ICV-2: Moderate Poor; ICV-3: Vulnerable; and ICV-4: Non-poor (Murillo, 2014). This chapter reports as the number of nonmonetary poor nationally the headcount of those households who fall under ICV-1 and ICV-2.

Why has progress on poverty not been faster in the DR?

Stagnant and unequal wages and labor opportunities, especially for women and the poor

Part of the reason for the low elasticity of growth to poverty is that real earnings for the poor have been stagnant, particularly since the aftermath of the banking crisis in 2003-04 up to 2013. Labor income is the main source of income for most Dominican households, so when real income for the population at the bottom 20 percent of the income distribution has grown, poverty has fallen and vice versa. Real wages for those at the bottom 20 percent of the income distribution in the population dropped dramatically after the 2003-04 banking crisis and were stagnant up to 2013. Wages across all skill groups were about 30 percent lower in real terms in 2013 compared with 2000. Importantly, wage incomes began to grow in real terms since 2013, causing poverty to fall faster, but this stretch suddenly came to a halt in 2020 with the onset of the Covid-19 pandemic.

Lagging productivity has depressed real wages, especially in services, the most employment-intensive sector for the poor. Low productivity can be partially explained by both learning gaps in the current labor supply relative to the skills required by firms to improve business performance and mismatches between knowledge and skills acquired during school and college. The lack of education and low-quality schooling or the acquisition of irrelevant skills could be a crucial bottleneck in accessing better-paid jobs in the future: In a national survey conducted in 2019, nearly two thirds of firms in the retail trade/commerce and hospitality sectors said that their labor force requires training or skills upgrading. Tax exemptions benefitting large firm have reduced productivity growth through resource misallocation as do price controls and provisions that protect incumbents in sectors dominated by few groups of firms.

The low growth in real earnings has been particularly hurtful for the poor and women because they already earn lower average wages than other groups and have lower participation rates in labor markets. Workingage adults in poverty earn lower salaries compared to the non-poor. Women earn less than men and the gender pay gap is wider among lower earners. On top of this, the participation of men in labor markets has historically outstripped that of women. Although women have been gradually catching up, in 2021 only around 51 percent were working or actively looking for a job compared to 76 percent of men. The presence of women in lowearning and informal sectors like domestic work and services, and the unfair burden of household work and care help explain some of the labor participation and pay gap, both of which contribute to the feminization of poverty.

Lower levels and quality of education among the poor

Education can grant higher earnings so limited education opportunities among the poor has also dragged on poverty reduction. Despite improvements in enrollment and sizeable returns to secondary education in the Dominican Republic, one in two boys and one in three girls do not complete upper secondary school, with rates even higher among the poor. Among 15- and 18-year-olds, attendance rates are just 50 and 21 percent for the poorest children. Many pregnant girls, especially poor ones, drop out of school. On top of this, there are wide and well-documented variations between the performance of poor and better-off children across multiple subjects. Financial constraints and family reasons, which include becoming pregnant and household chores, are the main reason for school dropout for girls and young women. By contrast, lack of interest in school and joining work are the primary reasons for boys and young men to abandon their studies, which suggests that secondary education has to improve its quality and relevance for youngsters.

Uneven access to services, housing and connectivity

Uneven access to basic services, housing and market connectivity have also impaired faster progress on poverty reduction; these gaps cut across socio-economic groups (poor-nonpoor) and space (urban-rural and by regions). The state's provision of roads and transports, for instance, can help household to reach markets and accumulate faster or mobilize their labor and other productive assets more effectively. More and better public services like water, sanitation and electricity can also make more productive the self-employed working from home. Dominicans enjoy better access to services, housing materials and durable goods than fifteen years ago, but such access is neither universal nor equitable. Access to basic services like piped water or sanitation has more than doubled in recent decades, but slower progress has been achieved by the poor and from lower levels. Motorcycles are a key productive asset but their ownership has risen more slowly among the poor. The share of households without sanitation (flushing toilet) dropped by two thirds in urban areas outside the Metropolitan Area to reach 9 percent in 2021. By contrast, despite progress on both fronts, about 30 percent of rural households still lived without sanitation and 1 in 4 had no safe water provision. Households in lagging provinces (defined by a composite measure of productivity that includes nightlights per capita radiance, spatial GDP per capita and income per capita) have less access and lower quality of basic services like running water, power sockets, sanitation, waste collection, and internet. Households in lagging regions also have fewer hours of water and electricity services than in more productive regions, and are more likely to have poor-quality floors, walls and roofs.

Lack of land-use planning and spatial diagnostics lead to unplanned urban sprawl and together with insufficient local resources could make it harder to address gaps in access to services, housing and roads. As of 2021, only 5 percent of municipalities had land-use plans and most municipalities do not have urban planning offices. There is no evidence of territorial planning in rural areas. In parallel, the DR is one of the most centralized countries in the LAC region: local governments account for just 2.4 percent of total government spending. Regional imbalances in the provision of services and infrastructure could also be due to misguided tax incentives that limit fiscal space. Firms surveyed by the World Bank report that access to the DR's northern ports, the US market, and skilled workers drive their decision to set up shop in Special Economic Zones (SEZs); tax exemptions – like a 100 percent exemption for imports of raw materials and vehicles – do not even feature in the top five reasons.

Modest impact of fiscal policy on poverty

Fiscal policy reduces poverty modestly. The first three deciles of the population are net beneficiaries of the country's fiscal system when all benefits, transfers and taxes are applied, except for health and education. But the share of the Dominican population lifted from poverty (those whose income are below the international poverty line of US\$5.5/day in 2017 PPP terms) as a result of fiscal policy interventions is small (1.36 percent points), relative to the population that exits poverty due to the impact of fiscal policy in other Latin American countries. Underpinning these patterns are three proximate causes or drivers. First, there is heavy reliance on consumption taxes like value-added tax (known as ITBIS in the DR) to raise revenues and compensate the lower levels of taxes collected from other sources, including corporate, income, and property taxes. The consumption taxes are paid by all the population through the purchase of goods and services and thus affect the poor and vulnerable. Second, government spends important amounts on water and energy subsidies which mainly go to upper income deciles and fail to reach many poor households. On top of this, they crowd-out other important social expenditures like cash transfers. And third, ongoing cash transfers provided through the social protection system in the country have wide coverage, but still insufficient among the poor and provide relatively low amounts per beneficiary. Public transfers do have reduced monetary poverty historically like between 2004-13 when real wages were stagnant, but their size, targeting and efficiency are falling behind peers in the region.

The main cash transfer programs benefit around 22 percent of the non-poor. Poverty maps at subnational level serve as one of the mechanisms to reach poor beneficiaries and currently rely on the 2010 census, meaning some eligible people may not be enrolled in social assistance. For these reasons, it is further anticipated that the group of poor people who escape poverty by virtue of being net fiscal receivers (that is, they receive more benefits and transfers than taxes paid) is also small.

High exposure to and impact of climatic shocks

The structural deficiencies reported above that have prevented a faster pace of poverty reduction in the DR have been compounded by shocks, particularly recurrent floods and tropical storms, that have adverse impacts on dwellings, health, work and employment, and food security, especially for the poor. Poorer households bear disproportionate impacts: they are more exposed, have fewer assets with which to protect themselves or recover from shocks, and are more likely to cope in negative ways like eating less. One in four of the poorest households are at high risk of flood compared to 13 percent among the wealthiest. Meanwhile, over half of the households with high exposure to flood risk have inadequate housing materials like zinc roofs. Despite being highly vulnerable to climate change and variability, many poor households do not undertake preventive actions due to financial constraints or lack of security of ownership or tenancy. And even though they tend to receive higher shares of assistance due to floods than wealthier households, overall assistance has been negligible in the past. As a result of this uninsured risk due to shocks households can be forced into poverty. For instance, between 2001 and 2016, poverty increased by 2.5 percentage points on average for households that experienced heavy storms and flooding, relative to non-affected households. Unlike climatic shocks which hit recurrently and cause high human and economic losses, the Covid-19 pandemic was an uncommon shock that pushed many into poverty.

The Covid-19 crisis and the need to accelerate poverty reduction in its aftermath

Poverty in the DR is nowadays higher than before the Covid-19 pandemic that pushed the DR into its first recession in nearly 17 years, reversing poverty reduction and swelling the ranks of the vulnerable. Moderate poverty (\$6.85/day) grew from 20 percent in 2019 to 23 percent in 2021, an increase of around 350,000 people. The vulnerable population (defined as the non-poor living on less than \$14 USD a day) also grew to around 41 percent of the population by 2020; and by 2021 the DR has become the country with the highest share of vulnerable people among its population within the LAC region. Having such a large group that could easily fall into poverty is particularly problematic given the high exposure of the country to climatic risks.

The Covid-19 pandemic exposed the enduring fragilities in the DR's social fabric mentioned before, which have stopped everyone from benefiting equally from growth in the past. Nearly 200,000 jobs were shed in the 2020, with poor households, women and informal workers disproportionately affected. The pandemic widened pre-existing gaps in the workplace between women and men. In 2021, 23 percent of women aged 18-24 years were NEETs (not in employment, eduation or training), compared to 12 percent of men. The quality of jobs (characterized by income, benefits, security, and satisfaction) held by men and in urban areas has returned to reasonable pre-pandemic levels, but not for women and in rural areas. The gendered disparities in labour and wages have contributed to a noteable feminization of poverty. Many children dropped out of school due to the Covid-19 pandemic crisis, but in larger shares among the poor.

The pandemic has also accelerated the urbanization of monetary poverty, while rural areas remain disadvantaged in multiple other ways relative to urban areas. In 2004, the share of the poor living in urban areas exceeded 60 percent. By 2021, urban areas were accounting for 83 percent of the total poor. At the same time, in 2021, over a third (36 percent) of the rural population were non-monetary poor, compared with only

in five (22 percent) among those living in cities. This means the educational attainment of the rural poor is relatively lower; they have less access to water and sanitation, connectivity and financial services; and they are overrepresented in informal and self-employed jobs. Nonmonetary poverty has fallen across regions but underlying structural inequalities remain. Poverty is about three times higher in the poorest two regions (Enriquillo and El Valle) neighboring Haiti than in the richest (Cibao Sur) region. Poverty has become a lot more urban, and is now concentrated in the Ozama region, where 40 percent of the poor population resides, compared to 25 percent in 2005.

In spite of the setbacks created by the Covid-19 pandemic, there are some encouraging signs afterwards. Amid an economic recovery driven by tourism, remittances, and near-shoring, poverty started to fall once more since 2021. And the fact that the government responded swiftly and robustly to the Covid-19 crisis, helped to protect much of the gains of recent years making the recovery quicker. The DR's mitigation package against the crisis was one of the biggest and more generous in the region. *Aliméntate*, the DR's main cash transfer program, has doubled its coverage (to around 1.35 million households) and average monthly transfer amounts (from US\$16 to US\$32) since the start of 2020. By 2022 conditional cash transfers had expanded by 173% relative to 2019. This served as a buffer for income loss, preventing an additional poverty rate increase of 6 percentage points.

But the DR would need to harness and improve its track record of inclusive economic growth and redistributive policies to deliver faster poverty reduction while mitigating the structural gaps unraveled by the pandemic. Informality correlated with lower productivity and wages; high inflation affecting key staples, fuel and fertilizers; and enduring gendered and socio-economic disparities in education and job opportunities are still dragging on the rate of poverty reduction. According to projected forecasts, the poverty rate (US\$6.85 PPP 2017 per day) in 2023 is expected to be 21.6 percent: lower than in 2020 (23 percent) but still above precrisis levels in 2019 (20 percent).³ The modeled results show that, in a ceteris paribus context, where poverty reduction responds similarly to the GDP growth of recent years, the poverty rate would only recover to prepandemic levels in 2025.⁴ Moreover, the DR has an aspiration to become a high income country by 2030 and poverty levels for this group of countries hovered around 6.6 percent in 2021.⁵ Based on simulation analysis conducted for this Poverty Assessment, poverty in the DR by 2030 would drop to 15 percent if the historical patterns of growth were to continue, and 12 percent if the pro-poor growth of 2013-16 were replicated.⁶

How can the DR accelerate inclusive growth and expedite poverty reduction?

To expedite poverty reduction while overcoming the harms caused by the pandemic and raise the prospects of achieving high-income status by 2030, the country will need to close faster the gaps that persist between population groups and territories in five inter-related challenges around: human capital and employment, productivity, territorial development, fiscal policy and vulnerability to climatic shocks. These challenges can be overcome through five broad areas of action:

³ Country Poverty Briefing (Spring Meetings 2023) – Dominican Republic. The World Bank: Washington, D.C.

⁴ Economic growth explains an estimated 80 percent of the reduction in poverty (US\$6.85 a day) between 2004 and 2019, while redistribution was behind the remainder.

⁵ Chile, Panama and Uruguay are high income countries in LAC and displayed the following poverty (US\$6.85 PPP 2017 per day) rates: 8 percent (in 2020), 12.9 percent (in 2021) and 6.7 percent (in 2021), respectively.

⁶ Predictions of poverty up to the year 2030 were conducted based on two simple simulation models. A *business-as-usual model* assumes that the average 4.5 percent annual growth rate of real income per capita between 2004 and 2019 is maintained for the next eight years. An *inequality-reducing model* assumes an annual growth rate of 6.6 and 7.3 percent for the B40 in urban and rural areas respectively (which was the previous best pro-poor performance in terms of growth, in 2013-2016).

First, investing in people, especially girls and women. Quality education is widely understood to be an essential vehicle for poverty reduction and there are sizeable returns to secondary education in the Dominican Republic. Adolescent pregnancy remains exceptionally high by global standards and well above the LAC average, so keeping teenagers in school, especially girls, is a clear priority given the multiple negative consequences associated with dropping out. Since primary education is almost universal in the DR, the benefits and incentives of Aprende - a successful CCT to incentivize primary education- could be shifted towards Avanza, the conditional cash transfer program to incentivize secondary education, with an emphasis (or bonus) on completing the last year of the lower and upper cycles where dropouts tend to occur. Girls could receive more money than boys, reflecting the additional pressures on them to drop out, and go directly to students rather than to the heads of the household. Deploying early warning systems for student at risk of dropping out has been successful in other LAC countries of the region so similar strategies could be implemented in the DR to increase retention rates. Improvements in the quality and relevance of education could accompany efforts to encourage high school completion. First, making education more relevant and attractive to young people by strengthening and expanding the vocational stream of upper secondary education and introducing life skills. And second, expanding learning technologies that adapt to the needs and knowledge level of the students (instead to responding to set curricula), and which have already shown remarkable improvements in short periods of time among disadvantaged groups in the public system.

Since women face notable handicaps as they to transition into or seek to stay in work, policies like the Extended School Day Program (JEE), which has proven successful in increasing labor participation among women with low education, should be promoted and extended. Care services through the Comprehensive Early Childhood Care Centers (CAIPI) should also be opened or expanded in underserved municipalities where the unmet demand for care services is most acute, and beneficiaries of the current anti-poverty strategy *Supérate* should be referred to them when possible.

Second, boosting the labor incomes of the poor through increased productivity. Inadequate human capital, skills mismatches between labor supply and demand, and an insufficiently competitive business environment hamper labor and firm productivity, particularly among micro, small and medium-sized companies in the service sector, which generate the most jobs and thus have a major role in reducing poverty. The impediments preventing small and medium firms and workers from becoming more productive and formal should be lifted. In addition, vocational training programs embedded in the DR's social protection system have raised incomes for existing job-holders, but could be integrated with counseling and mentoring services for trainees looking for job, as well as linking them to temporary first employment and wage subsidy programs administered by the Ministry of Labor to overcome aspirational or information barriers while increasing the chances of getting a job. Public employment services should also be strengthened to provide job support targeted to vulnerable jobseekers through provision of better information, digital tools, and closer links with the private sector and educational and training institutions. However, supply-side interventions in the labor market should be accompanied by demand-side policies such as encouraging FDI and liberalizing labor markets.

Third, reducing spatial inequalities in basic services, connectivity and housing. Unplanned urbanization and weak urban-rural, intraurban and regional connectivity will limit productivity gains even for those with good levels of education and employed. At the same time, limited and poor-quality of services and road networks hinder the potential of lagging groups, areas and provinces. An initial effort should then be devoted at closing the infrastructure gap in connectivity, technology, and public services. An important step in this regard is boosting the capacity of local governments to deliver land management and planning reforms through stronger municipal planning capacity (land use plans) and greater financial resources, especially through the right to impose property taxes and more control the allocation of capital spending within their jurisdictions. The regional imbalances in connectivity and services could be further addressed by reducing unnecessary tax

exemptions in *Zonas Francas* (Special Economic Zones - SEZs) and channeling recouped revenue into infrastructure. Government policy also needs to prioritize goods and services that incentivize job creation in peri-urban and semi-urban areas. Therefore, greater weight should be given to diagnostics that help to understand the spatial endowments of a territory (degree of connectivity, population density), the education of its labor force, and its existing industrial focus. This in turn would help identify the main local bottlenecks for job creation. Once territorial endowments have been identified and the strategic focus of a territory decided, it is important to ensure that relevant skills are available locally. The DR has extensive experience in training programs that train young people in technical and socio-emotional skills and match them with non-paid internships in local firms. But this can limit their chances of finding long-term paid employment in the provinces where most jobs are. Transport subsidies or mobility stipends could help bring young skilled workers from remote, poorer regions to job clusters in and near SEZs.

The DR should redouble efforts to improve housing and local services through slum upgrading programs that help protect citizens from environmental shocks and improve their wellbeing. Housing constitutes a key productive asset for many self-employed and a source for risk management against floods and hurricanes when dwellings are built of strong materials. Proper land-use planning and the expansion of low-income housing programs can alleviate both demand- and supply-side constraints, including property registration and permits. Incidentally these programs can also help to build resilience against climatic shocks as they relocate people into safer areas and strengthen incentives to undertake preventive measures by giving people property ownership.

Fourth, mobilizing more domestic resources and spending them more efficiently with a greater focus on the needs of the poor. An increase in fiscal revenues could grant more resources to finance the provision of more and better services on education, health, water and sanitation, roads and housing to endow the poor with the skills and assets required to take full advantage of their productive capacity and live better lives. More public resources could also serve to expand the regular coverage of social assistance programs and provide larger cash transfers per beneficiary among poor households or enlist more households in response to climate shocks. Increasing the capacity of the Tax Administration Authority to conduct tax audits and enforce control while revising existing tax exemptions (which are the highest in the region at over 6 percent of GDP in 2019) could broaden the resources available and the tax base. There is a high-exemption threshold for the personal income tax and a high level of labor informality—the informal sector accounts for 57 percent of income earners. Scaling back regressive subsidies on water and energy can also free up funding to finance higher-quality services and strengthen social assistance programs.

The tax system should build safeguards for pro-poor spending if the reliance on indirect taxation continues or expands. How taxes are raised matters to poverty as much as the amount raised. The ITBIS is the single largest contributor to tax revenue in the DR and is slightly progressive in relative terms⁷ because it has an important set of exempted basic consumption goods and services primarily consumed by the poor and because many purchases are made in informal establishments. However, it remains a value added tax and is less progressive than personal income taxes. If increasing revenues in the future relies on indirect taxes, these could introduce adverse impacts on the poor and vulnerable unless part of the revenues raised through ITBIS and other indirect taxes are properly channeled to them. Targeted cash transfers provide a way to compensate the poor so the final set of policy recommendations in this report sketches some ideas to improve their targeting and reach.

⁷⁷ The amount of taxes collected expressed as a share of market income is lower for the poor than for other groups of the population.

And fifth, within fiscal policy, some of the DR's social assistance and safety net programs could have wider coverage and be better targeted. Social protection coverage in the DR is good compared with regional peers, but some programs could expand their coverage and many potentially eligible citizens are not enrolled. In particular, the coverage of the CCT programs for education, *Aprende* and *Avanza*, among the poor remains limited. In addition, many non-poor benefit, especially from the main CT program *Aliméntate*. Such leakages need to be addressed by: updating poverty maps with census data from 2022; improving the quality of the proxy means test; and implementing a graduation strategy out of poverty to transition beneficiaries into other services and create space for those not currently covered.

The country should also continue its efforts to protect households from risk and shocks through safety nets and transfers. The DR is already moving towards an adaptive social protection system (ASP) with an unconditional free-use and temporary cash transfer to alleviate the impact of climate emergencies (the *Bono de Emergencia*), a national social registry, and a flexible payment system to help poor households in dealing with climate and other shocks. These efforts are welcome and should continue. The *Bono de Emergencia* was activated for the first time in response to Hurricane Fiona in 2022, but its scale was minor so its fiscal sustainability was not put to the test. Incentives for people to take preventive measures against risk should also be embedded in the emergency cash transfers.

Ultimately, the proposed complementary reforms are intended to lay the foundation for a more dynamic and prosperous country, where growth continues to reduce poverty but faster, but also address the fragilities revealed by the pandemic. At their core, they aim to chart a path toward sustainable growth based on increased economic productivity, more inclusive labor markets, more dynamic structural transformation, and a better-functioning fiscal policy, including safety nets. These policy reforms are meant to mitigate or remove the key obstacles identified in this report that have hindered faster poverty reduction in the DR and their inception is presented in the summary table below.

Drivers of slow poverty reduction	Key barriers to attenuate the factor that explains the slow pace of poverty reduction	Policy recommendations to accelerate inclusive growth			
poverty reduction Slow pace of poverty reduction		To keep women at work:			
Unequal labor opportunities and wages, especially between poor and better-off individuals and between women and men	Unequal labor participation and gender wage gaps due to: Domestic and care activities Informality Overrepresentation of women in low-earning sectors Discrimination at work	 Adapt or build new centers and classrooms to universalize the Extended School Day Program (JEE) and increase access to preschool Expand access to formal care services provided through the Comprehensive Early Childhood Care Centers (CAIPI) and refer beneficiaries of the current anti-poverty strategy Supérate to CAIPIs, where possible			
Stagnant real wages in the service sector due to lagging productivity	Lagging productivity due to: Insufficient human capital (low schooling and learning gaps; mismatches between knowledge acquired during school and college and skills required by firms to improve business) Domestic policy distortions (tax exemptions benefitting large firms, price controls and provisions that protect incumbents in sectors dominated by few groups of firms)	To improve productivity and job opportunities: Link upskilling and reskilling programs more closely to labor market demand Integrate the vocational training programs embedded in the DR's principal social protection program with counseling and matching services, and link them to temporary employment and wage subsidy programs administered by the Ministry of Labor to overcome aspirational or information barriers while increasing the chances of getting a job Consider the reduction of tax exemptions to firms within Special Economic Zones and reconsider price controls in favor of less distortive mechanisms, while compensating the poorest where necessary			
Lower levels and quality of education among the poor	Low school attendance and dropouts due to: Financial constraints and family reasons, which include becoming pregnant and household chores, in the case of girls and young women Lack of interest in school and joining the labor market, in the case of boys Low academic performance due to: Low preschool attendance Clustering of students with similar economic and social backgrounds in the same schools Low efficiency of the public education sector measured as the ratio between learning outcomes and expenditures per pupil; with many students not passing the academic year because they accumulate learning lags over the years	 To increase school retention and completion: Expand the conditional cash transfer program to incentivize secondary education, Avanza, and strengthen its focus on girls by giving them more money than boys, reflecting the additional pressures on them to drop out, and giving the cash directly to students rather than to the heads of the household Deploy early warning systems for student at risk of dropping out To improve the quality of education and the relevance of education for youth: Continue increasing access to preschool -children from ages 3 to 5 Expand a digital learning technology that adapts to the needs and knowledge level of the students and has already shown improvements in short periods of time in the public system in the DR Strengthen and expand the vocational stream of upper secondary education and introduce life skills that make education more attractive Use existing student assessments to provide additional training to teachers on what students lack the most 			

	Poor management of urban growth due to:	To improve territorial planning and financing:
	Lack of land-use planning and spatial diagnostics	Promote "smarter" urbanization through mapping land use and the production of spatial diagnostics for better municipal planning
Uneven access to and low	<u>Under investments and uneven provision of services</u>	Strengthen the capacity of local governments to deliver land management and planning
quality of key basic services,	and infrastructure due to:	reforms by expanding their financial resources, especially allowing them to impose broad-
housing and durable assets	 Low tax revenues by regional standards 	based local taxes like property taxes
between regions and	Lack of own resources (transfers from the central	To reduce regional and socio-economic imbalances in connectivity, housing and services:
urban/rural areas	government being by far the largest source of municipal revenues) and little control over the	 Consider reducing unnecessary tax exemptions in SEZs and channel recouped revenue into infrastructure to boost connectivity in areas far from existing SEZs
	 allocation of capital spending within their jurisdictions by local governments Misguided tax incentives to attract FDI and private 	 Generate diagnostics that help to understand the spatial endowments of a territory (degree of connectivity, population density), the level of education of its labor force, and its existing industrial focus
	firms into Special Economic Zones as tax exemptions do not feature among the main reasons why firms choose to operate in SEZs	 Ensure that relevant skills are available locally through collaboration agreements between private investors involved in the financing of SEZs and local research centers, universities, and vocational training bodies
		 Provide transport subsidies or mobility stipends to help bring young skilled workers from remote, poorer regions to job clusters in and near SEZs
		Redouble efforts to improve housing and local services through slum upgrading programs
		• Expand low-income housing through the Happy Family National Housing Plan (Plan Nacional
		de Vivienda Familia Feliz)
	Modest impact of fiscal policy on poverty due to:	To mobilize more resources and spend them more efficiently:
	 Low levels of revenue collection partly due to evasion 	 Increase the capacity of the Tax Administration Authority to conduct tax audits and enforce control while revising existing tax exemptions
Modest impact of fiscal policy on poverty	 Inefficient expenditures on water and electricity subsidies that are regressive and crowd-out other important social expenditures 	 Scale back water and energy subsidies to free up funding to finance higher-quality services and strengthen social assistance and safety nets
	 Low levels of social expenditures compounded by 	To improve the effectiveness of safety nets
	mistargeting and lack of coverage in key social programs	• Expand the coverage of the CCT program for education, <i>Avanza</i> , as well as the level of benefits per beneficiary of the main CT program <i>Aliméntate</i> , and index those payments to food inflation to avoid their depreciation in real terms
		Reduce program leakages by updating poverty maps with census data from 2022; improving
		the quality of the proxy means test; and implement a graduation strategy to transition
		beneficiaries into other services and create fiscal space for those not currently covered
	High impact of climatic shocks especially among the	To mitigate the impact of climatic shocks through safety nets:
	vulnerable and the poor due to:	
High exposure to and impact of climatic shocks which		Consolidate the unconditional free-use and temporary cash transfer to alleviate the impact full state and appropriate the Board of Europeanics
regularly hit the country and	 More exposure to climatic shocks, fewer assets to protect or recover and cope 	of climate emergencies (the Bono de Emergencia) • Embed incentives into the emergency cash transfers for people to take preventive measures
cause high human and	 Limited undertaking of risk preventive actions due to 	against risk
economic losses	financial constraints or lack of security of ownership or tenancy	-0
	Uninsured risk given limited safety nets for poor and vulnerable households to deal with climatic shocks	

Introduction

In recent decades, economic growth in the Dominican Republic (DR) has been steady. However, growth has not occurred in such a way as to make the benefits widely and evenly available. In fact, although the DR economy grew faster than that of other LAC countries before the Covid-19 pandemic, its poverty rates and social outcomes remain broadly similar to them. This report seeks to explain this conundrum, as well as to expand the knowledge base to improve the effectiveness of ongoing poverty reduction policies in the DR.

The Poverty Assessment draws primarily on new analytical work conducted in the DR, structured around four background notes on: (i) trends in monetary poverty and inequality, as well as the key drivers of those changes; (ii) nonmonetary poverty and its spatial dimensions; (iii) social assistance programs and their role in mitigating poverty; and (iv) climate change and its interaction with poverty. By helping to reduce the evidence gap in each of these areas, our analysis hopes to inform government policies and the national dialogue on poverty reduction. In addition, the note integrates existing analytical work and evidence produced inside and outside the Bank, including from its operations in the country.

The report draws primarily from several waves of the National Labor Force Survey, Encuesta Nacional de Fuerza de Trabajo or ENFT. The nationally representative ENFT, administered by the Central Bank of the Dominican Republic (BCRD in Spanish) for more than two decades, is the source for the country's official poverty and labor market statistics and has been collected since 2001. As such, the main goal of the survey is to collect information on income generation activities and on public and private transfers receipts of family members. Official poverty estimates in the Dominican Republic are produced jointly by the Ministerio de Economía, Planificación y Desarrollo (MEPyD) and the Oficina Nacional de Estadística (ONE) based on data from the Encuesta Nacional de Fuerza de Trabajo (ENFT). The ENFT is collected biannually (April and October) by the Banco Central de la República Dominicana and available upon written request. This survey was replaced in 2017 by the new permanent household survey called Encuesta Continua Nacional de Fuerza de Trabajo (ECNFT) with year-round data collection. In 2015 and 2016, both the ENFT and ENCFT were collected simultaneously to assess their comparability. In 2017, the BCRD discontinued the ENFT and kept the ENCFT as the official source of information to estimate poverty. Thus, since 2017 poverty measurements are calculated using the ECNFT and are not strictly comparable to those from the ENFT. Due to the COVID-19 crisis and subsequent mobility restrictions, the ENCFT was conducted by phone from Q2 2020 until Q1 2021. Preliminary assessments on data quality show that comparability of the main indicators was not severely affected.

The rest of the report is organized as follows. Section 1 provides a synopsis of the extent and trends in growth, poverty and inequality in the DR over the past two decades. The section provides a core diagnostic of those living under monetary poverty, emphasizing the spatial distribution of poverty and inequality. It then compares poverty in the DR to that of the rest of LAC and other upper-middle income countries. The section then documents the evolution of poverty and its inclusivity since 2004, highlighting achievements and ongoing challenges. The chapter then analyzes distributional aspects of welfare to understand whether progress, or lack thereof, in access to assets, services, and opportunities that could reduce poverty is generalized or not. Section 2 proposes five inter-related proximate drivers that explain the relatively slow pace of poverty reduction in the Dominican Republic between 2004-2021, building on the core diagnostic of trends and profile of assets and inequalities from section 1. These drivers are (a) unequal labor opportunities and wages between poor and wealthier individuals and between girls and boys; (b) lower levels and quality of education among the poor, (c) uneven access to services, housing and connectivity between regions and urban/rural areas; (d) modest impacts of fiscal policy on poverty, including limited adequacy of social assistance programs, and (v) high exposure to and impacts of climatic shocks. Section 3 identifies the obstacles to mitigate or remove the

challenges around employment and education, productivity, territorial development, fiscal policy and vulnerability to shocks that have hindered faster poverty reduction. **Section 4** provides specific recommendations on the types of policy reforms and investment that should be prioritized in each of these areas to increase incomes, catalyze poverty reduction, and boost shared prosperity.

1. AN OVERVIEW OF POVERTY AND INEQUALITY

1.1 Snapshot of Poverty in the DR: who and where are the poor today?

This section profiles households characterized by some form of poverty (monetary or nonmonetary) between 2004 (2007 in the case of nonmonetary poverty) and 2021. The profile assesses multiple welfare dimensions including demographic characteristics, education, economic diversification, and access to utilities. The key characteristics are described below (and the more detailed profiles can be seen in Appendix 1 table A1).

Box 1. How is poverty measured in the Dominican Republic?

Poverty analysis requires three main elements. The first component is a welfare indicator to rank all population from the person with the lowest level of welfare to the person with the highest level of welfare. The second element is an appropriate poverty line to be compared against the welfare indicator to classify individuals as poor or non-poor. Last, a set of measures that combine the individual welfare indicators and the poverty line into an aggregate poverty figure.

In the Dominican Republic, income per person per month has been chosen as the preferred welfare indicator.

Two poverty lines are defined: The *food poverty line* is the amount needed (per person) to purchase food following local diet patterns that provides sufficient calories (defined as 2,183 daily calories on average for the Dominican Republic). The *total poverty line* is the food poverty line plus a nonfood allowance that considers the basic nonfood needs of the population.

Based on these lines, and the level of income observed, two definitions of being poor are used:

A household is classified as poor if its income (per person) is less than the total poverty line, that is, its total resources are not enough to meet all its basic needs. This note uses two types of poverty lines: an official national line (5,785 dominican pesos per person per month of 2021) and an international poverty line (6.85 USD PPP17 per person per day) for international comparisons.

A household is classified as extremely poor if its total income (per person) is less than the food poverty line, that its total resources are not enough to meet its basic food needs. This note uses two types of poverty lines: an official national line (2,663 dominican pesos per person per month of 2021) and an international poverty line (3.25 USD PPP17 per person per day) for international comparisons.

Two poverty measures are used to aggregate poverty status across households: The poverty incidence is the percent of the population living in poor households. The poverty gap measures how far, on average, the poor population is from the total poverty line.

On May 2023, the Dominican Republic launched a new methodology to estimate poverty starting in 2022 (MEPYD, 2023).⁸ The new methodology updates and therefore diverts from that employed in the official poverty estimations up to 2021 which dates back to 2012. The main changes to the new methodology comprise the following:

- New poverty lines to reflect updated consumption patterns of the population both spatially and temporally. At spatial level, poverty lines for urban and rural areas were discontinued and replaced by four poverty lines corresponding to each of the four macro-regions (Ozama, North, East and South) of the country. At temporal level, the construction of the basket of basic needs takes information from the consumption patterns of the newest expenditure and income survey for the country (ENGIH in Spanish) from 2018 replacing the baskets estimated from the ENGIH 2007.
- The nominal income of the household and the new poverty lines are adjusted for temporal and spatial cost-of-living differences relying on the monthly consumer price index (CPI) by macro-region.
- The in-kind transfers from the school meals program (PAE in Spanish) are added into the income aggregate.
- Gifts and contributions from other households living abroad are excluded given their sporadic nature and the fact that the reported amounts are typically rather large, they are left out to avoid overestimating the true level of welfare of the household.

This report relies on the methodology that served to estimate official poverty up to 2021.

The DR's most recent household survey, the 2021 Encuesta Continua de Fuerza de Trabajo (ECNFT), puts the national incidence of poverty at 23.9 percent and extreme poverty at 3.1 percent. In absolute numbers, around 2.5 million Dominicans were living in poverty, and 325,000 in extreme poverty.

Most of the poor population is concentrated in urban areas. In 2021, urban and rural areas showed similar poverty rates (24 percent in urban and 25 percent in rural). Nonetheless, 80 percent of the poor lived in urban areas (figure 1.a).

Monetary poverty varies widely across regions. Poverty is well above the national average in Enriquillo and El Valle, two regions neighboring Haiti. Some 44 percent of people are poor in Enriquillo, more than double the rates of northern regions (figure 1.b). But in absolute terms the poor population is heavily concentrated in Ozama (which hosts the DR's capital, Santo Domingo), Valdesia and Cibao Norte (which hosts Santiago, the second largest city).

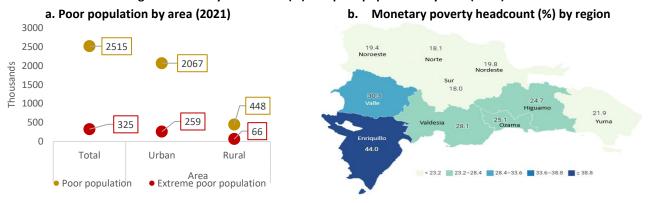


Figure 1. Poverty headcount (%) and poor population by area (2021)

Source: Authors, based on ECNFT.

Note: The ENCFT is representative for 4 macro-regions on a quarterly basis. The team aggregated the information for the full year to estimate poverty at regional level.

⁸ https://mepyd.gob.do/publicaciones/boletin-de-estadisticas-oficiales-de-pobreza-monetaria-en-republica-dominicana-2022.

The poor are typically less educated, have higher unemployment and informality rates, and when holding a job, they tend to work in services and commerce. Poor households tend to be headed by younger adults. Households whose head completed tertiary education are about half as likely to be poor as those whose heads only started primary education. Households with unemployed heads display the highest poverty rates. By occupation, the poorest households are those whose head is engaged in agriculture and domestic services. While the labor force participation rate is around 50 percent among the poor, the same rate for the total population oscillates around 64 percent. Unemployment is almost three times higher among the poor (at 22 percent) than for the total population (7 percent). Inactive and unemployed women are similarly overrepresented among the poor.

Poverty rates are higher among larger families and female-headed households. Households with 5 or more members make up around one third of the total population but are at least 2 times more likely to be poor when compared with households with 3 or fewer members (see Annex 1). Female-headed households are more likely to be poor than male-headed households (18.4 vs 16.9 percent respectively).

Importantly, the profile of the monetary poor has undergone significant changes in the last fifteen years. Poverty has become a lot more urban (partly because some rural administrative areas have been redefined as urban, but also because poverty in existing urban areas has increased), and is now concentrated in the Ozama region, where 40 percent of the poor population resides, compared to 25 percent in 2005. In that year, poor households had more than 6 members on average and were headed by self-employed males. In 2021, poverty has become entrenched among smaller households (4 members on average) headed by young males employed in salaried jobs. The feminization of poverty (Polanco, 2023) and unemployment have also emerged as major traits. The difference in the poverty rates between male and female was 2.2 percentage points in 2019. A poverty index showing the proportion of women against men shows that for every 100 poor men there were 146 women in poverty; the pandemic aggravated this situation, placing the index at 153.6 for women in 2021. On the other hand, 12 percent of the poor now live in households with unemployed heads, up from 3 percent in 2005. Most of the poor have left agriculture or primary activities such as fishing or mining to engage in services and commerce (Annex 1).

The proportion of the population suffering nonmonetary poverty (overlapping deprivations in education, dwelling materials and housing, access to services and lack of durable goods) stands at 25 percent in 2021.9 In absolute numbers, these represents around 2.6 million Dominicans living in nonmonetary poverty.

Nonmonetary poverty is also concentrated in urban areas but is relatively more prevalent in rural areas. In 2021 urban poor dwellers account for 22 percent of the total urban population but represent 75 percent of the nonmonetary poor in 2021. By contrast, 36.4 percent of the rural population is nonmonetary poor.

⁹ The Dominican Republic has no official measure of nonmonetary poverty. However, the country has been tracking the living standards

rural areas, with a unique cutoff point for each (see Figure 1). The score groups households into four categories of nonmonetary poverty: ICV-1: Extreme Poor; ICV-2: Moderate Poor; ICV-3: Vulnerable; and ICV-4: Non-poor (Murillo, 2014). This chapter reports as the number of nonmonetary poor nationally the headcount of those households who fall under ICV-1 and ICV-2.

of a large part of its population through a quality-of-life index (ICV) since 2004. This index measures the non-monetary wellbeing of the population, based on 17 indicators grouped into four categories: ownership of durable goods; access to utilities and basic services; dwelling materials and quality of housing condition; and selected education and socio-demographic characteristics of household members. The indicators are continuous or categorical and each has a corresponding weight depending on the level of deprivation observed. The indicators are combined to produce a score which runs from zero (fully deprived) to 100 (not deprived). The scores are obtained through a statistical technique of principal components analysis and vary by urban (metropolitan and non-metropolitan) and

There is also a marked difference between nonmonetary poverty rates across regions, with the poorest regions concentrated in Western parts of the country. In 2021, Enriquillo and El Valle had the highest poverty rates, and Cibao Sur the lowest. These spatial patterns mirror the patterns of monetary poverty.

Noon poor households are also more likely to be headed by men and have higher dependency ratios, lower education achievements, less diversified sources of income, and less access to assets and services. Self-employment is more widespread among nonmonetary poor households, mainly informal activities in the service sector. Poverty has become a lot more urban, and mainly concentrated in the Ozama region.

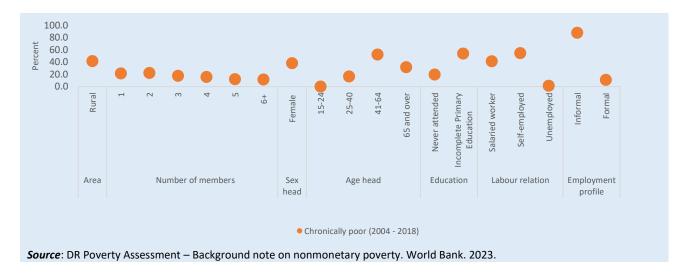
Box 2. Chronic poverty in the Dominican Republic

Both cross-sectional information on changes in poverty and well-being over time (Bolch et al., 2022) as well as panel data has proved invaluable to policymakers to answer questions about movement in and out of poverty. In the presence of panel data, there are basically two ways to estimate poverty dynamics: the "spells" approach (McKay and Lawson 2003) and the "component" approach (Jalan and Ravallion 1996). The "spells" approach focuses on transitions from 1 welfare status (poor/non-poor) to another (non-poor/poor) when 2 or more waves of panel data are available (a baseline survey and one or more resurveys). By extension, the spells approach defines households as chronically poor if they always have been poor, that is, those whose welfare metric has been below the poverty line at all points in time.

The Socioeconomic Study Survey (ESH1 in Spanish) from the DR's SIUBEN (Unique System of Beneficiaries) is a national survey that contains all the necessary information to estimate the quality-of-life index (ICV for its Spanish acronym) (see footnote 2). The ICV can be used as a proxy to estimate nonmonetary poverty. Each ESH wave covers a large part of the population: roughly 69% in 2004-08, 90% in 2011-12 and 62% in 2017-19. The ESH1 comprises 1.7 million households and was fielded in 2004-08. The ESH3 tracked and revisited 882,645 of these households between 2017-19. The panel component of the ESH survey can identify the households who stayed in nonmonetary poverty between ESH1 and ESH3; in other words, the chronically poor during 2004 and 2018. Almost two-fifths of the households in the ESH data were chronically poor in this period; in absolute terms most lived in urban areas.

The chronically poor in the Dominican Republic prevail in rural areas in relative terms and live in more numerous households, often headed by individuals over 65 years. They are more likely to have no education or an incomplete primary education. They also experience higher levels of informality and self-employment (see Annex 1 table A1). Antipoverty interventions like the "PROVEE" protection program (Conditional transfer exclusively for adults over 60 plus in extreme poverty to purchase food) and training for self-employment seem highly relevant for this group.

Profile of chronically nonmonetary poor (2018)



Box 3. Inequality and Shared Prosperity Measures: Definitions

Absolute poverty measures deprivation at a given threshold. Inequality is a broader concept that is defined over the entire population, not only those below the poverty threshold. Inequality measures generally capture either how much of the overall income is owned by a certain group of the population, or how income is distributed among all the population.

The Gini coefficient is the most common measure for inequality. A Gini coefficient of 0 indicates perfect equality, that is, a situation in which everyone has the same income. A Gini coefficient of 1 indicates complete inequality, that is, a situation in which a single person accumulates all the income.

In 2013 the World Bank announced a new goal of globally promoting shared prosperity. Progress toward this goal is defined by promoting the well-being of the bottom 40 percent of the population in each country as measured by income or consumption.

Hence, later on this report examines the growth of the per capita real household income for the entire population, with an emphasis on the bottom 40 percent of the population. Then it compares the share of the bottom 40 percent of the population (ranked in terms of income) with the share of the top 60 percent of the population (also ranked in terms of income).

The proposed measures of inequality and shared prosperity are obtained through the labor force survey (ENCFT). However, it is important to note that household surveys have limitations for calculating inequality, since they often fail to capture the incomes of households at the tails of the income distribution, both poorest and richest. Other recent work has tried to overcome this limitation by combining the ENCFT with tax records and national accounts (Fuentes, 2022).

Income is unequally distributed in the Dominican Republic. The bottom 40 percent of the population concentrate less than 17 percent of total household income. The top 20 percent of the population meanwhile has almost half of the total income (Figure 2). Labor incomes represent almost three quarters of the total income in the highest quintiles but only two thirds of the total income in the first quantile of the income distribution (Figure 2). Inequality, as measured by the Gini coefficient, was 0.395 for the Dominican Republic in 2021. By region, the highest Gini coefficient is found in Ozama (0.42) followed by El Valle (0.41) and the lowest in the Cibao Nordeste region (0.33) (figure 3).

Figure 2. Income distribution by quintile (2020)

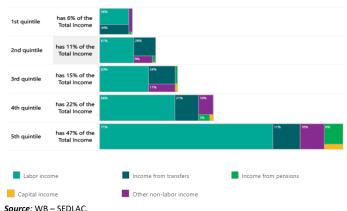


Figure 3. Gini index by region (2021)



Source: Author's based on ENCFT

Note: The ENCFT is representative for 4 macro-regions on a quarterly basis. The team aggregated the information for the full year to estimate Ginis at regional level.

1.2 Comparisons to other countries

Poverty in the Dominican Republic is below the regional average for Latin America and the Caribbean. However, the share of the vulnerable within the total population is one of the highest in the region. In 2021, the poverty rate using the international line of US\$6.85 (PPP 2017) a day was 30 percent for the LAC region and 23.2 percent for the Dominican Republic; the country ranked 8th out of 18 countries in the region (figure 4). The vulnerable population (non-poor living on less than \$14 USD a day) in the Dominican Republic make up around 43 percent of the population, the highest share in the region (figure 5). The high exposure of the country to climatic risks (see section 2.2.5) makes many of this group vulnerable to falling into poverty.

Figure 4. Poverty headcount (%) (\$6.85 PPP) in LAC countries (2021)

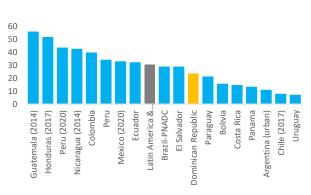
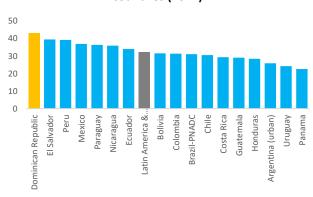


Figure 5. Vulnerable headcount (%) (\$6.85-14 PPP) in LAC countries (2021)



Source: WB - SEDLAC.

Inequality is relatively low compared to the LAC region. In 2021, the Gini coefficient in the Dominican Republic was 0.396 but 0.503 for the LAC region. Among 17 countries in LAC with Gini coefficients available for 2021, the Dominican Republic displays the third lowest level of inequality (figure 6). A recent exercise that estimates

¹⁰ If inequality gets measured through the top 10% income share or the pre-tax national income share held by the top 10 percent of the population based on the World Inequality Database (WDI), inequality in the Dominican Republic is about the same as the regional level average at around 53 percent. Another study uses as inequality metric the top 1% income share and portrays the DR as the most unequal country in the region at 29 percent relative to those countries for which similar data exists (Fuentes, 2022). Nevertheless, this conclusion should be taken with caution. The WDI methodology combines different data sources: national accounts, survey data, fiscal

an alternative set of Gini coefficients by combining the ENCFT with tax and national accounts data also finds that the DR is also among the least unequal countries in the region when compared to Mexico, Chile, Brasil, Colombia, Costa Rica, Argentina and Uruguay (Fuentes, 2022). The 75/25 ratio, which measures the homogeneity of the income for the half of the total households that oscillate around the national median income, shows DR as the most equal country in the region (figure 7). In other words, excluding the 25 percent of poorest households and the 25 percent of richest households, the difference between the household income of those households at the 75th percentile in the DR is 2.3 higher than those in the 25th percentile, this same ratio is 3.2 for the LAC region.

Figure 6. Gini coefficient in LAC countries (2021)

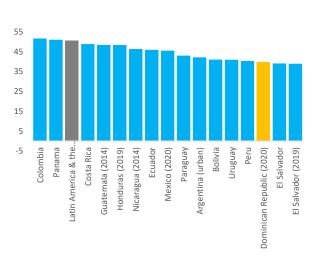
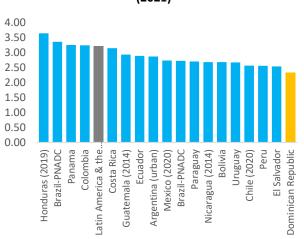


Figure 7. Figure 75/25 inequality ratio in LAC countries, (2021)



Source: WB - SEDLAC, LAC Equity Lab.

1.3 Trends in growth, poverty and inequality

1.3.1 High and sustained economic growth

At the macro-level, the country has accomplished a remarkably high and sustained economic growth over the past two decades. The economy expanded by 5.7 percent per year on average from 2004 to 2019. GDP per capita grew almost three times faster than the Latin America and the Caribbean (LAC) average during the same period, making the DR the second fastest growing economy in the region during that period (figure 8) and rapidly converge with the regional average. Sustained growth has been made possible by macroeconomic stability, characterized by relatively low inflation and stable exchange rates, as well as capital accumulation and total factor productivity growth. Foreign direct investment (FDI) inflows, averaging about 4 percent of GDP over the last two decades, boosted tourism, services, manufacturing, construction, and mining.

data, and wealth rankings to arrive at one number and has limitations to perform country-country comparisons. The WDI recognizes that none of these data sources and the associated methodology is sufficient in itself. They stress that their ability to measure the distribution of wealth is limited, and that the different data sources at disposal are not always fully consistent with one another.

¹¹ Growth volatility gradually fell throughout the same period, notwithstanding the country's exposure to climatic shocks, the 2003 banking crisis, and the global financial crisis of 2009. Growth has been steady in large part due to stable macroeconomic fundamentals, evidenced by low inflation, fiscal deficits, and interest rates.

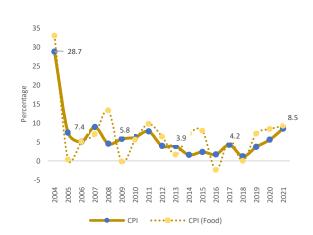
The COVID-19 pandemic triggered a historic economic downturn, followed by a strong rebound during 2021. Growth volatility gradually fell between 2003 and 2019, despite the country's ongoing exposure to natural hazards, the banking crisis in 2003 and the global financial crisis of 2009. The economic crisis triggered by the COVID-19 pandemic, however, caused GDP per capita to contract by 6.7 percent in 2020, the biggest drop in the 30 years for which comparable records exist. However, the economy recovered strongly in 2021. GDP rebounded by 12.3 percent, supported by a solid policy response to COVID-19, including fiscal, macroprudential and supervisory policies, and monetary easing (World Bank – Spring MPO, 2023).

Macroeconomic stability and growth up to 2019 were also characterized by relatively low inflation. Following the banking crisis of 2003, consumer inflation observed an annualized growth rate of 4.5 percent up to 2019 and was particularly controlled between 2012 and 2018. Unfortunately, inflation has faced upward pressures ever since the pandemic. The economic distortions produced by the COVID-19 crisis delivered annual inflation of 5.6 percent in 2020 and an accumulated 8.5 percent by the end of 2021 (figure 9). Food prices reached a higher cumulative rate of 9 percent by 2021, the highest rate since 2011. According to the latest Gallup poll on economic wellbeing in the country respondents perceive higher living costs as the main challenge affecting them and their families.¹²

Figure 8. Annualized GDP (constant 2015 US\$) per capita growth (2004-2021)



Figure 9. CPI - Annual inflation rate (2004-2021)



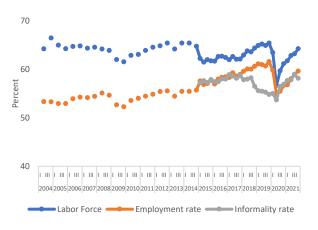
Source: WDI.

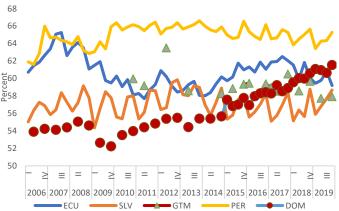
Robust economic growth has created many jobs, even by regional standards, particularly in services. Since the global financial crisis of 2009, the DR's participation and employment rates increased steadily, reaching 61 percent by the end of 2019 (figure 10). Such pace of employment growth allowed the DR to overcome other structural peers in the region like Ecuador and Guatemala or close the gap considerably like in the case of Peru (figure 11). Market liberalization has promoted tourism activities, which became a major source of external revenue and job creation. Between 2000 and 2019, tourism activity accounted for 9.6 percent of GDP on average, while job creation in the sector doubled. In 2019, the tourism sector created around 358,000 new jobs, of which more than 70 percent through indirect job creation. Special Economic Zones (see box 10) concentrated, on average, 3.8 percent of total employment over 2010-19, and provided 176,555 direct jobs as of 2019.

¹² Gallup República Dominicana. Estudio Nacional de Temas Económicos, Políticos y Sociales. Informe Final. 1 al 5 de abril de 2023.

Figure 10. Labor force, employment rate and informality (2015-2021

Figure 11. Evolution of employment rate across selected countries (2006-2021)





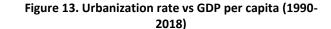
Source: ENFT and ECNFT by Central Bank of the Dominican Republic (BCRD). Note: Labor force and employment rates are defined as the shares of active population and employment in the working age population; Informality is defined as the share of informal workers in total employment.

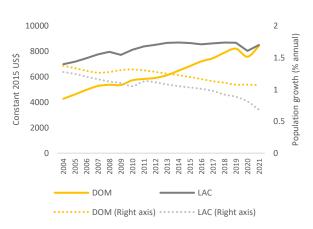
Source: Central Bank of the Dominican Republic (BCRD) and LABLAC by CEDLAS. Data from 2016 onwards correspond to the ENCFT.

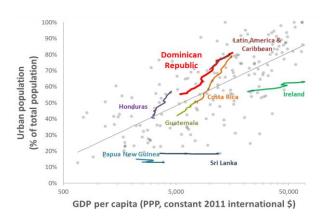
High economic growth, in combination with slow population growth and the bulk of the population in their prime years, has yielded sustained real per capita growth. Between 1950 and 2010, the median age increased from 17 to 24.8 years, and will reach 29.4 years in 2025. The population over 60 years is expected to represent 12 percent of the total population by 2025 (from 4.4 percent in 1950). The aging process will continue and by 2050, one in five Dominicans will be over 60 years old. The population has more than doubled in the past 50 years, going from 4.5 million in 1970 to just under 11 million in 2019. The annual rate of population growth, however, has been decreasing for some time, sitting at around 1 percent over the last decade. The fertility rate has decreased steadily since the 1950s to 2.36 births per woman. This decline, in combination with a net migration rate that has been traditionally negative (-2.84 migrants per thousand population in 2020, has significantly slowed the population growth rate. (figure 12).

The DR has also embraced structural transformation, with an impressive urbanization process. The share of the population living in urban areas rose from 57 in 1994 to 82 percent in 2020, reaching the LAC average (see figure 13). Meanwhile, population projections show that the rural population has fallen to a projected 17 percent in 2021. The dynamism of urban centers has attracted increased rural-to-urban migration, but also urban centers have sprawled and some rural administrative areas have been redefined as urban. The rate at which the DR is urbanizing (1.9 percent) is well above the average for the LAC region and the Caribbean, converging with Central American countries and international comparators. Costa Rica is the only Central American country with a similar urbanization trend than the Dominican Republic, with slightly lower levels of urban growth at 1.8 percent and 79 percent of the urban population (figure 13). Urban population is highly concentrated in the metropolitan areas of Santo Domingo and Santiago. By 2020 it is estimated that around 43 percent of the urban population live in these metropolitan areas. It is projected that the metro area of Santo Domingo, which currently concentrates 59 percent of the economic activity and 36 of the population, will keep growing until 2060 (World Bank, 2021d).

Figure 12. GDP per capita (constant 2015 US\$) and population growth (2004-2021)





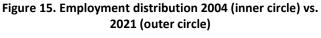


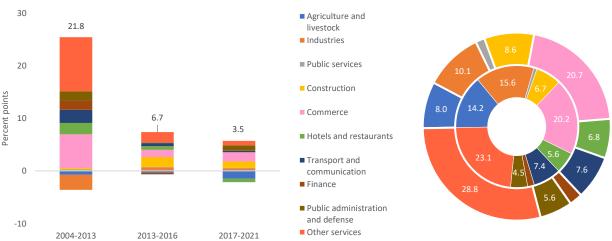
Source: Central Bank of the Dominican Republic (BCRD).

Note: Labor force and employment rates are defined as the shares of active population and employment in the working age population; Informality is defined as the share of informal workers in total employment.

Following rapid urbanization, there has been a shift towards services as the leading economic and employment sector. The depopulation of rural areas has been coupled with an increase in non-agricultural activities. Around two thirds of employment growth between 2004 and 2021 was driven by the expansion of services (including domestic work)¹³ and commerce, particularly up to 2013. By contrast, the share of agriculture employment within total employment almost halved during the same period, to 8 percent, and industrial employment contracted around 5 percentage points to 10 percent (Figures 14 and 15).

Figure 14. Contribution to employment growth (2004-2021)





Source: Authors' calculation from ENFT and ECNFT, BCRD.

 $^{^{13}}$ See Cañete and Serafin Cuello (2022) for a discussion on the relevance of domestic work in the DR.

1.3.2 Growth was mostly pro-poor¹⁴ between 2004–21

Growth Incidence Curves (GIC) plot growth rates in income per person against percentiles ranked by income per person from poorest to highest and thus provide an intuitive picture of how much growth has favored different population groups. Figure 16 shows the GIC for the DR as a whole, and in urban and rural areas, between 2004 and 2021.

We split the analysis of GICs into three periods to facilitate the understanding of the recent poverty dynamics observed in the Dominican Republic discussed later in section 2: (i) 2004-2013: slow poverty reduction following the banking crisis of 2004; (ii) 2013-2016: fast poverty reduction; (iii) 2017-2021: fast poverty reduction until the COVID-19 crisis and then strong rebound afterwards.¹⁵

Growth in the DR has been mostly pro-poor during the last two decades. Growth was positive and stronger among those with lower incomes and weaker for those with higher incomes between 2004 and 2013: percapita income for individuals in the bottom 40 percent grew at an average annual rate of 2.1 percent, compared to 1.2 percent per year for the T60. Growth was not pro-poor between 2013-16, but incomes increased a lot more than in the previous decade, including for the poor: per-capita incomes grew at an average annual rate of 6.7 percent for the B40 and 7.7 percent for the T60. Growth was also pro-poor between 2017-21; however during the pandemic crisis, all the urban population and the upper half of the rural population experienced negative growth in real income. As a result, per-capita income for individuals in the bottom 40 percent grew at an average annual rate of 1.7 percent, but decreased 0.9 percent per year for the T60 (figure 16).

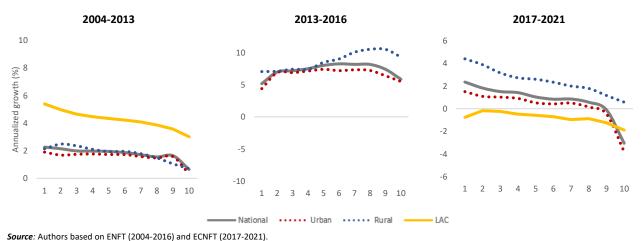


Figure 16. Growth Incidence Curves in the DR, 2004-2021

Source: Authors based on ENFT (2004-2016) and ECNFT (2017-2021).

Note: a. X axis represents percapita income deciles. b. No GIC is available for LAC between 2013-16.

¹⁴ This report considers growth as pro-poor when growth benefits the poor more than the rest (Baulch and McCullock 2000; Kakwani and Pernia 2000).

¹⁵ The ENCFT (Encuesta Nacional Continua de Fuerza de Trabajo) substituted the ENFT (Encuesta Nacional de Fuerza de Trabajo) in 2017, as a part of methodological improvements conducted by the Central Bank of the Dominican Republic. In preparation for this transition, both the ENCFT and the ENFT were conducted simultaneously in 2015 and 2016 to assess comparability.

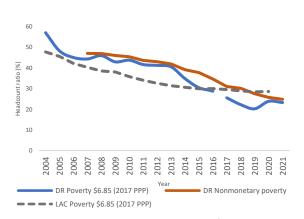
1.3.3 Progress in poverty and inequality

Partly as a result of pro-poor growth, monetary poverty was falling, and the middle class was growing, until the COVID-19 crisis. Using the LAC regional poverty line (\$6.85/day), poverty was reduced from 57 to 20 percent between 2004 and 2019 (figure 17). Meanwhile, the proportion of the middle class rose from 16 to 39 percent, outnumbering the poor for the first time in 2015 (figure 29).

Poverty has dropped over time in urban and rural areas alike. The gap in monetary poverty between urban and rural areas had been gradually closing since 2004 and almost disappeared by the time the COVID-19 crisis hit as it affected mainly affected urban areas. Most formal jobs in the country are in cities and urban centers, so the economic contraction triggered by the crisis had a larger impact on urban areas, where poverty increased from 19.9 to 23.7 percent between 2019 and 2021. By contrast, rural poverty decreased from 25.4 to 24.8 percent during the same period. This is partly explained by the expanded coverage of social assistance and emergency programs like *Quédate en Casa*, and higher amounts of the conditional cash transfers under the new *Supérate program*.

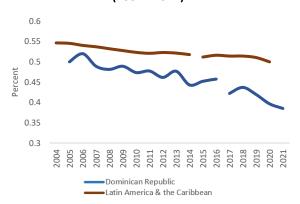
Inequality has declined since 2004 as well. Income inequality as measured by the Gini coefficient decreased from its peak of 0.521 in 2004 to 0.385 in 2021, remaining below regional levels throughout the period (figure 18). Inequality in the distribution of all income sources declined in this period, with labor income consistently more equally distributed than non-labor income and income from abroad.

Figure 17. Monetary and nonmonetary poverty headcount ratio (%), 2004-2021



Source: Monetary Poverty: WB – SEDLAC, LAC Equity Lab; Nonmonetary Poverty: Authors based on ENFT and ENCFT.

Figure 18. Gini coefficient in the DR and LAC countries (2004 - 2021)



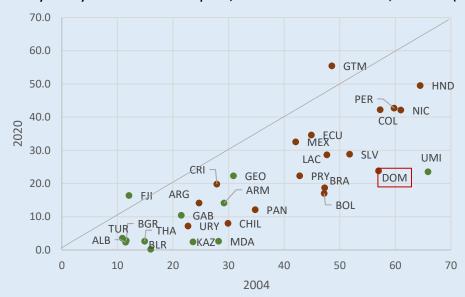
Source: WB – SEDLAC, LAC Equity Lab.

¹⁶ Based on the national poverty line, after increasing from 32 to 50 percent between 2002 and 2004, in the aftermath of the banking crisis, monetary poverty declined steadily after 2004, reaching 21 percent in 2019. After the hit of the pandemic crisis, poverty increased and reach 23.9 percent in 2021.

Box 4. Comparing poverty trends in the DR with LAC

International comparisons of poverty rates cannot be made using national absolute poverty rates since countries set different subsistence minimum standards and use different methodologies for poverty estimations. In addition, household surveys used for poverty estimations generally are not comparable across countries. A common practice for cross-country comparisons is to use a fixed poverty line expressed in an internationally comparable denomination, such as \$6.85 a day at 2017 international prices. This poverty line uses purchasing power parity (PPP) conversion factors^a and consumer price indices to convert national consumption aggregates expressed in local currencies to US dollars.^b

Based on the cross-country comparison, in 2004, with 57 percent of its population living below \$6.85 per day, the DR was above the average rate for LAC and among the countries with highest levels of poverty in the region. By 2020, the DR has achieved lower poverty rates than its structural peers in the region as defined by the SCD (Ecuador, Peru, Guatemala and Honduras) as well as below the average rate for LAC.



\$6.85-a-Day Poverty Rates in Dominican Republic, LAC and Other UMIC Countries, 2004–2020 (US\$)

Source: Poverty Assessment team calculations based on WDI.

Notes:

- a. Red dots represent LAC countries and green dots represents other upper middle-income countries.
- **b.** CIRCAS: NIC, BGR (2005); CHL, GTM, BUL, THA (2006); ECU (2007); FIJ (2008) and ALB, BUL, FIJ, TUR, PAN, SLV, HND (2019); KAZ (2018); GAB (2017); NIC, GTM (2014).
- **c.** PPP conversion factors are exchange rates that take into account the cost of common items in different countries. This conversion is defined as the number of units of a country's currency required to purchase a standard basket of goods and services collected in all countries.
- **d.** International \$6.85-a-day estimates should be used for international comparisons. Policy dialogue and within-country discussions should be informed by the national absolute and extreme poverty estimation methodology.

2.8 million people exited nonmonetary poverty¹⁷ in the 14 years to 2021, especially in rural areas. Unequivocally, Dominicans enjoy nowadays better access to services, housing materials and durables than fifteen years ago (see Annex 2). As a result, the proportion of nonmonetary poor declined from 47 percent in 2007 to 25 percent in 2021 (figure 17). The drop benefited urban and rural areas alike, but was greater in rural areas (from 61 percent in 2007 to 36 percent in 2021) than in the Metropolitan area (from 36 to 26 percent) and other urban areas (42 percent to 20 percent) (DR Poverty Assessment, Background note on nonmonetary poverty, World Bank).

Better housing quality (including cement floors, walls and roofs) account for over half of the reduction in nonmonetary poverty in the metropolitan area of the Dominican Republic; the strides made in access to services, particularly flushing toilets, were the main contribution to the reduction in nonmonetary poverty in other urban areas and rural areas between 2017 and 2021) (table 1). Others services like proper trash collection also improved, as did housing materials. Many of these gains have important implications for improved health outcomes. Access to electricity has become almost universal (DR Poverty Assessment -Background note on nonmonetary poverty, World Bank).

The country has also seen noticeable progress in educational access and attainment. Improvements in educational attainment account for an important part of the reduction in multidimensional poverty everywhere. The country has achieved almost universal access to primary education, especially in urban areas, and increased secondary enrollment from around 60 percent in 2000 to over 80 percent in 2019.

Table 1. Decomposition of Changes in Headcount Ratio for the Urban Metropolitan Area, Other Urban Areas and **Rural Areas in the Dominican Republic:**

2007-2016

2007 2010						
	Metropolitan Area		Other Urban Areas		Rural Areas	
ICV (quality-of-life) dimensions	Change in p.p	Contribution (%)	Change in p.p	Contribution (%)	Change in p.p	Contribution (%)
Education/demographics	-3.4	36.7	-3.9	27.2	-2.3	22.2
Quality of housing	-4.9	52.3	-4.2	29.1	-2.4	22.9
Asset ownership	-0.9	10.1	-1.4	9.9	-3.0	28.3
Access to services and utilities	-0.1	1.0	-4.9	33.9	-2.8	26.5
Overall change in poverty headcount	-9.3	100	-14.5	100	-10.5	100

¹⁷ The Dominican Republic has no official measure of nonmonetary poverty. However, the country has been tracking the living standards of a large part of its population through a quality-of-life index (ICV) since 2004. This index measures the non-monetary wellbeing of the population, based on 17 indicators grouped into four categories: ownership of durable goods; access to utilities and basic services; dwelling materials and quality of housing condition; and selected education and socio-demographic characteristics of household members. The indicators are continuous or categorical and each has a corresponding weight depending on the level of deprivation observed. The indicators are combined to produce a score which runs from zero (fully deprived) to 100 (not deprived). The scores are obtained through a statistical technique of principal components analysis and vary by urban (metropolitan and non-metropolitan) and rural areas, with a unique cutoff point for each (see Figure 1). The score groups households into four categories of nonmonetary poverty: ICV-1: Extreme Poor; ICV-2: Moderate Poor; ICV-3: Vulnerable; and ICV-4: Non-poor (Murillo, 2014). This chapter reports as the number of nonmonetary poor nationally the headcount of those households who fall under ICV-1 and ICV-2.

2017-2021

	Metropolitan Area		Other Urban Areas		Rural Areas	
ICV (quality-of-life) dimensions	Change in p.p	Contribution (%)	Change in p.p	Contribution (%)	Change in p.p	Contribution (%)
Education/demographics	-1.3	27.2	-0.7	15.0	-2.6	24.6
Quality of housing	-3.2	68.7	-1.4	28.1	-2.2	21.1
Asset ownership	0.0	0.4	-0.3	6.6	-1.3	12.4
Access to services and utilities	-0.2	3.7	-2.5	50.3	-4.4	42.0
Overall change in poverty headcount	-4.7	100	-4.9	100	-10.4	100

Source: DR Poverty Assessment – Background note on nonmonetary poverty, World Bank).

1.3.4 Ongoing challenges to poverty and inequality

Despite growth being pro-poor, the pace of monetary poverty reduction in the Dominican Republic has not always been commensurate with its growth performance. Economic growth in the DR between 2004 and 2019 was nearly three times the speed of LAC and was favorable to the poor overall. Yet the pace of poverty reduction in the Dominican Republic was not as fast relative to LAC as a whole. Using the LAC regional poverty line (\$6.85/day), poverty fell from 57 to 40 percent in the DR between 2004 and 2013. In the LAC region, poverty fell from 48 to 31 percent over the same period. In other words, the elasticity of growth to poverty has been low in the DR, particularly between 2004 and 2013, where a percentage point increase in mean (per capita) income for LAC reduced the poverty rate by 1.3 percentage points, but by only 0.7 percentage point in the DR. Several LAC countries have outperformed the elasticity of growth to poverty in the DR during that period (figure 19). The poverty rate dropped faster after 2013 up to 2019 so the country's elasticity of growth to poverty improved relative to LAC as a whole, but is still below the rate of aspirational peers in the region like Uruguay. The onset of the Covid-19 pandemic in 2020 increased poverty since the 2003-04 crisis.

5.0

-5.0

-10.0

-15.0

ARG BOL BRA CHL COL DOM ECU SLV GTM HND MEX NIC PAN PER CRI URY

2004 -2013 2014-2019

Figure 19. Growth Elasticity of poverty in LAC (2004-2019)

Source: Authors calculation base on WDI. **Note**: GDP per-capita growth (constant 2015 US\$)

a. Own estimations based on ENFT and ECNFT.

b. The variables captured in the four ICV dimensions are as follows: Education/demographics - level of education of household head, average education and literacy of household members and school attendance of children aged 6-14, as well as the share of under-fives in the household. Quality of housing - housing materials (roof, walls and floor), number of household members per room (as proxy for overcrowding) and dwelling type. Asset ownership -refrigerator, stove, tv and washing machine. Access to services and utilities - water provision, sanitation, liquid cooking fuel, trash collection and electricity.

Part of the reason for the low elasticity of growth to poverty is that real earnings for the poorest have been stagnant, particularly since the aftermath of the banking crisis in 2003-04 up to 2013. Labor income is the main source of income for most Dominican households (it hovered around 72 percent of total household income on average between 2004-2021), so when real income for the population at the bottom 20 percent of the income distribution has grown, poverty has fallen and vice versa. Figure 20 suggests an inverse correlation between labor income growth the bottom 20 percent of the population across economic sectors and poverty. Real wages for those at the bottom 20 percent of the income distribution in the population dropped dramatically after the 2003-04 banking crisis and were stagnant up to 2013. Wages across all skill groups were about 30 percent lower in real terms in 2013 compared with 2000 (World Bank, 2017).

Wage incomes began to grow in real terms since 2013 and poverty drop faster concomitantly (figure 20). Wages for high-skilled workers (defined as those with complete secondary education or more) in the service sector are higher and grew more rapidly from 2013 onwards when compared to those from low-skilled workers. The supply of highly skilled workers within the sector increased (as the proportion of low-skilled workers continued dropping) during the same period, but this increase has been accompanied by a rise in worker's income (figure 21). Such shift is possibly due to the growth in labor productivity within services that started to be observed in these years (see section 3.2 and figure 59).

Figure 20. Real labor income growth (B20) by economic sector and poverty (2004 - 2021)

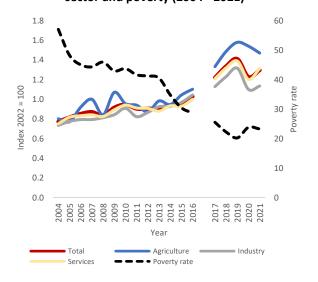
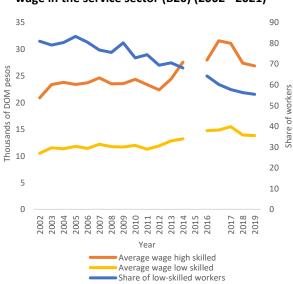


Figure 21. Share of skilled workers and average wage in the service sector (B20) (2002 - 2021)



Source: Author's calculations based on ENFT and ECNFT.

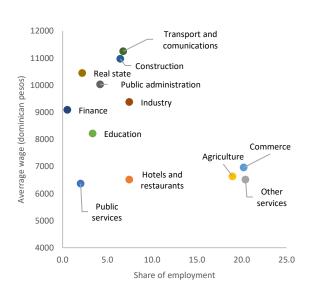
Note: B20: Bottom 20 percent of the population based on their income level. Low skilled workers are defined as those with incomplete secondary or less education. The ENCFT started in 2017 hence the break in the series.

The low growth in real earnings has been present across sectors, but average wages in the service sector have been lower than in other sectors historically, particularly among the poor and women. The protracted increase in employment levels within services has met with stagnant levels of productivity over time keeping real wages down. Low productivity levels has been mainly driven by inadequate skills and insufficient levels of human capital coupled with policy distortions. Section 2.2 inspects these drivers in more detail. The economic activities that concentrate the bulk of services (social and other services, education, hotels & restaurants) have among the lowest average salaries among economic activities. And many of the service jobs are taken up by

the poor or other vulnerable groups like women (figures 22 and 23). For instance, one fifth of the total population in the bottom quintile of the income distribution was employed in other services in 2019. Importantly, women are overrepresented among the poor and make less money than men in most service sectors. This pattern is more acute in sectors where women have higher shares of participation (figure 23). The gender pay gap (i.e., the simple difference between hourly earnings across genders) is even larger in the informal sector, where women make only 60 percent of men's earnings on average. These factors are discussed at length in sections 2.2.1 and 3.1 below.

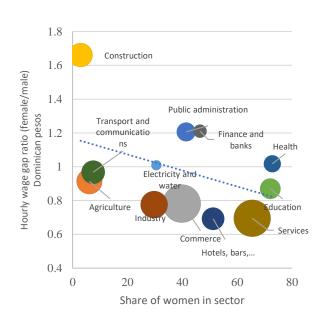
And the service sector employs the bulk of the poor. Growth in real labor incomes has been small in agriculture and industry as well, but these sectors hold less opportunities for low skilled workers (which is the group for whom labor wages can reduce poverty). Other services, which includes community, social, health, education and private households with employed persons is the most employment-intensive sector for the poor and expanded at high rates (relative to other sectors) until 2019 (figures 15 and 22). Employment growth in the services sector has been the largest contributor toward total employment in the last 20 years and has gained participation relative to other sectors: the share of the services sector in total employment increased from 51 to 71 percent between 2000 and 2021.

Figure 22. Average wages vs B20 as share of wage employment (2019, by economic activity)



Source: Authors' calculation from ENFT and ECNFT.

Figure 23. Hourly wage gaps and share of women employment by economic sector, 2019



Source: Author's calculations based on ENCFT-2019

Note: The size of the circles represents the size of the sector in terms of total employment.

Note 2. The agriculture sector includes fishing and mining.

Another reason for the low elasticity of growth to poverty is that some of the sectors which have contributed the most to economic growth (leaving aside services) have not always created a substantial number of jobs or hold small shares of the total employed population. The industrial sector is the largest sector of GDP, but barely added jobs to the economy between 2004 and 2019. Finance, hotels and restaurants and public services grew rapidly over the same period, but hold small shares of the total employed population. Construction is

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¹⁸ MEPyD (2017) in PLANEG III

another important contributor to growth, but employs few people relative to services. Commerce employs more people, but grew more slowly over the same period (figures 24 and 25).

Figure 24. Distribution of GDP and employment by economic sector (2019)

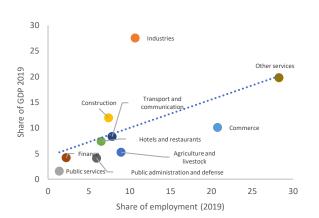
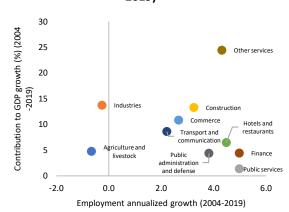


Figure 25. Contribution to GDP growth and employment growth by economic sector (2004-2019)



Source: Authors' calculation from ENFT and ECNFT and national accounts, BCRD.

Fiscal policy and poverty

When real wages were stagnant between 2004-13, cash transfers together with remittances helped reduce poverty to some extent through supporting consumption (figure 20), but there is room to improve their performance against poverty. To start with, transfers constitute at most less than a tenth of total household income among the poor (see section 2.1). A recently completed Public Expenditure Review (PER)¹⁹ calculated the coverage, targeting and incidence of the main cash transfer schemes in the DR between 2012 and 2018. It concluded that further gains can be achieved through larger and better targeted transfers as well as by indexing those transfer payments to local price levels. These issues are discussed at length in section 2.4.4. Cash transfers were increased and reached more people to play an important role in mitigating the impact of the pandemic: In 2020, official poverty increased by 2.4 percentage points to 23.4% but would have reached 29% in absence of fiscal transfers. But again the fiscal space to sustain those expansions is not trivial. Sections 2.2.5 and 4.4 explore some ideas to boost fiscal revenues and make social expenditures more efficient.

Even cash transfers may not reduce poverty sustainably if they fail to improve the productivity of the poor through the accumulation of human capital (by requiring cash beneficiaries to fulfill the co-responsibilities associated with the transfers). The country has experienced noticeable progress in educational access and attainment. However, the enrollment and completion rates are low relative to the regional average as is the quality of education, as DR ranks 146th out of 148 countries with low quality education (OECD, 2019). At the same time, many of the income poor have significantly lower education levels, and their children have lower education participation rates. The evidence to date on cash transfer programs (namely CCTs) in the DR to enable people to escape poverty or improve their probability of doing so in the future is mixed. Section 2.2.2 shows that CCTs do increase schooling and educational attainment, but the reach of these programs is fairly limited.

¹⁹ Dominican Republic Public Expenditure Review." 2021a. World Bank, Washington, DC.

And there is only so much transfers can do to appease the rigidity of poverty to economic growth if the most vulnerable cannot get more and better jobs. The fact that children growing up in poverty have lower rates of school completion, raises concerns about the employment prospects at the time of entering the labor force, and social mobility more broadly. In 2019, for instance, much lower shares of young adults and working-age populations living in poverty had completed secondary education and were earning lower salaries (employed) compared to their peers in the top quintile (see section 2.2.1). The advent of the Covid-19 crisis only reinforced the pre-existing inequalities on education and employment. The employment rate and school attendance²⁰ dropped 9 and 28 percentage points respectively for the bottom 40. The top 60 percent of the income distribution experienced drops of 7 and 25 percent, respectively.

Efforts to pivot away beneficiaries of social assistance programs into more and better-paid jobs have been only partially successful. Vocational training programs offered to the same youth that as children received cash transfers are well-established within the government toolkit to fight poverty. These programs do improve wages and formality, but not the prospects of getting a job. These issues are discussed in more detail in section 2.2.2.

Inequalities in access to assets and services

Gaps in access to key basic services, housing and productive assets (in addition to the gaps in education and labor opportunities) also impair faster progress on poverty reduction²¹; these gaps cut across socio-economic groups (poor-nonpoor) and space (urban-rural and by regions). Figure 26 examines the trends in nonmonetary deprivations for segments of the population that are identified by where they are positioned on the income distribution or spatially. The analysis focuses on 4 types of dichotomies: poor and non-poor; the bottom 40 percent and those in the remaining 60 percent; urban and rural areas; and the poorest and richest province (based on their headcount monetary poverty rate).

Access to essential opportunities and services has been uneven for those at the bottom in particular (figure 26). The proportion of households in which at least 1 member is attending school was almost universal years before the Covid-19 pandemic. Worryingly, many children stopped attending school, especially among the poor as a result of the pandemic. Significant increases occurred in the case of secondary completion rates, but again for those living in poverty and rural areas the rates are far behind than for the noon poor and those living in urban areas. The ownership of durable goods has also improved along the income distribution, but unevenly. For instance, motorcycles are a key productive asset for mobility but their ownership has risen more slowly among the poor. An important exception is mobile phones, which have seen impressive growth rates in ownership across all deciles and regions in the country.

Progress has not permeated equally spatially; it has reached the poor less and large disparities persist between urban and rural areas and across regions. For instance, from 2004 to 2021, the share of households without sanitation (flushing toilet) dropped by two thirds in urban areas outside the Metropolitan Area and the share of households with improper waste disposal reached below five percent. In 2021, about 30 percent of rural households live without sanitation and 1 out of 4 have no safe water provision. Gains on both fronts happened at a slower pace and from a higher baseline in rural areas (DR Poverty Assessment – Background

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²⁰ For population aged 3 to 18 years old.

²¹ The capacity of households to generate income depends on the combination between (a) the type of assets owned, including mainly human capital, but also physical and financial capital and (b) the opportunities to improve the returns to these assets (such as yields, profits, and wages). The opportunities are determined, for instance, by the state's provision of socioeconomic infrastructure, access to markets, and public services and a sound economic environment for employment opportunities.

note on nonmonetary poverty, World Bank). The use of nonsolid cooking fuels (kerosene, ethanol or other biofuels, natural gas, LPG, and biogas or electricity) is also virtually universal in urban areas. By contrast, close to 8 percent of rural families still rely on solid fuel like wood, charcoal, and coal for cooking (figure 26). All of these carbon fuels pose substantial health risks due to the air pollution caused by the smoke released by the incomplete combustion of these materials. The population in lagging regions like El Valle face multiple and persistent deprivations—less access to basic services, including to the public water supply and sanitation, basic infrastructure- in addition to higher levels of monetary poverty. By contrast, those living in Ozama displayed much lower levels of deprivations since 2004 and have improved further ever since (figure 26). The subpar provision of services and connectivity and poorer quality of housing materials affects quality of life for the poor and better-off, but also may have differentiated effects on labor productivity and the ability of the self-employed to earn money relative to the wage employed (see box 8).

Cooking with solid fuels Improper waste disposal Non-connected to sanitation 45 40 80 40 35 70 35 30 60 30 25 50 Percent 25 20 40 20 30 10 20 10 5 10 5 0 Top 60 Top 60 Poor Urban Bottom 40 El Valle Top 60 El Valle Bottom 40 Bottom 40 Rural Poor Poor -poor Urban El Valle 2004 **2021** ■ 2004 ■ 2021 ■ 2004 ■ 2021 Inadequate floor material Inadequate walls material Own motorcycle 120 70 60 60 100 50 50 80 40 Percent 00 05 60 30 40 20 20 10 10 40 Top 60 El Valle El Valle Poor -poor El Valle Urban 40 Top 60 Urban Poor Von-poor Тор ■2004 ■2021 ■ 2004 ■ 2021 ■ 2004 ■ 2021 Own mobile phone School attedance (6-14 years) Secondary completition 120 50 100 100 40 30 60 60 40 20 40 20 10 49 Top 60 Urban El Valle 40 El Valle Poor El Valle Urban b40 t60 Poor poor

Figure 26. Trends in selected deprivations by income group and spatially, 2004-2021.

Source: Authors calculations based on ECNFT and ENFT.

2004

2021

Note: Bottom 40 and Top 60 correspond to income deciles. Poor and non-poor are based on monetary poverty status.

2004

2021

2004

The fact that rural areas and lagging regions harbor higher rates of non-monetary poverty is a reflection of the wider disparities in access to key basic services, productive assets and market connectivity. The gap on nonmonetary poverty have been gradually shrinking between urban and rural areas, but remains wide (figure 27). This begs a more balanced pattern of inclusive growth in access to services and goods between cities and the countryside. Similarly, nonmonetary poverty has fallen over time in all regions (figure 28) but large imbalances in non-monetary poverty persist across regions due to underlying structural inequalities. Poverty is about twice as high in Enriquillo and El Valle, two regions neighboring Haiti, than in the Metropolitan area (where much of the country's economic activity is concentrated) and the tourist enclaves of Cibao Nordeste and Yuma. The gap in the poverty headcount between the poorest (Enriquillo) and richest (Ozama) regions in 2007 was 42 percentage points. In 2021, a sizeable gap of 32 percentage points remained between the poorest (Enriquillo) and richest (South) regions. The spatial configuration of poverty reflects how the country's growth model has favored Ozama, where the capital, Santo Domingo, is located. Estimates²² suggest that Ozama and Cibao Norte accounted for nearly 56 percent of national GDP between 2015 and 2019. Meanwhile, Enriquillo and El Valle contributed just 2 and 3 percent respectively. Estimated GDP per capita in Ozama is roughly twice as high as in Enriquillo, further evidencing sizable regional disparities. As of 2015, the Santo Domingo metropolitan area concentrated around 59 percent of national GDP; one of the highest shares in LAC.²³

Figure 27. Nonmonetary poverty headcount ratio (%) by area (2007-2021)

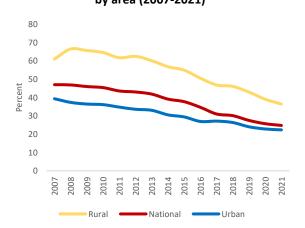
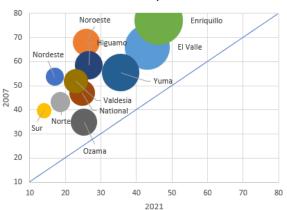


Figure 28. Nonmonetary poverty by region (2007-2021)



Source: Authors calculation based on ENFT and ECNFT and SIUBEN 3 - ICV methodology. Nonmonetary poverty is defined as households categorized as ICV 1 and 2

Note: The size of the bubbles represents the nonmonetary poverty level in 2021. Bubbles above the 45-degree line represent a decrease in poverty between 2007 and 2021.

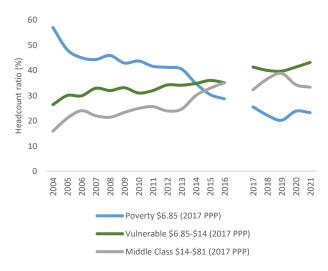
²² MEPyD (2022). "Aproximando el PIB a nivel regional en República Dominicana".

²³ Only Nassau (Jamaica), San Juan (Puerto Rico), and Paramaribo (Suriname) reported higher GDP concentration than Santo Domingo. In a set of 24 LAC countries, the average GDP share of capital cities in 2015 was estimated at 34 percent. See World Bank. 2021. "Paving the way for prosperous cities and territories: The Urbanization and Territorial Review of the Dominican Republic."

Shocks and poverty

All the structural deficiencies reported above that have limited the pace of poverty reduction in the DR have been compounded by the COVID-19 crisis, which reversed progress on poverty and the growth of the middle class while swelling the ranks of the vulnerable. Using the LAC regional poverty line (\$6.85/day), moderate poverty increased from 20 percent in 2019 to 23 percent in 2021 (figure 17). Around 350,000 people fell into poverty. The impact was higher in urban areas and the eastern region of the country, characterized by its high dependency on commerce and tourism. Poverty afflicted women more than any other population group, impacting one in every four women by 2020. Extreme poverty, as measured by the population living on less than 3.65\$US PPP17 per day, also increased from 3.5 in 2019 to 4.3 percent in 2021.²⁴

Figure 29. Income groups (%), DR (2004-2021)



Source: Monetary Poverty: WB – SEDLAC, LAC Equity Lab.

Nonmonetary poverty: Authors calculation based on ENFT and ECNFT and SIUBEN 3 - ICV methodology. Poverty is defined as households categorized as ICV 1 and 2.

The DR fared relatively well compared to the region thanks to a massive infusion of emergency cash transfers and a strong economic recovery driven largely by tourism, remittances, and near-shoring (see box 5). However, the levels of poverty still remain higher than in aspirational peers²⁵ like Uruguay and Costa Rica. Despite the growing middle class, by 2020 those vulnerable to falling into poverty (the non-poor living on less than \$14 USD a day) were already the largest population group, at 41 percent (figure 29). With the onset of the pandemic, this vulnerable group grew even further. The country's high exposure to climatic risks makes many in this group especially prone to falling into poverty (see Dominican Republic Poverty Assessment – Background note on poverty and social protection, World Bank).

In fact, unlike the Covid-19 pandemic or the banking or financial crises of the 2000s, hurricanes and tropical storms hit recurrently and cause high human and economic losses which increase poverty. Section 2.2.4 below indicates that those households that experienced heavy windstorms and flooding actually experienced an increase in poverty relative to non-affected households (see figure 48 and Dominican Republic Poverty Assessment – Background note on poverty and climate change, World Bank). The Dominican Republic is one of the most vulnerable countries to climate change in the world mainly because of its location in the center of a hurricane belt. According to the 2019 Global Climate Risk Index (CRI), the country ranked as the world's 12th most-affected country over 1998-2017. Storms during the hurricane season cause flooding, soil erosion, and landslides, especially in the northeastern region. Coastal cities—and the country's tourism industry, a significant employer in the country —face threats from a rise in sea level and the continued loss of coral reefs, mangroves, and wetlands that protect the beaches from storm surges. If not addressed, climate change will exacerbate losses and poverty, and is poised to become a major development constraint to enable people to escape poverty and vulnerability.

²⁴ The pandemic crisis also amplified income deprivation among the poor and inequality between regions. The poverty gap, which measures the average distance between household per capita income and the poverty line, widened from 5.8 to 7 in urban areas between 2019 and 2021. In rural areas, the poverty gap remained unaltered. Meanwhile, the poverty incidence gap between the poorest region (Enriquillo) and the richest (Cibao Norte) expanded from 20 to 26 percentage points between 2019 and 2021.

²⁵ Based on the DR Systematic Country Diagnostic, World Bank, 2018.

²⁶ German Watch, 'Global Climate Risk Index', 2019.

Multiple domestic and international factors have dampened poverty reduction since the pandemic contributing to stubbornly high post-pandemic poverty. These include: (i) the informalization of the labor market, correlated with lower productivity and wages (formal employment rates in 2022 remain 2.3 percentage points below their pre-pandemic level and observed improvement in employment between 2020 and 2022 has been largely driven by the creation of informal jobs) and lingering recovery of labor market participation rates which continue to lag pre-COVID-19 levels by 2 percentage points.²⁷ The pandemic crisis caused labor force participation to drop by around 10 percentage points by Q2 2020, mostly explained by falls in employment which increased inactivity levels; (ii) higher inflation (7.8 percent in 2022) and (iii) the downscaling of emergency social assistance launched during the peak of the crisis. The Russian invasion of Ukraine has also increased the price of key staples and goods like fuel and fertilizers. Inflationary pressures could threaten poverty alleviation and jeopardize the consolidation of the middle-class as the vulnerable population expands (see box 5).

Box 5. Poverty nowcasting and forecasting 2020-2025

Despite the recent uptick in inflation in the Dominican Republic, the historical reduction of poverty is expected to resume amid a strong economic recovery driven largely by tourism, remittances, and near-shoring; in 2022, the economy grew by 4.9 percent. *Aliméntate*, the DR's main cash transfer program, doubled its coverage to reach 1.35 million households as well as the average monthly transfer amounts to US\$32 since 2020. Model projections by the World Bank indicate that sustained GDP growth, combined with projected increases in employment, will reduce poverty rates in the medium-term.

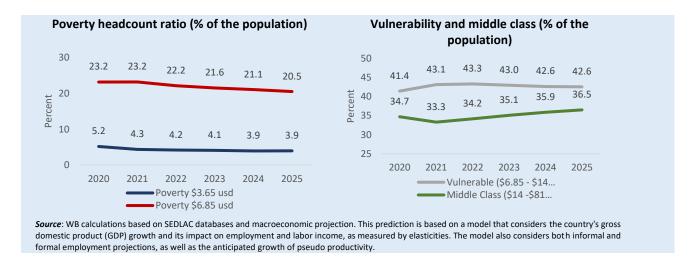
However, inflation reached 7.8 percent y-o-y in 2022, reducing disposable incomes, especially for the most vulnerable. The cost of the typical consumption basket increased 23.5 percent in 2022, compared to pre-pandemic levels. Employment has meanwhile recovered but remains below pre-pandemic levels: In the first three quarters of 2022, the employment rate (59.9 percent) remained 1.4 percentage points below pre-pandemic levels and informality (58.1 percent) was 2.6 percentage points higher than in 2019. As a result, the poverty rate (US\$6.85 PPP 2017 per day) is expected to continue to decline in 2022 relative to 2020, but remain above pre-crisis levels, at 22 percent. These trends mirror the DR's official poverty estimates, where poverty under the old methodology (see Box 1) in the country stood at 21.8 percent in 2022, 1 percentage point higher than in 2019.

An extra boost to GDP growth or shared prosperity would be needed to reach pre-pandemic poverty rates before 2025. The modeled results show that, in a ceteris paribus context, where poverty reduction responds similarly to the GDP growth of recent years, the poverty rate would only recover to pre-pandemic levels in 2025. Despite the overall trend towards poverty reduction, the proportion of the population vulnerable to falling into poverty is projected to remain stable at around 43 percent. This highlights the ongoing need for targeted policies and programs to support those most at risk of becoming impoverished.

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²⁷ See https://www.bancentral.gov.do/a/d/2541-encuesta-continua-encft

²⁸ A new methodology to estimate monetary poverty in the Dominican Republic was launched in May 2023 (see Box 1). Under the new series, poverty stood at 27.7 percent in 2022, that is, 1.9 percentage points higher than in 2019. See MEPyD (2023b) to learn more about the poverty figures under the new methodology: https://mepyd.gob.do/publicaciones/boletin-de-estadisticas-oficiales-depobreza-monetaria-en-republica-dominicana-2022



The recent shocks reversing years of uninterrupted progress against poverty together with the low elasticity of growth to poverty make imperative to accelerate the pace of poverty reduction in the DR by sharing growth more inclusively among populations groups and regions. The following section explores in more depth these mechanisms that were previewed along with the income engines behind poverty reduction in the past to enhance those sources going forward.

2. DRIVERS OF POVERTY CHANGES

As noted before, we split the analysis of poverty changes into three periods given the recent poverty dynamics observed in the Dominican Republic: (i) 2004-2013: slow poverty reduction following the banking crisis of 2004; (ii) 2013-2016: fast poverty reduction; (iii) 2017-2021: fast poverty reduction until the COVID-19 crisis and then strong rebound afterwards.

Limited growth in labor income was behind the relatively slow elasticity of growth to poverty reduction between 2004-2013. Overall growth in the real labor income of the bottom 20 percent of the population was minimal until 2013 growing by 18 percent in 9 years (figure 20). The main cash transfer program of the DR created in 2004 and subsequently expanded was the main factor behind poverty reduction during this period (4 out 10 percentage points).²⁹ Between 2005 and 2011, the coverage of the DR's main cash transfer program almost tripled, reaching close to 0.6 million families (figure 28).

Poverty reduction accelerated after 2013 as household labor income growth gathered pace. The increase in real wages for the bottom 20 percent of the population gathered pace since 2013 until the Covid-19 pandemic growing by 55 percent during this 6 years period (figure 16). This surge coincides with the period where poverty rates dropped faster. For instance, the drop in poverty between 2013-2016 was equivalent to that observed

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²⁹ Following the economic crisis in 2003, poverty in the Dominican Republic spiked in 2004 reaching 50 percent (compared to 32 percent in 2002). One of the measures that the government took to address the situation was the launch of the SOLIDARITY PROGRAM in October 2004 which granted conditional cash transfers (*Comer es Primero* – CEP for its acronym in Spanish) for food to socioeconomically vulnerable families. In December 2005, the program instituted the first schooling-related transfer, the *Incentivo a La Asistencia Escolar* or ILAE. It was targeted to all eligible households with children in school age (6-21) to promote school attendance at primary and secondary levels. Additionally, in June of 2013, a new conditional cash transfer was established specifically targeting high school age children to further encourage attendance at this level (*Bono Estudiantil Estudiando Progreso* – BEEP). (See DR Poverty Assessment – Background note on social protection and poverty)

during the entire previous decade. Real labor income growth of 16 percent explains almost 80 percent of total poverty reduction in this three-year period (figure 30).

An overall increase of labor income up to 2019 and a massive increase of transfers during the pandemic outstripped the fall in labor income during the pandemic, contributing to a total reduction in poverty of around 2 percentage points between 2017-21. Labor income growth for the bottom 20 continued to make a dent in poverty rates between 2017-2021 as it grew by 6.4 percent. The main impetus to poverty reduction in this period came during the first two years where labor income grew at 15.7 percent; it then contracted by 9 percent due to the pandemic crisis between 2019 and 2021.

Social assistance programs contributed to the decrease in poverty between 2019-21. The removal of the conditional cash transfer for secondary education (BEEP) between 2017-19 may have tempered the poverty-reducing effect of social assistance. But in the aftermath of the crisis, income from social transfers grew by 8 percent, mainly due to the emergency programs launched by the government that partially mitigated an increase in poverty during this period. Increased social assistance programs helped to reduce poverty by around 0.7 percentage points between 2019 and 2021 (see DR Poverty Assessment, Background note on poverty and social protection). This effect was larger for rural households, which unlike urban areas, were largely bypassed by the crisis.

Remittances account for a high share of national income but their evolution over time has not contributed substantially to poverty reduction. Dominicans home and abroad (23 percent of all Dominican nationals live outside the DR³⁰) have traditionally benefitted from emigration and remittances flows. According to national accounts, remittances flowing into the Dominican Republic represented around 4 percent of the GDP in 2010 and have steadily increased to reach a peak of 10.6 percent as share of GDP in 2020. This same year, remittances triplicated the FDI inflows³¹ and proved one of the most resilient financial flows during the COVID-19 pandemic, as migrants abroad sent USD 8.3 billion to 400,000 Dominican families. Remittances have kept growing compared to the pre-pandemic period reaching US\$9,856 million dollars in 2022.³²

Most remittances come from Dominicans in the United States, which represent about three quarters of the 1.6 million emigrants from the country. Remittances reach mainly non-poor households and perhaps this explains their small reductions in poverty and inequality. Nonetheless, remittances accrue for about one quarter of the total household income among recipient households and are an important source of income for households at the bottom of the distribution. A simple simulation that subtracts remittances from household income without taking into account any behavioral responses found that poverty would have increased from 23.4 percent to 25.3 percent in 2020 in their absence.³³

Migration from rural to urban areas explains very little the observed changes in poverty. Changes in poverty can also be decomposed by changes in income and its distribution inside urban and rural areas (the intraregional effect) and by changes in these two factors driven by the increase in the share of people in urban areas migrating from rural areas (the inter-regional effect). The decomposition shows that migration from rural to urban areas (the inter-regional effect) did play a role to reduce poverty right after the financial crisis up to 2013 though never to the extent that the emergence of new poor in the urban areas did (the intra-regional effect).

³⁰ Instituto de Dominicanos y Dominicanas en el Exterior (Index, 2022).

³¹ Foreign Direct Investment (FDI) net inflows represented 3 percent of GDP (WDI, 2020).

³² BCRD

³³ Alejandro de la Fuente y Christian Gomez. "Remesas en la República Dominicana durante la crisis del Covid-19." Seminario Internacional: Migración, Remesas y Desarrollo. Instituto Nacional de Migración de la Republica Dominicana. 2022.

The effect of migration dissipated after 2013 to give way to the intra-regional effect, accounting for more than 95 percent of the changes in poverty since 2013 (figure 31). In short, the emergence of new poor in the urban areas has created the observed "urbanization" of poverty rather than the arrival of poor migrants from rural areas.

Figure 30. Decomposition of poverty changes by income sources (2004-2021)

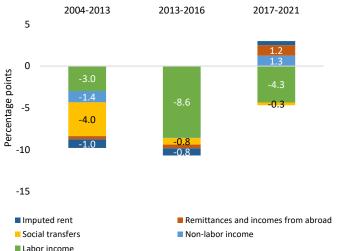
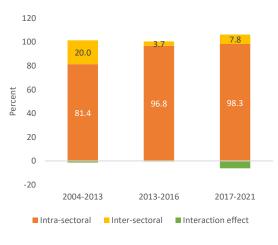


Figure 31. Decomposition of poverty changes by urban-rural population shifts (2004-2021)



Source: Author's calculations based on ENFT and ECNFT. **Note**: The non-labor income category includes: incomes from pensions, rentals, capital gains, and other types of income not linked to a job.

Source: Author's calculations based on ENFT and ECNFT.

Note: The decomposition is based on the methodology by Ravallion and Huppi (1991). The two regions considered for the decomposition are urban and rural.

The decomposition applied above distinguishes the contributors to poverty changes by income sources. Having identified the main income sources associated with poverty changes since 2004 begs the questions, (i) what is the structure of household incomes among the poor, and (ii) what determines these income components and how did these determinants have been allocated among the poor over time?

2.1 What is the structure of household incomes among the poor?

The analysis in this section sheds light on the contributions of different income sources to the total income of monetary poor households. The previous section highlighted how important was labor income to drive changes in poverty so it is important to understand the trends in the propensity of poor households to engage in various income-generating activities and the extent of the incidence of other income sources between 2004-21. Table 2 shows the trends in the structure of household income nationally and by urban and rural areas.

Looking at the two periods, labor income from wage employment is the most important contributor to total household income among the poor and its fluctuations over the years seem correlated with changes in poverty. More poor people have also engaged in wage employment activities over time (Annex 1). Income from self-employment is the second most important source of income among the poor, but less people have been engaged in these activities up to 2021. Notably, the income from social transfers was inexistent in 2004 and reached up to 6 percent of the total income of the poor by 2021. The share of remittances in total income has been relatively small and shrank over time. They constituted approximately 3.7 percent in 2004 and that share that fell to just 2.4 percent in 2021.

In rural areas, household incomes are mainly drawn from self-employment. In 2004, over 40 percent of total household income came from such sources. By 2021 the contribution of incomes earned through self-employment dropped to constitute one third of overall income. The share of wage income has stayed constant at around 29 percent. Notably, the shares of social assistance transfer in total income were inexistent in 2004 and raised to 7 percent of total income by 2021.

Total household income in urban areas is dominated by wage income, but its importance in total income dropped over the period. Income from self-employment remained relatively stable and was approximately 29 percent of total income. Public transfers from social assistance have also become increasingly important as a source of income and poverty reduction in urban areas.

Table 2 Shares of total income for poor households by income source, 2004–2021 (%)

		2004			2021	
	Rural	Urban	Total	Rural	Urban	Total
Labor income (self-employment)	41.3	26.0	31.8	35.5	28.8	29.9
Labor income (salaried)	29.6	41.9	37.2	28.9	34.7	33.8
Non-labor income	16.4	15.4	15.8	14.9	18.8	18.2
Social transfers	0.2	0.1	0.1	7.1	5.8	6.0
Remittances and income from abroad	2.4	4.5	3.7	1.5	2.6	2.4
Imputed rent	10.1	12.1	11.4	12.1	9.3	9.7

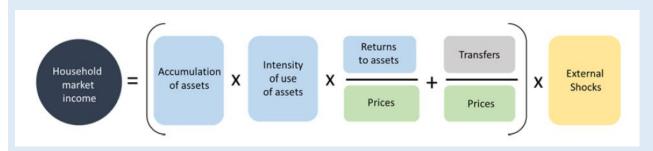
Source: DR Poverty Assessment team calculations based on ENCFT.

With this analysis in mind, the section now moves to the question of the role of key assets and their returns in driving the changes to the main sources of income that have led to poverty changes.

Box 6. A framework for understanding changes in poverty in the DR

Dominican households earn income primarily through employment in the labor market. However, a wage income is not always possible. Therefore, households often diversify into self-employment, including in household-owned microenterprises.

The capacity of households to generate income depends on (a) the type of assets owned, especially human capital (education) but also physical capital (such motorbikes) and financial capital (access to credit); (b) the intensity of asset use (participation in labor markets and use of inputs); and, finally, (c) the returns to these assets (price of factors of production such as wages and profits).



The potential to transform assets into income is determined by the context in which households operate. Important context includes, for instance, the government's provision of socioeconomic infrastructure, access to markets, and access to public services; a sound economic environment for investment and employment generation; and the ability to manage risks and shocks.

In addition, many households rely on remittances and other public cash transfers to meet their basic needs and invest in the health and education of future generations. Targeted public and private transfers can also help to protect households from shocks and mitigate the need for expensive government interventions during times of crisis, and smooth out household income over the life cycle.

In short, the proposed framework can help researchers and policy makers to understand the components that make up household income as well as to analyze the income generation capacity of different socioeconomic and demographic groups (poor and nonpoor; women and men). Households operate conditioned by the availability and use of assets; returns to assets; market prices for inputs; and a context characterized by shocks. So initial conditions and context matter for success in poverty reduction according to this framework.

Source: Lopez-Calva and Rodriguez-Castelan (2016).

2.2 Why progress on poverty has not been faster in the DR?

The conceptual framework presented above posits that changes in key endowments (like education or physical productive assets) or in the intensity of use of those key assets that serve to generate income (such as labor participation), along with changes in the returns to these endowments (such as the wages obtained from labor), can help explain the progress in poverty or lack thereof.

As section 1.3 showed there has been unequal access to labor opportunities, levels of education, services and housing, and asset ownership across population groups and spatially over time. The limited availability and use of some of these assets by the poor in lagging areas and regions along with the observed shifts in access to other sources of income like social assistance may have impaired faster income growth for these groups. And the recent Covid-19 pandemic has shown that effective risk mitigation mechanisms in place (or their lack thereof) also matter for success in poverty reduction.

Building on these priors, the next sub-section explores in more detail how the evolution in access, use and returns to these key assets between 2004 and 2021 in a context characterized by high exposure to climatic shocks may have contributed to changes in poverty via their effects on the key income sources identified in the previous section. The analysis and discussion is organized around five topics: (i) lower levels and quality of education among the poor, (ii) unequal labor opportunities and wages, (iii) uneven access to services, housing and connectivity, (iv) modest impacts of fiscal policy on poverty, including limited adequacy of social assistance programs, and (v) high exposure to and impacts of climatic shocks.

2.2.1 Lower levels and quality of education among the poor

Education is widely understood to be essential for poverty reduction as it grants higher labor earnings; and there are sizeable returns to secondary education in the Dominican Republic. As discussed earlier, improvements in education account for an important part of the reduction in multidimensional poverty giving cause for optimism as one of the biggest economic benefits of schooling are labor earnings. On average, completing high secondary schooling leads to a 25 percent increase in hourly wages. Estimates from the 2021 National Labor Force Survey (Encuesta Nacional Continua de Fuerza de Trabajo, NCFT) indicate that 69 percent of individuals in urban and rural areas who completed upper secondary education are employed, compared to 46 percent of those with an incomplete secondary education. In addition, when considering the impact of education on earnings, the most common measure of worker's skills captured by measures of the returns to education obtained from earnings regressions, it is observed that individuals who complete high school in

urban (rural) areas earn US\$88 (57) more per month than individuals with incomplete secondary education (DR Poverty Assessment, Background note on poverty and social protection, World Bank).

Despite improvements in enrollment and high returns on education, one in two boys and one in three girls do not complete upper secondary school, especially among the poor. Analysis based on the ENCFT reveals average schooling gains conceal large disadvantages faced by poor children as school enrollment gaps between poor and better-off children widen after primary education. The phenomenon is particularly salient among 15-and 18-year-olds (ages corresponding to the final year of the first and second cycles of secondary education) with school attendance rates of just 50 and 21 percent, respectively, for children in poor households classified as ICV-1 (figure 32). Secondary completion rates are much lower among poor girls than for the rest of the population (figure 33).

Figure 32. Enrollment rates by age and ICV Level (Q4 2021)

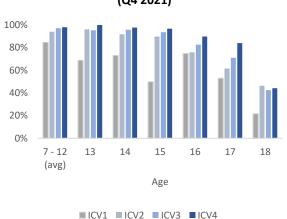
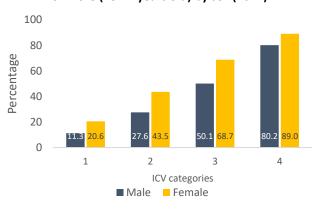


Figure 33. Population with complete secondary education or more (18-24 years old) by sex (2021)



Source: Author's calculations based on ECNFT.

The low quality of education remains a challenge. Even before the pandemic, 81 percent of children in Dominican Republic at late primary age today are not proficient in reading, adjusted for the out-of-school children, limiting their ability to learn other subjects and increasing their risk of dropping out of school. This measure of learning poverty (percentage of 10-year-olds that are not proficient in reading) is slightly higher for boys (81.2 percent) than for girls (79.7 percent).³⁴

Disparities by poverty status in education in the DR are present not only in coverage but also in terms of performance. For instance, wide variations between poor and better-off children were encountered on the scores for standard tests across all subjects included in the assessment administered to ninth-grade children in 2019, including Spanish and Mathematics (figures 34). Large gaps in the learning outcomes for third and sixth graders also were encountered in between children of high and low socioeconomic status. Moreover, girls tend to slightly outperform boys in the same assessment and across all subjects.

^{34 &}lt;u>https://thedocs.worldbank.org/en/doc/212111571223351532-0090022019/original/LACLCC3CDOMLPBRIEF.pdf</u>

National Q5 Q4 Q3 Q2 Q1 250 260 280 290 300 310 320 330 340 270 ■ Mathematics ■ Reading

Figure 34. Basic proficiency in Spanish and Mathematics by income quintiles, 2019

Source: MINERD.

Note: Quintiles correspond to a socio-economic index constructed using a PCA analysis from a range of goods that the household has along with education of the household head.

The Dominican Republic lags other countries in educational achievement and learning. According to Barón and Mola (2019), the performance of Dominican students is lower than expected given the country's level of GDP per capita. When comparing harmonized test scores, for instance, the DR has the lowest level among comparator countries in LAC. The performance is poor for girls and boys alike, but more so for boys: Dominican girls scored on average 4 percent higher than boys, the largest such gap for LAC countries with available data. According to the Dominican Republic's national standardized test, just 12 percent of children in third grade achieved satisfactory levels in Spanish, and 27 percent in mathematics, in 2017. And the Dominican Republic has the lowest scores for reading, mathematics, and science among 15-year-olds when compared to other LAC countries that participate in the Program for International Student Assessment (PISA). Scores in these areas moreover displayed some of the strongest drops among PISA-participating countries since 2015: for example, average reading test scores in the DR declined in 2018 (World Bank, 2021).

2.2.2 Unequal labor opportunities and wages, especially for women and the poor

Increasing labor incomes is fundamental to improve the welfare of Dominicans. Labor is the most important and abundant resource that the poor have at their disposal. The decompositions presented in the previous section show that the growth in labor income has been driving force in poverty reduction so the compound effect of higher rates of labor participation (intensity of labor use) and higher wages (returns to labor) can make a substantial dent on poverty.

Employment rates have been growing steadily for the last two decades up to the pandemic. The COVID-19 pandemic pushed the DR into its first recession in nearly 17 years and contracted labor markets. As of the last quarter of 2020, an estimated 191,273 jobs were lost since March of the same year, with especially negative implications for poor households, women, and informal workers. The informal sector recovered faster than formal employment and accounted for 51.3 percent of total employment in Q4 2020 compared to 48.4 percent a year earlier. In the first three quarters of 2022, the employment rate (59.9 percent) remained 1.4 percentage points below pre-pandemic levels and informality (58.1 percent) 2.6 percentage points above. On top of this, pre-existing gaps on employment rates between women and men widened during the pandemic and little

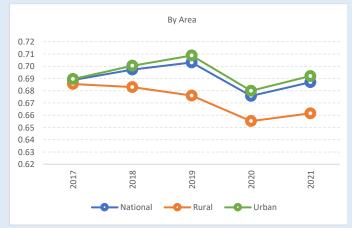
progress has occurred since then. For instance, half of the working-age women were economically inactive in the first three quarters of 2022, compared to 23 percent of men.³⁵

Box 7. Quality of jobs in the DR has not recovered ever since the Covid-19 pandemic

Even as employment has almost recovered to pre-pandemic levels in the DR (as in other countries in LAC) from the onset of the COVID-19 pandemic, there is a persistent deterioration in the quality of employment. The Job Quality Index (JQI), which combines four dimensions that characterize a good job (Brummundi, Mann, and Rodriguez-Castelan, 2018): income, benefits, security, and satisfaction, has reverted on average for more than a decade (2009 levels). There is a negative correlation between employment recovery and the JQI in LAC countries after 2020. As employment levels return to pre-pandemic, job quality does not, even for countries like the DR with employment levels just below pre-pandemic levels. The recovery in job quality for the DR relative to pre-pandemic levels has materialized for men and urban areas, but not for women and rural areas (panel A).

Lower benefits and job security levels than in pre-pandemic have driven the deterioration in the JQI across LAC countries. This implies that workers in these countries face higher levels of vulnerability and are more exposed to shocks. A cut in benefits is present in the DR along with Ecuador and Paraguay (panel B). Income has a smaller contribution to the drop in the index than the other two dimensions across countries.

Panel A: Change in Job Quality Index 2021 vs. 2019



Panel B: Change in dimensions of Job Quality Index 2021 vs. 2019



Source: Own estimates based on SEDLAC (CEDLAS and World Bank).

*Argentina only has urban coverage and is not included in computing the correlation between the JQl and employment in Panel A.

The Job Quality Index (JQl) is a multi-dimensional measure of job quality based on Brummundi, Mann, and Rodriguez-Castelan (2018) that includes four dimensions of job quality as follows: Job income: Minimum income of well-being. The JQl defines the Upper-Middle Income Class poverty line of \$6.85 per day (2017 Purchasing Power Parity) as the minimum income of well-being. Even for an individual with all the other dimensions, if their wage is below the poverty line, the JQl is equal to zero. Job benefits: The job provides health insurance or retirement benefits. Job security: The worker has a contract; the job is permanent, or the worker has kept the job for a long enough period to consider a job secure. The JQl assumes a cutoff of three years of tenure to consider the job permanent and a contract and stable work indicators when available. Job satisfaction: The worker is satisfied with their job. As a proxy of this dimension, we assume that the worker does not have a second job

The average employment rates mask important differences between men and women and the poor and the non-poor. Fifteen years ago, the participation of men in labor markets was twice as high as that of women. Although women have been gradually catching up, even in 2021 only around 51 percent were working or actively looking for a job compared to around 76 percent of men. In other words, by 2021 only 42 percent of the total labor force are women. While the male labor force participation rate has long been about the average for upper-middle-income countries and for LAC, the female rate has only recently converged with the LAC average. These gaps are even wider for the poor: only 35 percent of women living in households classified poor

³⁵ Country Poverty Briefing (Spring Meetings 2023) – Dominican Republic. The World Bank: Washington, D.C.

are on the job market. Similar gaps can be observed in employment rates, particularly between nonpoor men and poor women (figure 35).

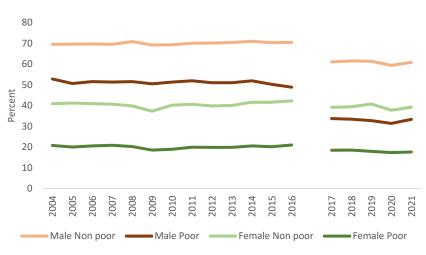


Figure 35. Employment rate by poverty status and sex (2004-2021)

Source: Own calculations based on ENFT y ENCFT.

Note: The official national labor market survey (ENFT) was methodologically updated in 2017 giving way to the renewed (ECNFT).

Women lag relative to men in many other labor market outcomes. In 2021, they were also more likely to experience unemployment (12 percent compared to 4 percent), and work less (5 hours per day on average across economic sectors). in 2021, around 23 percent of women were not engaged in education, employment, or training (NEETs) compared to 12 percent for men.

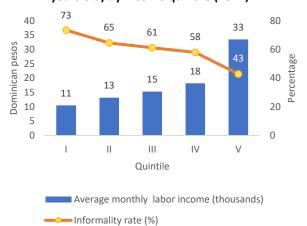
A related challenge is less formal labor market insertion for poor youth and women as 73 percent of those aged 25-54 among the poorest, those in the bottom income quintile, are informally employed versus 43 percent for those in the top income quintile.

Wages are the return to labor—the return to an individual's involvement (mental or physical) in the creation or realization of goods or services- and despite constituting the main source of labor income for the poor, were stagnant up to 2013 among this group. Wages constituted around 34 percent of the total labor income of the poor in 2021, followed by non-wage income at 30 percent of total labor income. As noted before, there was a dramatic reduction of wages during the 2003-2004 crisis, and their recovery in the post-crisis period was slower than would be expected given the economic growth during this time. In 2013, real wages started to grow for the bottom income quintile of the population. However, to this day, much higher shares of workingage adults living in poverty (income quintile 1) are earning lower salaries compared to their peers in the ranks of the non-poor (figure 36).

Earnings for women are persistently low when compared to those of men and the gap is larger among lower earners. In the last two decades men have earned between 11 and 20 percent higher hourly earnings than women (Figure 37). A recent Gender Assessment for the DR shows that, in 2019, men's earnings were on average 27 percent higher than women's across all wage earners. The magnitude of the gender wage gap rises even higher, to 30 percent on average, at the bottom 40th percentile. Gender wage gaps tend to prevail in services where there is a greater relative presence of female workers, like hotels, bars and restaurants, manufacturing, and domestic work. They are accentuated by the fact that the vast majority of women have a labor income below the minimum wage established. The minimum wage levels established for companies in

service activities and in free zones have been systematically lower than other kinds of employers (Gender Assessment of the Dominican Republic. 2023. World Bank).

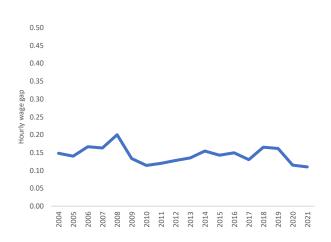
Figure 36. Informality and average wage income (25-54 years old) by income quintile (2021)



Source: Own calculations based on ENFT y ENCFT.

Note: The official national labor market survey (ENFT) was methodologically updated from 017 giving way to the renewed (ECNFT), as a result, the indicators calculated with the ECNFT are not strictly comparable with previous years.

Figure 37. Hourly gender wage gap (2004-2021)



Source: Gender Assessment of the Dominican Republic. World Bank. 2023. **Note**: The gap is derived as the difference of median hourly wages as a proportion of male income.

2.2.3 Uneven access to services, housing and connectivity

As the proposed conceptual framework notes, the ability of household to mobilize their labor and human capital successfully to generate income and eventually overcome poverty is also determined by the context in which they operate. Such context includes the state's provision of socioeconomic infrastructure and public services like water, sanitation and electricity.

Section 1.3 documented how economic growth has brought prosperity and a growing supply of infrastructure and services, but also how such access is neither universal nor equitable across different population groups. The poor have accumulated less productive goods or improved their housing conditions or access to drinking water and electricity much less than the non-poor.

Many of the self-employed operate informally from home and tend to have worse dwelling materials and access to basic services. Such uneven access to services along with key productive assets and market connectivity can influence their decisions on technology adoption and activities, which in turn have implications for their lower income generation and higher poverty levels (see box 8).

Box 8. Self-employment in the DR: challenges and policy options

Context

Although the participation of the poor in self-employment (SE) has fallen from a high of 48 percent in 2005, 42 percent of the poor in 2021 still relied fully on these activities. Many still need to generate their own income to overcome lack of credit, smooth consumption, finance investments, or start a business. Understanding who these poor self-employed workers are, and the obstacles facing them, is therefore key to tackling poverty in the Dominican Republic. Around three quarters of the DR's self-employed population works in four sectors: commerce (25 percent), construction (18 percent), agriculture and livestock (14 percent) and transport (13 percent). By contrast, only 25

percent of salaried workers work in those sectors. The self-employed are typically less educated older males, and tend to work less hours than salaried workers.

The productivity of self-employed activities is low and opportunities for improvement are limited. The returns from self-employment are lower for the poor. Self-employment growth and job creation occur mainly in rural areas, but the poor benefit less from these processes than the nonpoor. The self-employed and salaried earned similar monthly labor incomes in 2021 (10,538 vs 10,900 Dominican pesos, respectively). However, in 2021 average monthly returns for the self-employed poor were far lower (RD\$10,538, US\$188) than those of the nonpoor (RD\$18,475, \$USD330). Furthermore, the growth potential of self-employed activities is doubtful. The poor are self-employed mainly in low-return activities: for example, selling homemade food or shining shoes.

Key constraints and market failures

97 percent of the self-employed operated in the informal economy in 2021, limiting their access to formal capital markets and financing. According to the Global Findex Database 2021, around 56 percent of the population over 15 had at least one account in the regulated financial system in 2017. By 2021, this figure had fallen to 51 percent, placing the country 12th out of 16 evaluated countries in LAC. Self-employed individuals often lack access to capital, which can limit their ability to invest in their businesses and increase productivity. This is particularly true in the DR, where small businesses face difficulty in accessing formal financing. Wealth and access to credit are key also to starting a business or self-employment activity. Poor households often lack liquidity and collateral.

Internet connectivity is particularly low for the self-employed and this could also hinder their productivity. Internet connectivity can provide self-employed workers with access to online marketplaces, social media platforms, and access to customers, as well as enabling them to make better business decisions. Yet in 2021, only 30 percent of self-employed workers had access to the internet, compared with 48 percent for salaried workers. Self-employed workers also reported lower access to mobile devices (92 percent) than their salaried counterparts (97 percent). These comparatively low rates of online connectivity probably reflect the lack of internet at home or in public spaces where self-employed, informal work takes place. According to the ENCFT, around one quarter of self-employed workers work from their own home or adjoining premises, or in the home of their business partner or employer.

Many self-employed workers have little to no formal education to enhance productivity. Just 26 percent of self-employed workers have a complete secondary education or more, compared to 54 percent of salaried workers in the same sector. Furthermore, self-employed workers in commerce, construction, agriculture and livestock, and transport are 43 years old on average, 10 years older than their salaried counterparts. The self-employed work 37 hours per week on average, around 3 hours less than their salaried counterparts.

Distance from roads and markets discourages many from engaging in self-employed work. Roads and population centers are located farther from the poor, making it harder for them to reach markets for inputs and outputs, and raising the transaction costs of self-employment.

Poor self-employed individuals who work at home tend to have worse building materials and worse access to basic services. For instance, 12 percent of the self-employed poor live in dwellings with inadequate walls compared to 6 percent of the nonpoor. These figures are 10 vs 5 percent respectively in terms of inadequate water supply, and 16 vs 8 percent in terms of inadequate sanitation. These shortfalls can affect the quality of work and productivity of self-employed workers.

Policy options

Capital grants and digital financial inclusion could address key constraints and market failures that hinder productivity among the self-employed. Since lack of credit is a major constraint to the expansion and productivity of SE activities, digital finance tools can help address it. Payments of the main cash transfer provided by SUPERATE are administered by the Social Subsidies Administrator (ADESS), via dedicated cards issued by VISA and Mastercard. SUPERATE beneficiaries can use these cards in corner shops (colmados) to buy food and eligible basic household goods.

In other words, cash transfers in the DR are quasi-monetary transfers, as opposed to traditional cash-based transfers, that can be used in the Social Supply Network (RAS). A new Bank project called INSPIRE (Integrated Social Protection, Inclusion and Resilience Project) aims to finance the transition from quasi-monetary transfer to cash-based transfers. INSPIRE will achieve this by: a) eliminating the list of allowed goods that a beneficiary could acquire in the RAS and introducing a very short list of forbidden items (alcohol and cigarettes); b) changing magnetic stripe cards to chip cards or EMV issued by a commercial bank for 1.6 million households. Where magnetic stripe cards can be easily stolen and cloned, EMV cards replace static, unprotected data with dynamic cryptographic data, making it impossible to be cloned. This transformation will considerably reduce the risk of fraud; c) Opening limited-transactions bank accounts for each beneficiary associated with the card; d) Introducing digital payments to allow for different payment methods of the cash transfer program. This transition to a digital payment systems can reduce transaction costs and times, and increase the security and privacy of payments; and e) piloting and evaluating a cash-based model for a possible national expansion. All of these actions are a step towards a choice-based model and the financial inclusion of the poorest and most vulnerable. With the right environment and incentives, digital finance could take off rapidly in a short period of time.

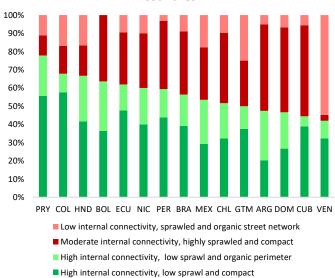
Via an entrepreneurship training program, INSPIRE also aims to support vulnerable young people who are self-employed through removing other constraints, including: (i) lack of funding to formalize their business and connections with financial institutions that provide credit; (ii) lack of basic business skills; (iii) lack of exposure and relevant networks to start and grow a business; and (iv) limited information and capacity to take advantage of existing support for the self-employed. Participants will be supported by business coaches and mentors to implement their business plan, meet business registration and licensing requirements, and connect with markets. They will receive stipends to finance their daily expenses (including transportation) in connection with the program. In addition, beneficiaries will receive up to US\$500 to finance the expenses incurred in preparing and implementing their business plan. Stipends will be delivered via digital payments. An estimated 5,000 eligible young people will benefit from this program.

Since a quarter of the self-employed population works from home, slum upgrading programs can also boost their productivity. In 2015, the government launched programs to upgrade the homes of poor beneficiaries of social programs, including replacing dirt floors with cement and re-painting windows and exterior walls. Eligible households saw an increase of 6.2 percent in their adjusted ICV (Quality of Life Index, an index of nonmonetary poverty computed by the DR) and were more likely to be satisfied with the quality of their home in general. They reported a 5 percent higher monthly rent value and were 30 percent and 10 percent more likely to be satisfied with the quality of their floor and walls, respectively. They were also slightly less likely to have a household member fall sick in the month prior to the interview. Such upgrades may make the self-employed who work from home more productive and prosperous: for example, by providing sturdier walls for electric and internet connections and a more attractive environment for customers of a shop or eatery.

Gaps in access to services and connectivity are also vast across urban-rural areas and within urban areas. Rural areas continue to harbor lower rates of access to key services and good-quality housing. And within the Metropolitan Area of Santo Domingo, which is the most dynamic urban area of the country, around 43 percent of its population lived in informal settlements in 2010.8 Access to electricity is far from even across the Metro Area, and across other urban areas high-income groups typically have better access to water and other services.

Despite faring better than rural areas, most Dominican cities are growing in a sprawling, unorganized manner; and have poor internal road connectivity, hindering their economic performance. The accelerated process of urbanization has occurred in an unplanned manner, decreasing cities' productivity, and taking place in disaster-prone areas. There is a lack of adequate housing supply, and even in large urban areas, the quality of basic services is poor and frequent disruption on water and electricity service poses a heavy burden on households and firms. A recent study looking at spatial characteristics of cities in Latin America³⁶ concluded that most of the cities in the Dominican Republic have rugged or elongated shapes with poorly connected streets that lessen productivity (Duque et al., 2019).³⁷ In fact, DR's urban centers appear to perform below similar cities around the world and Latin America in terms of the linkages between urbanization patterns like connectivity and sprawling levels and productivity (figure 38).

Figure 38. City connectivity and sprawling levels in LAC countries



Source: World Bank. 2021. Paving the way for prosperous cities and territories: The Urbanization and Territorial Review of the Dominican Republic.

As a result of the unplanned growth of cities, urban workers in the Dominican Republic are failing to benefit fully from the effects of agglomeration. Ferreyra and Roberts (2018) study the effects of the positive externalities of urbanization on workers by comparing wage differences between urban and rural workers in 15 countries in Latin America and the Caribbean. Once the workers' observed characteristics, including education, are controlled, the nominal wage increase associated with residing in cities—known as the urban premium—is only 17 percent in the DR, compared with an average of 36 percent in other countries in the region.

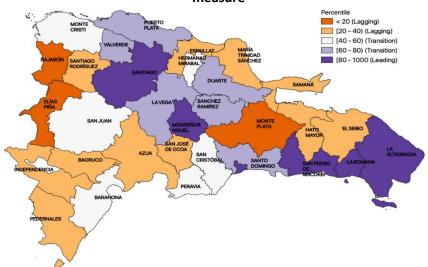
Unequal access to and quality of public services, housing and connectivity is also present across provinces. A composed measure of economic productivity produced at province level³⁸ reveals that the leading provinces form a corridor bisecting the country from Puerto Plata and Santiago to Santo Domingo, excluding Monte Plata, and continue into the southeast coastal area from San Pedro Macoris to La Altagracia. Lagging provinces are mostly located near the border with Haiti in Dajabón and Elías Piña and in the northeast corridor from Espaillat to El Seibo (figure 39).

³⁶ In the study of Duque et al. (2019), urban form is defined according to the following variables; geometric shape of the urban extend is measured by the roundness and the smoothness of the perimeter to measure a city. For internal infrastructure, the layout of the road network in the city and the degree to which all segments in the network are interconnected are considered. Finally, for land pattern use, sprawl is defined as the population distribution across the city and fullness by the presence of build-up areas as a fraction of the total area of the city.

³⁷ Duque et al. (2019), analyze all Latin American cities with more than 50,000 people in 2010 a total of 919. For Dominican Republic, the following cities were selected: Mao, Azua, San Juan, Barahona, Higüey, Bonao, Boca Chica, Bani, Cotui, San Francisco de Macoris, Puerto Plata, San Pedro Macoris, La Romana, Santiago and Santo Domingo de Guzmán.

³⁸ The composed economic productivity measure is integrated by nightlights per capita radiance, spatial GDP per capita and income per capita; all normalized in a scale from 0 to 1 and later combined, giving each of them an equal weight.

Figure 39. Regional disparities can be observed through the composed economic productivity measure



Sources: GDP spatial series elaborated by the World Bank; Income per capita from the UNDP, Human Development Index, 2016, and Nightlights using NOAA, VIIRS. See World Bank (2021d) for a more detailed discussion on the construction of the composed economic productivity measure.

Households in lagging provinces have less access and lower quality of basic services like running water, connections inside the house, sanitation, waste collection, and internet access. Water and electricity services are available to households in lagging regions for fewer hours than in more productive regions (figure 40). Lagging areas also contain more dwellings with poor quality materials in floors, walls and roofs. The housing deficit is 66 percent in lagging provinces, dropping to 51 percent in leading areas (figure 41).

Figure 40. Services in households (percentile)

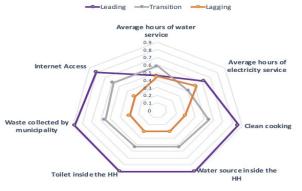
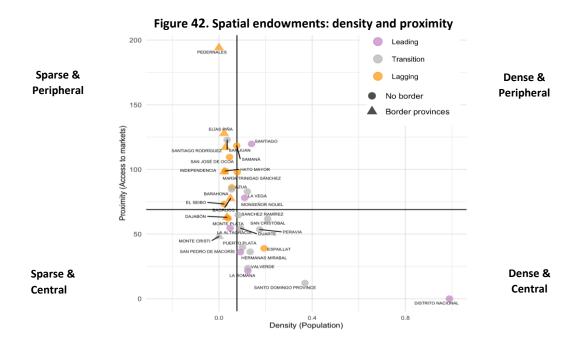


Figure 41. Housing deficit (percentage)



Source: World Bank. 2021. Paving the way for prosperous cities and territories: The Urbanization and Territorial Review of the Dominican Republic.

Most lagging areas have fewer residents and poorer connective infrastructure. Figure 42 shows the agglomeration (proxied by population density) and accessibility (proxied by average travel time to nearest city) of all provinces in the DR. Most lagging regions in the upper-left corner display low population densities (sparse) and market accessibility (peripheral). The fact that lagging regions lack market scale and density can deter firms from setting up in these areas. Higher concentrations of people and firms, by contrast, create more dynamic commercial and labor markets. And accessibility to major markets offers firms lower transportation costs of inputs and outputs.



Source: World Bank. 2021. Paving the way for prosperous cities and territories: The Urbanization and Territorial Review of the Dominican Republic. Notes: Density is the proportion of the population living in areas of high density (more than 300 ppl/sqkm) (GHS-POP, 2015). Proximity is the average travel time to the nearest city, in minutes), Malaria Atlas project (2015). Lines represent the mean value.

2.2.4 Modest impact of fiscal policy on poverty, including limited adequacy of social assistance programs

The proposed conceptual framework for this diagnostic suggests that many poor households may need basic support to start growing their incomes and elevate themselves out of poverty. Leveling the playing field for the poor in access to education and productive assets, services and job opportunities to generate income with respect to other population groups may take time. In addition, recurrent climatic shocks and the COVID-19 crisis halted progress on poverty reduction and may reverse the gains made over the years.

In such context, fiscal policy could help attenuate the negative impacts on poverty and inequality. This could be achieved both through the government's overall fiscal position—for instance, both by avoiding a loose fiscal policy that could lead to macroeconomic instability and higher inflation which is the worst tax on the poor—and through an increase in public revenue (e.g., taxes), which could be transferred to the poor and vulnerable populations via public spending on social programs carefully targeted for their distributional implications. The fiscal system in the Dominican Republic comprises, on the tax side, things such as personal income taxes, the value-added tax (tax on the transfer of industrialized goods and services known as ITBIS in the DR for its initials in Spanish), and excise taxes on alcoholic beverages, cigarettes, fuel products and telecommunication services. On the expenditure side, the main benefits to households include social protection benefits like direct cash and near-cash transfers (e.g., the school food-program and school uniforms and supplies program), indirect subsidies (water, public transport and electricity), and in-kind benefits on education and health.³⁹

Most Dominicans are overall net beneficiaries of their country's fiscal policy. The combination of taxes and transfers has a net positive effect on welfare. The first eight income deciles are net beneficiaries of fiscal policy

³⁹ For a complete overview of the size and composition of each of these main fiscal tools, as of 2018, see World Bank, 2021b.

when all benefits and taxes are applied. The benefits are higher for the poor and the highest impact comes from educational and health in-kind transfers. The net benefits are not significant for the highest deciles (deciles 9-10), which comprise the upper middle class and wealthy income groups. The impact of direct transfers is only noticeable for the first five deciles, which comprise the poor and vulnerable income groups. There is a neutral impact on the middle-class, as taxes are compensated exactly by the benefits received. However, when the benefits from health and education are excluded, only the first three deciles of the population are net beneficiaries of the country's fiscal system (figure 43). Upper deciles become net payers (World Bank, 2021b).

However, fiscal policy reduces poverty modestly. By international standards, the share of the Dominican population lifted from poverty (using the US\$5.5 PPP threshold) as a result of fiscal policy interventions is small (1.36 percent points), relative to the impact of fiscal policy in other Latin American countries (figure 44).

Figure 43. Net incidence, all taxes and transfers except health and education benefits

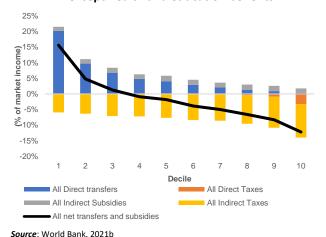
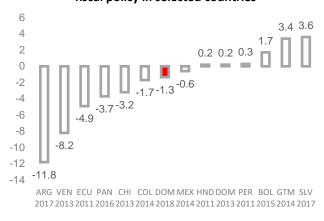


Figure 44. Poverty reduction (US\$ 5.5 PPP line) effect of fiscal policy in selected countries



Source: World Bank, 2021b.

Poverty reduction is driven primarily through direct transfers from *Desayuno Escolar and* the cash transfer program *Aliméntate* (former *Comer es Primero*) by supporting consumption. Cash transfers can help the poor to meet their most basic needs and improve the income opportunities of future generations through investments in health and education. Public transfers have indeed reduced monetary poverty historically. For instance, as noted before, cash transfers contributed to reduce poverty during a period when real wages were stagnant (figure 30). Recent studies (World Bank, 2021a, 2021b)^{40 41} have found that most direct transfers in the Dominican Republic are pro-poor.

But those effects are partially countered by indirect taxes affecting the poor and vulnerable, which reduce the population's market income by an average of 9.3 percent. This is especially relevant in the case of the ITBIS that is paid by all the population through the purchase of goods and services (including the purchase of fuel in oil stations but mainly indirectly through the purchase of goods and services that use oil as an input). (figure 45).

⁴⁰ World Bank. 2021a. "Dominican Republic Public Expenditure Review." World Bank, Washington, DC.

⁴¹ World Bank. 2021b. "Poverty and Distributional Impacts of Fiscal Policy in Dominican Republic." World Bank, Washington, DC.

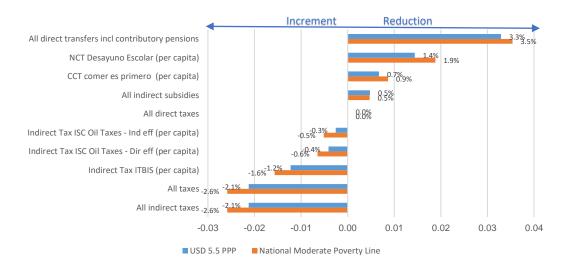


Figure 45. Marginal contributions of fiscal instruments to poverty

Source: World Bank. 2021b.

Notes: NCT: Non-conditional cash transfer. CCT: Conditional cash transfer.

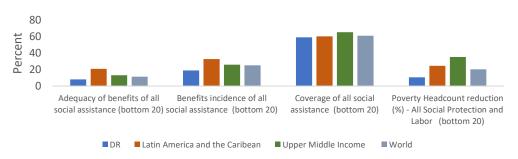
Cash transfers can also do better as their performance on adequacy, targeting and efficiency⁴² is falling behind peers. By 2019, the coverage of social assistance programs for the bottom 20 percent of the income distribution in the DR was comparable to the LAC average, as well as to upper-middle countries and worldwide. In terms of adequacy and incidence of the benefits of social assistance among the poorest households, DR performance lags that of comparators. Compared with cash transfer programs in other developing countries, the total transfer amount of CCT was relatively small. As a result, the social protection system alleviated the poverty headcount by only 10 percent, compared with 24 percent for LAC countries and 35 percent for UMC countries (Figure 46).

The CT program Aliméntate reaches its beneficiaries better than the human capital enhancing transfers Aprende and Avanza, but there is room to improve its targeting performance. The targeting differential (TD) is a measure that reflects both leakage to the non-poor and coverage of the poor: When only the poor get help from a program and all of them are covered, TD = 1, which is the measure's upper bound; and when only the non-poor get the program and all of them are covered, TD = -1, its lower bound (Ravallion, 2009). The TD for Aliméntate is larger (0.163) than for Aprende (0.019) or Avanza (0.001).

Indicators for all SPL programs provide the totals summing up the social assistance, social insurance, and labor market figures.

⁴² **Benefit incidence**: Percentage of benefits going to each group/quintile of welfare distribution relative to the total benefits going to the population. The indicator includes both direct and indirect beneficiaries. **Adequacy of benefits**: The total transfer amount received by all beneficiaries in a quintile as a share of the total welfare of beneficiaries in that quintile. **Coverage**: Percentage of population participating in social protection and labor programs (includes direct and indirect beneficiaries). **Poverty headcount reduction:** Simulated change (%) on poverty headcount due to SPL programs.

Figure 46. Coverage, adequacy, targeting and efficiency of social protection programs for selected group of countries and the Dominican Republic (2019)



Source: World Bank - ASPIRE database.

Note: The indicators for LAC, UMC and the World are calculated for the average (2010-2019).

Note 2: **Benefit incidence**: Percentage of benefits going to each group/quintile of welfare distribution relative to the total benefits going to the population. The indicator includes both direct and indirect beneficiaries. **Adequacy of benefits**: The total transfer amount received by all beneficiaries in a quintile as a share of the total welfare of beneficiaries in that quintile. **Coverage**: Percentage of population participating in social protection and labor programs (includes direct and indirect beneficiaries). **Poverty headcount reduction**: Simulated change (%) on poverty headcount due to SPL programs. Indicators for all SPL programs provide the totals summing up the social assistance, social insurance, and labor market figures.

2.2.5 High exposure to and impact of climatic shocks

In addition to promoting the income of the poor during normal times, fiscal policy could help the poorest and most vulnerable to manage risks while avoiding costly responses during hard times through public transfers targeted at them. For instance, the government responded swiftly and robustly to the Covid-19 crisis, helping to protect much of the gains of recent years. The DR's mitigation package was one of the biggest in the region. As noted, *Aliméntate*, the DR's main cash transfer program, doubled its coverage and increased the average monthly transfer amounts since the start of 2020. This served as a buffer for income loss, preventing an additional poverty rate increase of 6 percentage points. Cash transfers also played an important role in mitigating the impact of the COVID-pandemic: in 2020, the official poverty rate increased by 2.4 percentage points to 23.4 percent, but would have reached 29 percent in the absence of emergency cash transfers.⁴³

Yet despite this additional assistance, poverty in the DR was higher than before the pandemic as of 2022. And as noted before, the vulnerable population (defined as the non-poor living on less than \$14 USD a day) also grew to around 41 percent of the population by 2020. Having such a large group that could easily fall into poverty is particularly problematic given the high exposure of the country to recurrent climatic shocks.

Moreover, as the conceptual framework posits, uninsured risk due to shocks can affect assets and force households into poverty. First, they can impact assets' value and productivity. For instance, zinc roofs are liable to be lost or damaged during hurricanes, or a crop yield could be lower due to a flood. Second, households relocate assets in response to risk. For instance, households may migrate or increase their labor, or switch crop types from high-earning, high-risk varieties to low-yield, low-risk crops. And third, wealthier households tend to better handle risk-related losses. In contrast, given their reduced asset base, poor households are more likely to pay a higher cost for coping with risk after it occurs, especially if they have no public support for coping. As a preview, section 3.5 will show that the social protection system in the DR until recent times was not adapted to protect the vulnerable from falling into poverty, or the poor from further falling, when faced with recurrent shocks.

^{43 &}quot;COVID bajo la lupa – Efectos de la COVID-19 en la pobreza monetaria, desigualdad y mercado de trabajo." MEPYD 2020.

Heavy rainfall and tropical storms are recurrent in the DR44 and can have adverse impacts on dwellings, health, work and employment, and food security, especially for the poor. Between 2019 and 2021, half a million Dominican households in high-risk areas were affected by floods or excessive rainfall, with power cuts and water entering the dwelling the most common impacts. One in four poor households report floodwater entering their houses between 2019 and 2021, compared to only 11 percent in the wealthiest households. Flooding inside dwellings is particularly problematic because it increases the probability of immediate health impacts such as injuries or insect bites that can lead to infected wounds or chronic diseases (Du, Fitzgerald, Clark and Hou, 2010). 45 Relatedly, the proportion of households in the poorest quintile that report losing household goods due to floods is 12.5 percent, compared to 5.8 percent in the wealthiest quintile (table 3). A multivariate regression analysis confirmed a positive correlation between poor households and the chances of reporting flood-related losses and water entering the house. Living in high flood-risk areas during the major hurricanes Laura and Isaias (July-August 2020), which brought heavy rainfall, was also associated with higher chances of experiencing asset losses and water damage (DR Poverty Assessment – Background note on poverty and climate change, World Bank, forthcoming). The poorest workers also miss more workdays due to floods. Around 18 percent of workers in the poorest households reported losing days of work between 2019 and 2021 after being affected by a flood. Only 4 percent of all workers in the wealthiest households reported the same. Each time flooding prevents workers from coming into work, it makes it more likely they will lose their job. And loss of employment is associated with a decrease in the current and long-term earnings of workers, even if they find a new job in a similar firm (Jacobson, LaLonde & Sullivan, 1993; DR Poverty Assessment – Background note on poverty and climate change, World Bank, forthcoming). And with nothing to fall back during a climate shock, the poor are at the risk of resorting to harmful coping behaviors like eating less (figure 47). A recent inspection of coping strategies in the DR between 2019 and 2021 in the wake of floods and tropical storms confirmed that poorer families cut back on food, health and education expenditures to counter the effects of climatic shocks.

Table 3. Share of households affected by flooding by quintiles of wealth (%, 2019-2021)

	Quintiles				
	Poorest	2	3	4	Richest
Water entered house	26.2	21.4	17.9	16.1	11.0
Lost household goods	12.5	7.8	6.2	4.3	5.8
Water source affected	17.5	17.5	18.3	16.9	14.4
Sanitary service affected	7.4	6.1	6.8	6.4	4.9
Electricity service affected	24.2	30.0	24.6	26.1	23.7
Households (thousands)	734	755	621	709	682

Source: FIAS, 2021. Reference period: April of 2019 to April of 2021.

Note: The wealth index is constructed using a PCA analysis from a range of goods that the household has along with certain characteristics of the households. Next, the first principal component is used to predict the values to create five quintiles of the wealth index.

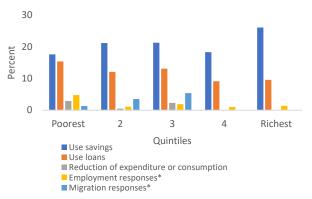
And the inability to smooth consumption after climatic shocks can push people into poverty. A recent study using ENFT data between 2001 and 2016 looked at the effects of tropical cyclones and flooding on monetary

⁴⁴ The DR was ranked the 12th most affected country in the world between 1998 and- 2017 in the 2019 Global Climate Risk Index. According to EM-DAT, The DR was the second-most-affected country in the Caribbean by natural disasters during the last two decades (with 54 recorded disasters), preceded only by its neighbor Haiti (83 recorded disasters)

⁴⁵ Flooding is also related to an increased risk of hepatitis E, gastrointestinal diseases and bacterial diseases like leptospirosis, particularly in areas with poor hygiene (Alderman, Turner and Tong, 2012).

poverty and labor income in the DR. ⁴⁶ Poverty increased by 2.5 percentage points on average for households that experienced heavy storms and flooding, relative to non-affected households (figure 48) (DR Poverty Assessment – Background note on poverty and climate change, World Bank).

Figure 47. Main coping response to floods by quintiles of wealth (%)



Source: FIAS, 2021.

Notes

 $\pmb{a}.$ reference period is April 2019 to April 2021.

b. The wealth index is constructed using a PCA analysis from a range of goods that the household has along with certain characteristics of the households. Next, the first principal component is used to predict the values to create five quintiles of the wealth index.

c. Employment responses refer to members of the household without work that went to work, or working members that worked overtime or looked for additional work.
**Migration responses refer to members of household migrating, or other relatives that came to live to the house to help

Figure 48. Effect of floods and storms on monetary poverty

	Poverty	Ln Labor income	Poverty gap
Flood	0.0244***	-0.0440***	0.0130***
s.e.	(0.00422)	(0.00808)	(0.00720)
Windstorm	0.0248***	-0.0341***	0.0107***
s.e.	(0.00263)	(0.00506)	(0.00122)
Obs	168829	149578	168829

Source: DR Poverty Assessment – Background Paper #4: Poverty and Climate Change.

Note: Results from OLS regression controlling for age, sex, years of education, and marital status of household head, demographic dependency ratio and area of residence (urban/rural). All estimations include location-specific fixed effects, location-specific time trends.

To sum up, following the proposed framework, this overview identifies five inter-related challenges that explain the relatively slow pace of poverty reduction in the Dominican Republic. These elements are (a) uneven investments and endowments in education and labor opportunities between poor and better-off individuals and between girls and boys, (b) stagnant real wages, (c) unequal access to and low quality of key basic services, housing and durable assets between regions and urban/rural areas, (d) modest instruments of fiscal policy to attenuate poverty, and (e) nascent safety nets to deal with climatic shocks which regularly hit the country and cause high human and economic losses. The next section documents some of the main obstacles to remove or attenuate these five factors that explain the slow pace of poverty reduction.

⁴⁶ Incidentally, rising temperatures are also affecting firm productivity in manufacturing. Rising temperatures between 2015 and 2020 were associated with productivity losses of between 2 and 9 percent among manufacturing firms located in the country's poorest regions. As GDP per capita in those regions is roughly one-third of level in the richest regions, climate change is further complicating the path to shared prosperity by widening income inequality (Country Economic Memorandum for Dominican Republic, 2023).

3. BARRIERS TO ADDRESS THE DRIVERS OF SLOW POVERTY REDUCTION

3.1 Drivers of unequal opportunities in education, labor participation and wages for the poor and women

As noted above, the DR has achieved noticeable progress in educational access and attainment in recent decades, reaching almost universal access to primary education, especially in urban areas, and achieving rates of secondary enrollment by over 80 percent prior to the Covid-19 pandemic. The average schooling gains however conceal large disadvantages faced by poor children and girls.

Financial constraints and family reasons, which include becoming pregnant and household chores, are the main reasons for school dropout for girls and young women, according to the most recent ENCFT (figure 49). Adolescent pregnancy, at 93 births per 1,000 women aged 15-19 in the DR in 2018, remains exceptionally high in the DR by global standards and well above the LAC average of 62 (Gender Assessment of the Dominican Republic, World Bank 2023). Teenage pregnancy is regularly cited as a reason for girls to drop out of school, particularly among poor girls. Dropouts are voluntary, but sometimes girls are expelled from school.⁴⁷ Therefore, keeping teenagers in school, especially girls, is a clear priority given the multiple negative consequences associated with dropping out (Gender Assessment of the Dominican Republic, World Bank 2023).

By contrast, lack of interest in school and joining work are the primary reasons for boys and young men to abandon their studies, which speaks to the quality and relevance of secondary education in the country. The different reasons for leaving school reported by Dominican girls and boys reflect differentiated sex roles in society.

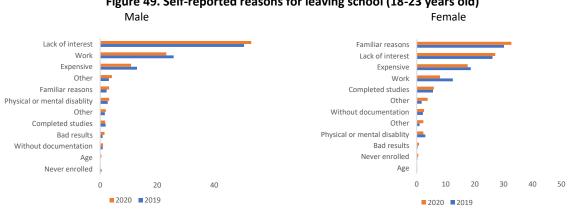


Figure 49. Self-reported reasons for leaving school (18-23 years old)

Source: Gender Assessment of the Dominican Republic. (2023). World Bank, Washington, DC.

Once they finish school and become part of the economically active population, women face the compound adverse effect of lower wages and lower rates of labor participation relative to men. As noted before, ever since 2009, the entry of women into the labor force has outpaced the participation of men, effectively closing the gap. But the difference is still dismal.

⁴⁷ https://listindiario.com/la-republica/2018/03/12/506129/a-muchas-las-expulsan-de-las-aulas.html

Informality and the presence of children at home are among the most important features preventing further labor participation by women (and for explaining job losses for women in general and during the pandemic in 2020). Historically, the disproportionate burden on women of caring for dependents at home is the most important barrier to women's employment, limiting their economic autonomy and the ability to generate their own income. During 2021, women currently inactive but with past work experience reported household chores and care activities are the main reason behind for not returning to work or searching for a job (Figure 50). The Covid-19 pandemic exacerbated pre-existing gender inequalities and reversed pre-pandemic gains for women in terms of labor force participation.

The number of hours spent by women on care activities (children and elderly) is much higher among poor households than in better-off households in the Dominican Republic. Women spend on average four to six hours per day on unpaid care activities, while men dedicate between two and three hours. The gap is higher among the poor and is negatively correlated with hours at work in the labor market (Figure 51). The closure of schools during the pandemic exacerbated this trend, as children had to be looked after and women largely absorbed this task.

Figure 50. Reasons for not working or searching for a job among economically inactive population (2021)

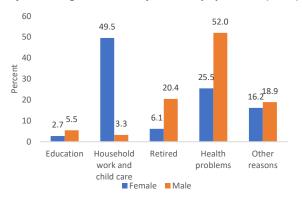
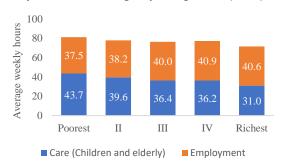


Figure 51. Average hours worked, and care activities by socio-economic group and gender, (2016)



Source: Gender Assessment of the Dominican Republic. World Bank. 2023.

The presence of women in low-earning sectors and discrimination at work (in addition to domestic and care activities) are behind much of the gender wage gap that exists in the DR. Although women predominate in low-paid sectors like domestic and social services, characterized by a disproportionate percentage of informal workers, most of what drives the difference in wages are intangible factors not associated with schooling or experience, which mainly influence the gap among the upper segments of the population. Unobservable characteristics explain most of the wage difference between men and women, particularly among the low-paid. Ñopo decompositions reconfirm that, although sectoral gender segregation explains part of the wage gap in the Dominican Republic, gender differences in wages are largely explained by unobservable factors related to discrimination or unmeasured characteristics such as family background or obligations (Gender Assessment of the Dominican Republic. 2023. World Bank). Caring responsibilities also increase the odds of getting partitime or lower-paid jobs for women, which together with lower rates of labor participation have contributed to the feminization of poverty in the Dominican Republic (Gender Assessment of the Dominican Republic, World Bank, 2023).

3.2 Stagnant real wages due to lagging productivity

As mentioned in sections 1.3 and 2.2.2, stagnant real wages among the poorest explain to an important extent the slow pace of poverty reduction in the DR up to 2013. By the same token, the improvement of real wages has accelerated the progress on poverty for the last few years until the pandemic.

Lagging productivity has depressed real wages, especially in services, the most employment-intensive sector for the poor. Unlike the industry and agriculture sectors, labor productivity growth in services was very slow since the late 1990s up to 2013: Labor productivity increased by about the same proportion between 1997 and 2013 (1.5 thousand US\$) than between 2013 and 2019 (1.5 thousand US\$) (figure 52). Moreover, there is a high degree of job informality in the sector, estimated at 55 percent in 2021. Most service activities are characterized by low productivity, low pay, and unskilled labor-intensive work, all signs of poor and deteriorating job quality. As noted in section 1.3, services have created the bulk of jobs in the country historically. The steady shift of employment towards services stabilized around 2013 (figure 52). The protracted increase in the share of workers within services without corresponding increases in productivity may have added pressures to real wages, particularly up to around 2013. The combination of lower growth in the share of workers going into services and higher labor productivity since 2013 rendered higher growth in real wages from that point onwards.

Gender wage gaps and discrimination in connection with the growing labor market participation of women, discussed in section 2.2.1, could have also added pressures to real wages, but not higher Haitian immigration resulting in lower wages for local workers. There is a sensitive debate on whether labor market outcomes in the Dominican Republic, and the stagnation of real wages in particular, are affected by migrants from neighboring Haiti and thus the relatively low rate of poverty reduction that has been documented in this report. Exploiting the heterogeneity in the distribution of Haitian immigrants in the Dominican Republic, some work has tested for a relationship between the size of the local Haitian immigrant population and wages of Dominican-born workers. Importantly, it does not lend support to the hypothesis that Haitian labor in the Dominican Republic has led to stagnating wages for local workers (see Box 9). If anything, Haitian immigrants are more likely to be complements than substitutes to both capital as well as the relatively more skilled Dominican workers and their conditions could be improved.

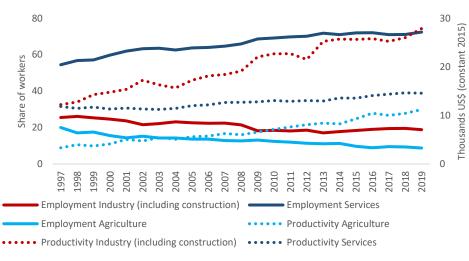


Figure 52. Evolution of employment and labor productivity by sector (1997-2019)

Source: WDI

Raising productivity is therefore essential to improve the welfare of poor Dominicans. Estimates show that a one percentage point increase in total factor productivity (TFP, which represents efficiency in the use of resources like capital, labor, and intermediate inputs in the production process)¹⁴⁸ above its historical average would lift GDP growth by nearly 7 percent. Productivity-enhancing reforms would increase the average income of the poorest households by nearly 17 percent by 2030 (DR Country Economic Memorandum, World Bank, 2023). Unfortunately, the faster growth in productivity needed to alter the trajectory of poverty has yet to be achieved in the service sector, where most of the population remains locked in low-productivity activities. In general, productivity can grow through the accumulation of labor and capital (land, machinery), technological change, managerial innovation ("within" productivity growth) or through the movement of factors of production such as labor from low-productivity to high-productivity sectors. The importance of those channels varies across sectors. In services, the lack of entry by productive firms into the market, and the failure of unproductive firms to exit, has offset the benefits from innovation. The Dominican Republic's recent growth model has been based on factor accumulation rather than productivity growth.⁴⁹

Box 9. The Role of Migrants in the Dominican Republic's economy and society: contributions to growth and challenges on inclusion

The Dominican Republic is characterized by being a country of origin, transit, and destination for migrants. By 2022, according to WB estimates, immigrants accounted for 5.7 percent of the total population (exceeding 639,132 people) —one of the highest immigration rates in Latin America and the Caribbean (LAC)— and 8.6 percent of the total labor force. About 7 out of 10 immigrants are from Haiti (an estimated 458,233 people) and 18 percent (115,00 people) come from Venezuela (as of July 2021). In addition, 90,800 people are still pending a nationality solution (UNHCR 2022). The large majority of these cases are people born in the Dominican Republic to parents of Haitian origin or descent. In 2020, emigrants accounted for 14.6 percent of the population (1.6 million people), according to UN-DESA 2020. See the contraction of the population (1.6 million people) according to UN-DESA 2020.

Two thirds of immigrants (64 percent) live in urban areas, mainly Santo Domingo and Santiago, but border provinces exhibit the highest immigration rates as percentage of the total population. Notably, these are Independencia, Pedernales and Montecristi, and other non-border provinces such as El Seibo, La Altagracia and Valverde. Border provinces experience the highest poverty rates in the country, with 65 % of the population being poor or extremely poor, substantially higher than the 36% rate nationally. These provinces are typically lagging in basic service provision including energy, internet, water, housing, education, health, among others (Regional Development Strategy of the Border Areas "MiFronteraRD", MEPYD 2022). In such areas, migrants and host communities share limited resources, adding to complex and long dated social dynamics.

Most Haitian immigrants are working-age men employed in unskilled and informal jobs in agriculture, commerce, and construction. An estimated 62 percent of all Haitian immigrants are men.⁵³ The Haitian-born are overrepresented

⁴⁸ Effectively, TFP accounts for the share of growth that cannot be explained by growth in observable production factors, such as labor and capital. Therefore, TFP reflects unobservable factors that can boost growth, such as managerial skills, advanced technologies, and innovation, as well as knowledge spillovers from new companies entering the market.

⁴⁹ Capital formation has been the main contributor of economic growth, accounting for 3.7 percentage points of GDP growth on average between 2005 and 2019. Employment was responsible for 1.6 percentage-point rise in GDP over the same period, with labor quality only contributing 0.4 percentage points (Country Economic Memorandum for the Dominican Republic, World Bank, 2023).

⁵⁰ World Bank staff calculations using ENI 2017 and DGM administrative records.

⁵¹ Both immigrant populations represent mixed migration flows that are typically fleeing their home countries following outbreaks of conflict, violence, poverty, and political instability.

⁵² United Nations, Department of Economic and Social Affairs, Population Division (2020).

⁵³ 82 percent of the Haitian labor force in the country is concentrated in agriculture (33.8 percent), construction (26.3 percent), commerce (16.3 percent), and hotels, bars, and restaurants (5.5 percent) (ENI, 2017; Encuesta medios de vida OIT y OIM 2020).

among the least skilled workers with low levels of schooling and Spanish language skills:⁵⁴ In 2017, 28 percent of the Haitian migrant reported being illiterate (and the years of schooling of a working-age Haitian immigrant were 4.1 in 2012) which contrast with the 9 years of schooling for those born in the Dominican Republic in 2021 (ENCFT, 2021).

Immigrants (and emigrants) are vital to the Dominican society and its economy. Dominican firms demand foreign workers. This demand is projected to remain stable or increase slightly in 2023⁵⁵. Agriculture, construction, hotels & restaurants and commerce are intensive in foreign-born labor⁵⁶ and contribute largely to the country's GDP. The Central Bank estimates that these sectors contributed around a third (32.9 percent) of GDP in 2020.⁵⁷ Overall, 82 percent of the total immigrant Haitians work in these industries.

The presence of low-skilled Haitian labor has an economically small, yet positive, effect on wages for the least-skilled. Sousa et al. (2017)⁵⁸ test if higher Haitian immigration results in lower wages for local workers and find no evidence to support this hypothesis. In other words, the increase of unskilled labor from Haiti cannot explain the stagnation of real wages up to 2013 and thus the relatively low rate of poverty reduction that has been documented in this report. By contrast, they find that a positive yet economically small correlation between the share of workers in a given gender-skill group who were born in Haiti and wages for Dominican-born members of that group.⁵⁹ The results seem to suggest that the skills of Haitian immigrants and natives are complements, which leads to increased demand for local workers as output increases. As already noted, Haitian immigrants are geographically and occupationally clustered and have significantly lower levels of human capital than local labor. At the same time, Dominican workers increasingly self-exclude from agricultural and construction jobs due to (i) having access to social protection benefits that raise their reservation wage for this type of jobs; and (ii) cultural factors that inhibit the participation of the Dominican labor force in this sector (INM 2022).

And yet, salaries and earnings for migrant workers remain among the lowest paid and labor conditions are restricted. Among Haitian immigrant workers, only 16.7 percent said they have paid vacations, 19.7 percent said they are paid when working overtime, 31.7 percent said they are paid double wages (Regalia Pascual)⁶⁰, and only 14.3 percent said they have paid sick days. Similarly, the percentage of immigrants who have access to insurance is low, only 10.9 percent of immigrants say they have health insurance, compared to almost 70 percent of the Dominican population that is affiliated. Among workers who declared having AFPs (Pension Fund Administrators), only 6.2 percent of Haitian immigrant workers say they have it and 8.4 percent have occupational risk insurance (Data ENHOGAR 2016 and ENI 2017). Immigrant women have the lowest average income (DOP 15, 828 is the average monthly labor income for migrant workers, but only DOP 13,336 for Haitian immigrant women) of all the groups of immigrants and descendants considered in a complementary study carried out by ONE and UNFPA for the ENI 2017.

Regulatory restrictions to migrant labor established in the national Labor Code (Law No 16-92) add market rigidities and could have potentially negative consequences or risks on agricultural exports, construction, and tourism amidst the post COVID-19 economic recovery. Further, global literature shows that potential restrictions to low-skilled

⁵⁴ The Livelihood Promotion Study for Venezuelans in the Dominican Republic published by the ILO, the National Institute of Migration (INM-RD) and UNHCR in 2020.

^{55.} National Institute of Migration (NIM). (2021). Institutional Strategic Plan 2021-2024. Santo Domingo

⁵⁶ Agriculture, where 54.4 percent of total labor force is composed by immigrants56 is the sector with the largest demand for immigrant workers, followed by construction (53.2 percent), tourism (17.5 percent) and retail (14.4 percent. National Institute of Migration (INM RD), International Organization for Migration (IOM) and International Labor Organization (ILO). (2020). *Estimation of the demand for foreign workers in the construction and agricultural sectors in the Dominican Republic*. Santo Domingo.

⁵⁷ Construction (12.2 percent), Commerce (10.6 percent), Agriculture (6.0 percent) and Hotels, bars and restaurants (4.1 percent).

⁵⁸ Liliana D. Sousa, D. Sanchez, and J. E. Baez. "Wage Effects of Haitian Migration in the Dominican Republic." In Carneiro, Francisco Galrao, and Sophie Sirtaine, eds. 2017. When Growth Is Not Enough: Explaining the Rigidity of Poverty in the Dominican Republic. Directions in Development. Washington, DC: World Bank.

⁵⁹ For Dominican workers who did not finish primary school, the results suggests that an increase of 10 percentage points in the Haitian share of the local population that did not finish primary school results in a wage increase of 0.7 percent. This share can reach 30 percent in some provinces, suggesting that in some localities with a high concentration of Haitian workers, local Dominicans who did not complete primary school could be seeing a wage premium of almost 1.3 percent.

⁶⁰ This is the extra salary for one month that is received at the end of the year in December and is given without tax withholdings.

immigration may displace the labor supply of highly educated women (which are already underrepresented in export sectors in the Dominican Republic), since they rely on daycare arrangements that often hire foreign-born workers (Cortes and Tessada, 2009), although specific studies have not been conducted in the DR.

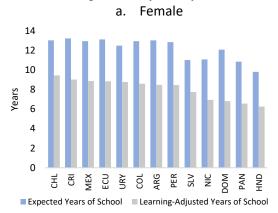
National policy efforts are changing towards a human-rights centered approach and a vision of long-term integration of migrants into the Dominican society and economy. The 2004 National Migration Law created the National Institute for Migration (INM). The PNPSP 2021-2024 establishes priorities and concrete objectives on migration management related to improving living standards for all residents of the Dominican Republic, including the quality of education, health, social protection, and work. Some examples of progressive policies and regulations are: (i) the Ministerial Resolution No. RES.MIREX-DGM-001 approved in March 2021 which grants a special migratory permit of a humanitarian nature to Venezuelan migrants; (ii) the 2020-2022 Action Plan against Trafficking of Persons and Smuggling of Migrants, chaired by an interinstitutional commission comprised of 18 participating institutions; (iii) the preparation of a bill to amend Law No. 137-03 on human trafficking and smuggling; the Migrant Labor National Plan for the orderly, safe and regular migration of the foreign-born workforce; and the launch of the Single Social Beneficiaries System (SIUBEN) in June 2022, an open data platform through which the general public can access the socioeconomic information of the population registered in SIUBEN, including regular migrants. The launch in July 2022 of the Development Strategy for the Border Zone (MiFronteraRD) coordinated by the Ministry of Economy, Planning and Development (MEPYD), conceived as an instrument to guide development, based on the demands prioritized by the population, the analysis of structural gaps and the potential of the territory. The INM has also embarked on data collection efforts toward the Periodic Demand Estimation Program of Foreign-born Labor Force, while the National Statistical Office (ONE)will conduct the next round of the 2023 National Immigration Survey (ENI).

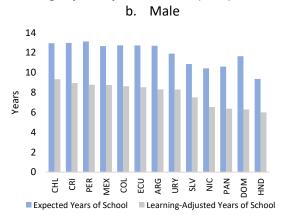
3.2.1 Productivity growth has been hindered by inadequate human capital

While the share of workers with a secondary degree is at par with other peers, productivity is not. Approximately 70 percent of the labor force has completed secondary school, a share 3 percentage points higher than structural peer countries, and only 2 percentage points below aspirational peers. However, for service firms where more than half of the labor force holds a bachelor's degree, labor productivity is roughly half the level of aspirational peers and 44 percent lower than in structural peers. A basic estimation calculating years of effective education by occupation in the DR *vis-a-vis* the US found an average gap of 5 years for service workers. Put another way, despite having been in education for a similar length of time, their skill level lagged behind US workers by the equivalent of five years of schooling (Country Economic Memorandum for the Dominican Republic, World Bank, 2023).

The quantity and quality of education in the DR are low relative to the region. When comparing the expected years of education of the future labour force, the DR has one of the lowest levels among comparator countries (figure 53), about 10 percent lower than that of Chile. When adjusting for the quality of education, the gap becomes even larger. The learning-adjusted expected years of education for the Dominican Republic represent about 72 percent of the corresponding value for Chile for girls and 67 percent for boys.

Figure 53. Expected years of education and learning-adjusted years of school (2020)





Source: Human Capital Index - WB.

Note: Expected Years of School is calculated as the sum of age-specific enrollment rates between ages 4 and 17. Learning-adjusted years of school are calculated by multiplying the estimates of expected years of school by the ratio of most recent harmonized test scores to 625.

The low academic performance of Dominican students is mainly explained by low preschool attendance, high repetition rates, and the low efficiency of the public education sector measured as the ratio between learning outcomes and expenditures per pupil (World Bank, 2021a). Both Treviño et al. (2015) and Castillo and Mola (2016) use the Third Regional Comparative and Explanatory Study (TERCE)⁶¹ information to analyze the factors that explain students' poor performance in the Dominican Republic relative to the rest of LAC. Better-off children have better learning outcomes and most of the variation on student performance is explained by differences across schools. This indicates that students with similar economic and social backgrounds are clustered in the same schools. In addition, preschool attendance, positively correlated with learning outcomes and school attendance, is low among Dominican children.⁶² Many students do not pass the academic year because they accumulate learning lags over the years.

The lack of technical capacity in the labor supply could be a crucial bottleneck in accessing jobs as firms cannot hire workers with the skills they need. A national survey conducted in 2019 reveals that nearly two thirds of firms in the retail trade/commerce and hospitality sectors mentioned that their labor force requires training or skills upgrading to improve their job performance. Large companies especially cite the lack of trained personnel as restricting their ability to innovate. Meanwhile, the low skill level of workers entering the labor market may have enhanced the bargaining power of employers and contributed to the slow growth of wages in the country (The World Bank, 2021c). Overall, low productivity can be partially explained by both low schooling and significant learning gaps in the current labor supply; and mismatches between knowledge acquired during school and college and skills required by firms to improve business.

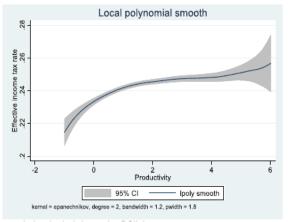
⁶¹ This is a regional study on the quality of education in Latin America.

⁶² León (2018) finds similar results for the Dominican Republic using information on 15-year-old students tested in PISA 2015. The preschool attendance rates of 3rd and 6th graders in the Dominican Republic are 17.6% and 19.3%, respectively, compared with 32.6% in the region. Additionally, in the country, 26.9% and 35.4% of students in third and sixth grade did not attend school at least two times a month versus 28.6% and 23.8% in the region, respectively.

3.2.2 Low productivity due to policy distortions

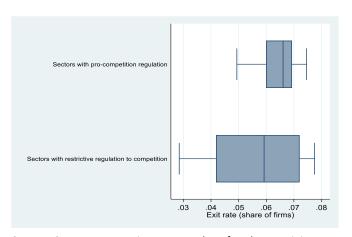
Tax burdens are the main obstacle to business development, but tax exemptions have reduced productivity growth through resource misallocation. Larger firms are the main beneficiaries of tax incentives, while smaller and more productive firms are subject to higher taxes. An analysis of formal firms located in Special Economic Zones (SEZs) that benefit from special tax regimes (STR)⁶³, compared with similar peers located outside SEZs, such as low-tech producers of textiles & clothing, shows that productivity of low-tech firms in SEZs is nearly 30 percent lower than comparable firms outside the SEZs. Highly productive firms pay on average 0.4 percentage points more on income tax than low-productivity firms (figure 61). Consequently, firms that register in special tax regimes remain in the market longer than those that do not, despite their lagging productivity level.⁶⁴ Furthermore, more firms exit the market in sectors with more restrictive regulations such as price controls, barriers to entry, and provisions that protect incumbents (figure 62) than in SEZs. The presence of state-owned enterprises (SOEs) also seems to be related to a large number of firms exiting the market (Country Economic Memorandum for the Dominican Republic, World Bank, 2023).

Figure 54. Effective Income Tax rate by productivity segment (2017)



Source: Country Economic Memorandum for the Dominican Republic. World Bank. 2023. Productivity measured as TFPR (Total Factor Productivity Revenue)

Figure 55. Firms exit rates by degree of regulation to competition



Source: Country Economic Memorandum for the Dominican Republic. World Bank. 2023.

Domestic markets in the Dominican Republic are less competitive than in comparator countries and dominated by few groups of firms, stifling productivity. In a World Bank enterprise survey conducted in 2016 in the Dominican Republic, over 46 percent of surveyed firms stated that they operate in concentrated market structures (i.e., monopoly, duopoly, and oligopoly), compared to an average of 30 percent in Uruguay and Croatia, both structural peers to the DR. Firm-level data from administrative records confirm that several activities in 11 out of 38 sectors that were analyzed are highly concentrated in the Dominican Republic, especially in manufacturing (Country Economic Memorandum for the Dominican Republic, World Bank, 2023).

⁶³ Tax-exempted firms producing textiles, clothing and metal products in Special Economic Zones (SEZs)

⁶⁴ Between 2007-2016, the exit rate of unproductive firms under general tax regime (GR) was roughly 9 percent, while under special tax regime (STR) for firms located in SZE is 7 percent. Meanwhile, the entry of productive firms under the GR is 2.3 percent, while only 0.6 percent for firms under the STR.

3.3 Gaps in access and low quality of services, connectivity, and housing due to limited planning and financial capacity at local levels

As noted before, between 2007 and 2021, the DR made strides on connectivity and access to water, sanitation, and electricity as well as improved housing quality. These improvements reduced nonmonetary poverty and increased opportunities. However, such progress was not always shared equally across income groups, between rural and urban areas and within cities and across regions. Limited and poor-quality of services and road networks hinder the potential of lagging groups, areas and provinces.

Lack of land-use planning and spatial diagnostics lead to poor management of urban growth and prevent addressing the existing gaps in access to services and roads. As of 2021, only 5 percent of municipalities had land-use plans, and just 6 percent had operational planning units (figure 56). Most municipalities do not have urban planning offices and there is no evidence of territorial planning in rural areas. So in the absence of land-use plans and planning offices current urban expansion patterns, if maintained, will further congest services and reduce internal connectivity and the economic potential of Dominican cities, further exposing them to climatic shocks.

Under investments in services and connectivity may also be due to the lack of local resources and limited capacity. The DR is one of the most centralized countries in Latin America and the Caribbean; with local governments accounting only for 2.4 percent of total government spending. Local governments have few responsibilities and limited capacity, with no role in the provision of public education, the urban water supply, and sewage systems, for example. Transfers from the central government are by far the largest source of municipal revenues, accounting for nearly seventy percent of the total in 2019 (figure 57). A more general point discussed below relates to the limited tax revenues collected by the DR which may prevent further investments in services and connectivity where needed.

Figure 56. DR Municipalities with Municipal Territorial Plans, by plan status

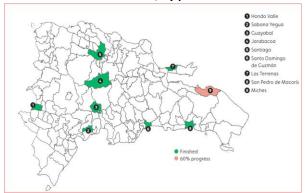
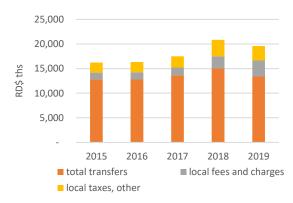


Figure 57. Sources of municipal revenue (2015-2019)



Source: "Paving the way for prosperous cities and territories Urbanization and Territorial Review of the Dominican Republic." World Bank. 2021.

Regional imbalances in the provision of services and infrastructure could also be due to misguided incentives to attract FDI and private firms into SEZs. According to a recent World Bank firm survey, physical connectivity, human capital, electricity, water and sanitation services, and digital connectivity are the main reasons why firms choose to operate in SEZs (*Parques de Zonas Francas* in Spanish) in the DR (figure 58). By 2020, the Dominican Republic counted 75 SEZs hosting 551 firms. The SEZs are primarily located in and around the provinces of Santiago (27 SEZs in the province itself, and seven in neighboring provinces) and Santo Domingo

(18 SEZs in the province itself, and 11 in neighboring provinces). Therefore, the benefits from the establishment of SEZs have been geographically concentrated in two out of the country's 10 regions —Ozama and Cibao Norte. The higher density of SEZ firms in the two largest cities of the country confirms the value that SEZ confer to better access to northern ports and the US market offered by Santiago and the human capital available in Santo Domingo; **fiscal incentives do not even feature in the top five.** Yet the DR has put in place multiple tax incentives to attract firms to SEZs, such as 100 percent tax exemptions for imports of raw materials and vehicles, as well as benefits to do with rent and patents. As such, the government could recoup fiscal revenue by curtailing unnecessary tax exemptions for firms in SEZs and use said revenue to boost connectivity and services in areas far from existing SEZs.

Box 10. Special Economic Zones (SEZs) in the Dominican Republic

Handled properly, Special Economic Zones (SEZs) can be a catalyst for inclusive structural transformation. They can act as a major source of demand for products. They improve the accumulation of skills, occupational specialization, and labor productivity. They integrate labor markets and foster creativity and innovation. To maximize the impact that SEZs can have in their surrounding territories, it is important to assess how they can boost local economic development by building on local absorptive capacity and endowments and enabling linkages with local firms. However, there is a need to recognize the limited spatial impact of SEZs in surrounding communities when located in areas with poor absorptive capacity and spatial endowments.

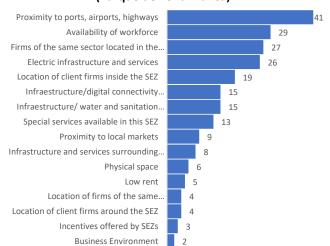
Many SEZs have been concentrated in Santo Domingo and Santiago, so the benefits of SEZs in promoting job creation and attracting FDI could be shared more widely. As of 2020, only 1 SEZ (*Parques de Zonas Francas* in Spanish) (out of 75) and 3 ZFEs (*Zonas Francas Especiales* in Spanish)⁶⁶ (out of 158) are located in the less developed parts of the country (1 SEZ in Pedernales, 2 ZFEs in Monte Cristi, and 1 ZFE in Independencia). SEZs concentrated, on average, 3.8 percent of total employment over 2010-19, and provided 176,555 direct jobs as of 2019. FDI into SEZs increased from 4 percent of total FDI in 2010 to 9 percent in 2019. Total sales from SEZs accounted, on average, for nearly 3 percent of GDP over 2010-19. However, economic activity in SEZs has failed to promote economic development elsewhere. A 1 percent increase in SEZ output leads to an estimated average increase in output in the rest of the economy of only 0.6 percent. Meanwhile, local manufacturing has had a greater impact on growth and job creation (figure 59).

Whether increasing the size and density of cities or creating new SEZs, policy makers need to take a conscious, planned approach to benefit the least developed parts of the country. Lagging areas in the DR are thinly populated and far from large markets. As such, the main priority should be strengthening human capital and internally connective infrastructure.

⁶⁵ Consejo Nacional de Zonas Francas de Exportación (July 2020). Retrieved from: http://www.cnzfe.gob.do/index.php/es/

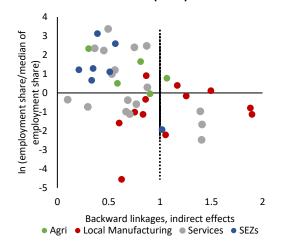
⁶⁶ These are 158 individual firms across the country located outside the designated *SEZs*, which receive the same benefits as those firms located inside the SEZs.

Figure 58. Main reasons to locate in a SEZ (Parque de Zona Franca)



Source: Country Economic Memorandum for Dominican Republic. 2023. Washington, D.C.: World Bank Group.

Figure 59. Backward linkages effects on employment creation (2016)



Source: "Paving the way for prosperous cities and territories Urbanization and Territorial Review of the Dominican Republic." World Bank. 2021.

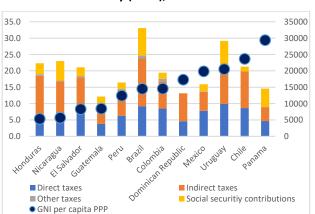
3.4 Modest impact of fiscal policy due to low revenue collection and social spending and inefficient subsidies

The current structure of fiscal policy, both on the revenue and expenditure sides, limits the ability of the Dominican Republic to provide sufficient and quality public goods and services and places too much of the burden on the poor.

The fiscal system is hampered by low revenue collection. Total fiscal revenue in 2018 amounted to 14.2 percent of GDP. Tax revenues are the most important source of revenue (close to 91 percent of total revenues) followed by non-tax revenues (8 percent of total revenues). The Dominican Republic has one of the lowest tax burdens in the region, below the average among LAC countries of 22.5 percent of GDP in 2018 (OECD, 2022). Direct tax collection is one of the lowest and indirect tax collection is below the regional average (11.5 percent of GDP in year 2018, according to OECD). Tax revenues are lower compared with countries that have similar GNI per capita PPP levels, such as Mexico and Colombia (figure 60). This low collection is explained by important levels of evasion. According to a recent World Bank report, the Dominican Republic's compliance gap is the single largest factor explaining its large potential efficiency gap (World Bank, 2021b).

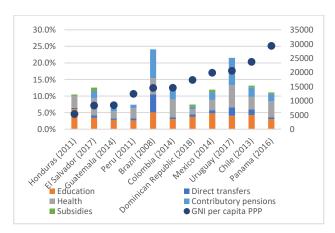
Low levels of social expenditure limit the ability of the Dominican Republic to provide sufficient and quality public goods and services for the poor. The Dominican Republic's social expenditure levels are lower compared with most other Latin American countries, including relative to countries with similar income levels. Education and indirect subsidy expenditures are close to regional averages (Figure 61). But health, social assistance (direct transfers) and contributory pension expenditures are lower than those of other countries. And, as noted before, the mistargeting and lack of coverage limits the efficiency of ongoing cash transfers that could directly improve welfare.

Figure 60. Latin America: tax revenue including social security (2018), as % of GDP



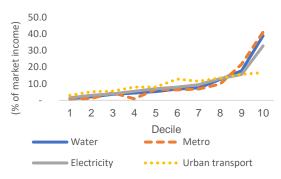
Source: World Bank 2021b based on OECD-Stat and World Bank Data.

Figure 61. Latin America: social expenditure (% of GDP)



Inefficient expenditures also hamper the impact of fiscal policy. Electricity in the Dominican Republic is highly subsidized. This is explained by the combination of historically high energy costs and low collections by its Electricity Distribution Companies (known as EDEs for their initials in Spanish). In 2018, the government transferred US\$850.5 million to the electricity sector, of which US\$385.6 million were current transfers⁶⁷. Water services are also subsidized and delivered by public companies that charge tariffs that are too low to permit recovery of all costs and capital depreciation. In addition to energy and water, there are subsidies for public transportation including buses, metro and cable car urban transit systems. In 2018, the government transferred to the Metropolitan Office of Bus Services (OMSA for its initials in Spanish) a total of RD\$1,387.9 million to cover the difference between its income and expenses,⁶⁸ supplying the service to 31 million passengers, of which 22.1 million paid fares.

Figure 62. Indirect subsidies: incidence and concentration of benefits per decile



Source: World Bank 2021b based on OECD-Stat and World Bank Data

In the same year, the government transferred RD\$4,512 million to the office in charge of metro and cable car services (OPRET), which served a total of 89.6 million passengers. Some of these subsidies promote fossil fuels and crowd-out other important social expenditures but are also highly regressive: Water and electricity subsidies mainly go to upper income deciles (figure 49). The subsidy on metro services (offered by the public entity known as OPRET) benefits the urban population of Distrito Nacional and Santo Domingo but may also be reassessed as the rural poor and urban poor not living in the capital hardly use this service (figure 62).

⁶⁷ See Ministerio de Hacienda (2018, p.32 and p.35)

⁶⁸ Decree 448-97 establishes that annual budget lines will be assigned in the General Budget of the Nation to cover the difference between their income and expenses.

3.5 Uninsured risk due to limited incentives for risk prevention and imperfect safety nets

The last four subsections have identified key constraints to facilitate more and better education and employment opportunities, especially for women and the poor, as well as to raise the labor incomes of the poor through improved productivity spatially and in services, the sector in which most poor people in the DR are engaged. They have also identified historical obstacles to the provision of services, housing and connectivity that together with a more efficient fiscal policy could accelerate the reduction of poverty in the country.

This subsection aims to establish why shocks have historically forced households into poverty and if there are specific constraints to adopting risk mitigation mechanisms (either ex-ante or ex-post) to insure better against climatic shocks.

The poor are more exposed to climatic shocks, have fewer assets to protect or recover, and eventually cope poorly. ⁶⁹ The Dominican Republic Flood Risk Assessment Household Survey (DR-FIAS) collected information on the impact of flooding, preventive behaviors and response mechanisms between April 2019 and April 2021. The survey shows that one in four of the poorest households ⁷⁰ are at high risk of flood compared to 13 percent among the wealthiest. Analysis conducted for this PA also suggests that households living in high-risk flood prone areas perceive themselves as more vulnerable to floods than those living in low-risk flood prone areas. However, over half of the household with high exposure to flood risk have inadequate materials in their dwellings (More than three-quarters of the poorest households have zinc roofs). And households at high-flood risk adopt preventive measures against floods in similar numbers than those living in low-risk areas despite their higher exposure. Even more surprisingly, the percentage of households who report ex-post support to mitigate the impact from floods is almost null (figure 63). The evidence shows that government protection against climatic shocks is meager and rarely reaches those who need it despite the hugely negative impact of such shocks on welfare.

80 70 60 50 40 30 20 Proportion of Households that Search for weather Received warnings Building wall around Putting sandbags Share of households households in high-perceive themselves information about risks of floods dwelling around dwelling receiving assistance risk areas likely to be affected after flooding events by floods in the next year ■ Quintile 1 ■ Quintile 5 Preventive actions

Figure 63. Perceptions, preventive actions, and policy responses to flood risk in the Dominican Republic

Source: FIAS, 2021.

Notes

a. reference period is April 2019 to April 2021.

b. Quintiles 1 and 5 correspond to a wealth index constructed using a PCA analysis from a range of goods that the household has along with certain characteristics of the households. Next, the first principal component is used to predict the values to create five quintiles of the wealth index.

⁶⁹ This stems from (a) location factors as poor households typically get pushed to marginal hazard prone areas (i.e., steep land or squatter settlements), where land ownership is easier and rents cheaper, but also more susceptible to get damaged by floods or landslides; and (b) housing materials of poorer quality, infrastructure, and production activities which are typically unsafe or less resilient to hazard impacts

⁷⁰ Status of poverty is defined as individuals that belong to the bottom 40 percent of the wealth distribution index.

Despite being highly vulnerable to climate change and shocks, many poor households do not undertake preventive actions due to financial constraints or lack of security of ownership or tenancy. When running a multivariate regression (controlling for wealth quintiles, location and head characteristics) on the probability of adopting preventing measures, financial constraints and the ownership of the dwelling are statistically significant, and in the expected direction: Household owners are more likely to build a wall or dig a ditch around the house to divert the water, than households that rent or do not own their property. Second, people may not be able to afford preventive measures. Only the richest households in urban areas have insurance against floods. And incidentally these tend to be low-risk areas. In rural areas, the proportion of households with insurance against floods is close to zero (DR Poverty Assessment – Background note on poverty and climate change, World Bank).

Behavioral biases may prevent households from undertaking more preventive actions. High-risk households do perceive themselves more vulnerable. However, among the poorest households, only 39 percent monitor weather forecasts compared to 72 percent among the richest households. Not looking for information on weather forecasts can reduce awareness of flooding and hinder readiness to face potential shocks. So, a loss-aversion bias may be at work: people care more about the costs of undertaking some action (like buying a TV, computer or tablet with which to check the forecast, or buying insurance) than about its gains, even if these are equal-sized (DR Poverty Assessment – Background note on poverty and climate change, World Bank).

And DR's safety nets for poor and vulnerable households in the wake of floods and hurricanes are limited. While higher for households that lose goods due to floods, overall assistance is negligible (Figure 63). Poorer households tend to receive higher shares of assistance than wealthier households (4 percent versus 1 percent) but the shares are still tiny. Greater public support for poor and vulnerable households against climatic shocks is therefore warranted given how burdensome these shocks can be. As discussed in next section, this situation will likely change as the DR is moving towards an adaptive social protection system (ASP) with an unconditional free-use and temporary cash transfer to alleviate the impact of climate emergencies.

4. POLICIES TO ACCELERATE INCLUSIVE GROWTH AND POVERTY REDUCTION

In summary, the Dominican Republic has made progress in tackling poverty and inequality, despite the impact of the COVID-19 crisis. But pro-poor achievements in the DR have not always tracked its economic growth rates, which have outperformed regional peers in the LAC. To expedite poverty reduction and raise the prospects of achieving high-income status by 2030, the country will need to close faster the relatively large gaps that persist in five inter-related challenges around human capital and employment, productivity, territorial development, fiscal policy and vulnerability to shocks.

These challenges can be overcome through five areas of action: (i) to enhance the human capital (education) and labor opportunities of the poor and women, including by providing cash transfers, particularly during the final years of secondary education; (ii) to boost the labor incomes of the poor through more and better jobs (i.e., increasing their productivity) and through better access to business skills; (iii) to reduce spatial and group inequalities through investments in public services, connectivity and housing conditions; (iv) to increase the availability of resources to invest in more and better public goods and services and to maximize the redistributive capacity of transfers and taxes through less tax evasion, less reliance on indirect taxes and scaling back regressive subsidies; and (v) to improve the impact of social assistance safety nets through more efficient,

more generous, and better targeted transfers and by protecting households from shocks, which will help sustain household incomes over time.

Ultimately, the complementary reforms are intended to lay the foundation for a more dynamic and prosperous country. At their core, they aim to chart a path toward sustainable growth based on increased economic productivity, more inclusive labor markets, more dynamic structural transformation, better-functioning safety nets and a fiscal system with strengthened redistributive capacity.

4.1 Invest in people, especially girls and women

Sections 2.2.1 and 2.2.2 documented persistent human capital deficits and sizeable gaps in employment and labor income, especially by poverty status and gender. Closing these gaps would help slash poverty in the country. High school completion rates have remained stubbornly low among the poor over the last decade, despite a high estimated return to secondary education in the labor market. Boys cite lack of interest in school and joining the labor market as the main reasons for leaving their studies. Girls drop out of secondary school predominantly due to family reasons, including becoming pregnant, and financial constraints. Prolonging the stay of girls in school in particular has multiple social and individual benefits. Children born to very young mothers tend to have higher risks of under-five malnutrition and mortality, but ongoing secondary education for girls reduces their chances of early pregnancy. It also means more educated women can enter the labor force. This not only benefits women and their families, but society as a whole: higher female labor force participation is associated with lower infant mortality rates and higher life expectancy.⁷¹

Avanza, the conditional cash transfer program to incentivize secondary education, should be expanded, and its focus on girls strengthened – along with reforms to improve the quality of education – to reduce school dropouts. Avanza has successfully increased high school enrollment. 72 Yet the number of beneficiaries fell from 123,489 in 2019 to 84,783 in 2022. Meanwhile, those benefiting from Aprende, a similar program to incentivize primary-school attendance, also dropped from 197,865 to 146,929. The total amount transferred per beneficiary in each program also fell. they could be renewed and redirected without significant cost. Since primary education is almost universal in the DR, the benefits and incentives of Aprende could be shifted towards secondary education given the success of Avanza in increasing the years of education, promoting school completion and reducing early pregnancies⁷³, with an emphasis (or bonus) on completing the last year

⁷¹ Mateo Díaz and Rodríguez-Chamussy (2016) in World Bank (2018); World Bank (2012).

⁷² In December 2005, the DR instituted its first schooling-related transfer for low-income households, the Incentivo a La Asistencia Escolar or ILAE (currently called Aprende). It was targeted to all eligible households with children in school age (6-21) to promote school attendance at primary and secondary levels. In June of 2013, a new conditional cash transfer was established targeting high school age children to further encourage attendance at this level, Bono Estudiantil Estudiando Progreso – BEEP (currently named Avanza). The DR Poverty Assessment work on the causal impact of Avanza reveals a substantial gain in completed years of education and a higher rate of high school completion for participants: Receiving Avanza transfers increases the probability of completing high school by 13.6 percentage points. Comparing this treatment effect size against the high school graduation rate in the control group (59.1 percent) implies a relative increase of 23 percent. Exposure to Avanza also translates into 0.52 additional years of completed education (Dominican Republic Poverty Assessment – Background note on social assistance programs. World Bank).

⁷³ Higher high school completion from school transfers translates into non-trivial effects later on monthly salaries, employment prospects and time delay for having a first child. Back of the envelope cost-benefit calculations were carried out combining the estimated effects of additional cash transfers on high school completion with estimates of delay in having a first child by education level obtained from the National Demographic and Health Survey, ENDESA (2013). Doing so indicates that 10 additional US dollars per year transferred to the group of girls that received both school transfers translate into a 0.6-month delay in having their first child, both in urban and rural areas, relative to those who only completed primary education, and around 0.4 months relative to those with an incomplete secondary education. Similarly, 10 additional US dollars in high school transfers per year increases employment probability

of the lower and upper cycles where dropouts tend to occur (see figure 32). Girls could receive more money than boys, reflecting the additional pressures on them to drop out, and go directly to students rather than to the heads of the household.

Box 11. Addressing teenage pregnancies in the Dominican Republic

Adolescent pregnancy is a significant challenge in the DR and is closely linked to women's worse education and employment outcomes. The Dominican Republic has spent decades trying to consolidate policies to reduce teenage pregnancy, end child marriage, and educate girls through three main types of interventions: (1) programs that provide girls with life skills and reproductive health knowledge; (2) programs that expand girls' economic opportunities; and (3) programs designed to ensure that girls remain in school or that enable them to return to school.

Widespread access to sexual and reproductive knowledge and services could thwart teenage pregnancies. For most Dominican teenagers, pregnancy is an unplanned event. The lack of adequate use of contraception, in connection with insufficient knowledge or maturity, was the main reason reported in a recent qualitative study (UNDP 2018). Indeed, only 46 out of 100 Dominican adolescents used a method of contraception in their first experience of sexual intercourse and only one in five adolescents made use of health services for adolescents (ENHOGAR 2018). Despite the existence of the National Program for Comprehensive Health Care for Adolescents (PRONAISA), the availability of healthcare services for adolescent girls remains limited and of insufficient quality. In addition, the Family Health Insurance program should include Sexual and Reproductive Health (SRH) services for adolescent girls. An annual medical visit of adolescents for preventive purposes could also become a condition to access social protection programs such as Aprende or Avanza, which are conditional cash transfer programs to promote school attendance at primary and secondary levels, respectively, among deprived children. A Comprehensive, age-appropriate sexuality education in the educational curriculum at various ages could also be required. Adolescents aged 15-19 who have never been pregnant report greater exposure to reproductive physiology courses taught at school (81.3 percent) than adolescents who have been pregnant (67.8 percent). Several pilot projects promoting life skills and access to SRH knowledge have been implemented in the Dominican Republic, including Baby Think It Over (Bebé Piénsalo Bien), I Decide to Wait (Yo Decido Esperar), and Girls Club (Club de Chicas). Evaluating their effectiveness to assess potential scale-up should be a priority moving forward.

Greater labor-market opportunities for women have also been identified as key preventive factors of teenage pregnancy and the Dominican Republic has experience with successful programs aimed at increasing the employability of poor young adolescents. The Youth and Employment Program, implemented between 2003-2010, was aimed at the population aged 16 to 29 who were out of school, with incomplete secondary education and from the poorest 40% of households. At least 45% of the participants had to be female. The program included classroom-based vocational and life-skills training as well as an internship with a private-sector employer. The program showed a positive impact on labor participation and on the probability of working (the subsequent employment rate was 8.4 percent higher than in the control group) especially among women. The medium-term the impacts dissipated, suggesting the need for a continuous monitoring process for the target population. Both in the short term and in the long term, women showed a higher level of satisfaction with their employment situation and the incidence of pregnancy was reduced, mainly in women between 16 and 19 years of age. More recently, an economic inclusion component for adolescents and young people through vocational training and apprenticeships was implemented as part of the *Progresando Unidos* Program and contained affirmative actions for women (i.e., at least 50 percent of beneficiaries had to be women). The interventions had no positive impacts on employment, but did raise the quality of the jobs (higher paid and more formal) for women and men alike. The new SUPERATE program, the successor of

by 1.3-1.5% in urban areas and 1.2-1.3% in rural areas, and monthly wages by US\$ 1.2-1.3 in urban areas and US\$ 1.3 in rural areas, compared to completed primary education only.

⁷⁴ The conditional cash transfer Comer Es Primero (renamed ALIMENTATE under the new Supérate strategy) requires annual health checkups for pregnant women and under-fives, but not for teenagers.
75 See Vezza et al. (2014)

the DR's principal anti-poverty strategy Progresando con Solidaridad (PROSOLI), also has a marked emphasis on capacity building for economic inclusion among women and young people.

A third category of programs aims to ensure that girls remain in school, enable them to return if they have dropped out, or directly delay marriage. There have been numerous interventions in countries to keep girls in school and delay marriage (Ozler et al. 2021, Evans et al., 2023). In some cases, evaluations demonstrate that programs that provide incentives for girls to remain in school often succeed in delaying marriage or childbearing, especially when linked to conditional cash transfers by increasing the economic stakes of becoming pregnant too early but also by improving SRH knowledge. The risk of becoming pregnant in the Dominican Republic is six times higher among women with only primary education compared to women with higher education. As noted above, the cash transfer programs *Aprende* and *Avanza* are conditional on attendance at school and research shows that such transfers have been effective in promoting participation in schooling by children. Using immediate financial incentives focused more directly on schooling for girls may further help in delaying marriage and childbearing.

Overall, the three types of interventions described are not mutually exclusive; implemented together, they can complement each other. While some programs are better than others in achieving the desired goals, all three categories of programs may have significant benefits of many kinds. With different interventions targeting different groups of girls (e.g., those in school or with the potential to return to school, and those who dropped out and may not be able to return), all three categories should be considered when formulating a strategy to improve opportunities for adolescent girls.

Source: Gender Assessment of the Dominican Republic. (2023). World Bank, Washington, DC.

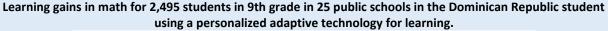
Improvements in the quality and relevance of education could accompany the efforts to encourage high school completion. First, improving the relevance of education for youth, strengthening and expanding the vocational stream of upper secondary education and introducing life skills that could make education more attractive and beneficial in terms of labor outcomes down the road. Second, deploying early warning systems for student at risk of dropping out, which has been successful in other countries of the region (Adelman et al. 2018). Third, using existing student assessments at a disaggregated level to provide additional training to teachers on what students lack the most. This is the first time ever that the education system in the DR has student assessment in 3rd, 6th, and 9th grade for all students in the system on the years the assessment was carried out. This provides a unique opportunity to target teacher training more effectively. Finally, expanding a digital learning technology that adapts to the needs and knowledge level of the students, which has already shown remarkable improvements in short periods of time in the public system in the DR (see box 12).

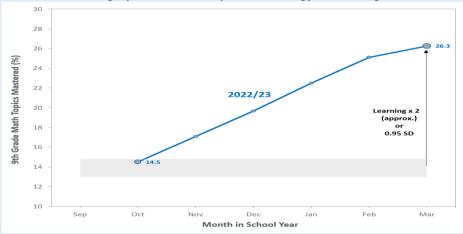
Box 12. Leapfrogging the quality of education through a digital adaptive learning platform

A recent intervention was applied to improve the learning outcomes of Dominican students on 9th grade. Students in the DR on 9th grade need to master 500 topics (for instance, divide two-digit numbers and perform square roots) according to the school curriculum for that grade. On average, they learn between 13-15 percent of those contents per year. An intervention consisting of using hardware at school combined with a personalized adaptive platform that helps students to progress through digital modules of contents in mathematics customized to the individual knowledge level of the student (instead to responding to set curricula that could be either too hard or too easy for them, generating discouragement and frustration in students) was applied. The intervention was applied on 3,300 students in 38 public schools in the school year 2022/23. The schools serve students from diverse socio-economic backgrounds. The figure below reports the learning gains in the current school year for 9th grades according to administrative school data.

 $^{^{76}\} https://documents.worldbank.org/en/publication/documents-reports/documentdetail/933991624785121641/dominican-republic-learning-poverty-brief-2021$

Learning gains amount to almost double (or almost a full standard deviation) the percentage of topics of the curriculum that students in 9th grade usually master during the school year. Similar work in India shows substantial improvement in learning as well (Muralidharan et al. 2019). This shows that gains in learning are possible and feasible in contexts, like the Dominican Republic, where the conditions to leverage technology can deliver results. Importantly, students in 9th grade show a high level of acceptance of this technology according to more than 20 focus groups carried out.





Source: World Bank and MINERD. For more information see: https://blogs.worldbank.org/latinamerica/teachers-and-technology-together-improve-student-learning
Note: the blue line represents the monthly gains in student learning during the school year 2022-23 (measured as the percentage of topics in the 9th grade math curriculum); the gray area represents the estimated range for the percentage of topics that students in the public sector mastered at any given time during 9th grade during the school year.

Policies to keep women at work, including the Extended School Day Program (JEE) and increased access to preschool should be promoted and extended. Women and girls face notable handicaps as they to transition into or seek to stay in work. Poor girls in particular are overrepresented among young people not engaged in education, employment, or training (NEETs). Since the presence of children at home is among the most important features explaining the inability for women to take a job or to lose it, including during the pandemic crisis, programs that extend school hours and provide care services can increase the employability and occupation rates of women. The JEE Program was created in 2014 to double the school day at primary and secondary level from 4 hours to 8 hours. Garganta and Zentner (2022), based on a non-experimental methodology, show that women with children eligible for the JEE were 3 percentage points (pp) more likely to participate in the labor force. The probability was even greater for married mothers (5.96 pp increase) and women in urban areas (7.71 pp increase) and with low education (9.38 pp increase). Despite its proven success and being enshrined into law, not everyone who wants to participate in the JEE program is currently able to. However, the Ministry of Education has recognized that new centers and classrooms must be built to universalize the JEE. Relatedly, increasing access to preschool (children from ages 3 to 5) could also help reduce women's care burden. The ongoing initiative to increase early education coverage by adding some 3,000 classrooms for the inclusion of around 75,000 boys and girls for the school year that begins in September 2023 seems a step in the right direction.⁷⁷

Access to formal care services provided through the Comprehensive Early Childhood Care Centers (CAIPI) should be expanded and the current anti-poverty strategy *Supérate* should refer its poor beneficiaries to

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⁷⁷ Discurso Rendicion de Cuentas. Presidente Luis Abinader. 27 de febrero de 2023.

CAIPIs where possible. As part of the preparations to create a National Care System, the Dominican Government has recently begun a pilot program for *Communities of Care* to serve young children, older adults, and people with disabilities within poor and vulnerable households. The National Institute for Comprehensive Early Childhood Care (INAIPI) day care centers – named CAIPIS – provide children and their families with socioeducational programs, early stimulation, nutrition, and health routine checkups, and parental skills training through workshops and scheduled center visits. ⁷⁸ INAIPI was created in 2015 and has expanded its coverage for the vulnerable population in the Dominican Republic since then. However, as of February 2023, less than 200,000 children were serviced by INAIPI with an estimated eligible population of around one million and the impact of its services on children and their families have not been rigorously evaluated. The work from INAIPI is critical and should be evaluated to maximize its efficiency as it continues to grow. Care services are urgently needed in underserved municipalities with high levels of school dropout associated with pregnancy or where the unmet demand for care services is most acute.

Women need more and better vocational technical education and skills training to increase their employability. Vocational training is offered through the Ministry of Education and the National Institute of Professional Technical Training (INFOTEP). The Basic Education Program for Adults and Distance High School (PREPARA) provides flexible general studies for the population aged over 14 who previously dropped out. PREPARA aims to encourage dropouts to return to school and provide students with soft skills that allow them to enter the labor market, either as employees or self-employed. At the moment, the program is outperformed by conventional high-school programs in key outcomes like promotion, repetition and dropout rates. Through coordination between PREPARA and *Supérate*, financial support could be offered to poor teenage mothers so that they can continue their studies. An educational curriculum could also be developed as part of PREPARA to incorporate content related to soft skills, the creation of life plans, and the development of digital skills. In addition, PREPARA should pursue an agreement with INFOTEP to provide PREPARA graduates with vocational training (Gender Assessment for the Dominican Republic, World Bank, 2023).

Multiple other policies could help women secure and retain better jobs. These include: (a) expanding quotas under Law 488-08, which requires public contracting to favor micro, small and medium-sized formal firms owned by women; (b) incorporating domestic workers into the Social Security Subsidized Contributory Regime (SCR).⁷⁹ A pilot to incorporate domestic workers into social security that began in December 2022 is a step in the right direction, but the Social Security Treasury (TSS) needs to establish an easy-to-navigate online platform where domestic workers can affiliate themselves and make contributions; (c) equalizing the minimum wage in activities where there is a greater relative presence of women such as hotels, bars and restaurants, and manufacturing with wages in non-sectorized companies (that is, those that carry out activities other than those installed in free zones and in hotels, bars and restaurants and where

⁷⁸ Currently, care services are delivered directly through 122 Comprehensive Early Childhood Care Centers (CAIPI) and 521 Child and Family Care Centers (CAFI), located in the most vulnerable areas of the country. The CAIPIs are directly managed by The National Institute for Comprehensive Early Childhood Care (INAIPI) and offer education, health, and nutrition services to children from 45 days until 5 years old and support to families, who receive training to improve their skills in comprehensive care of their children. These centers operate from 7:30 a.m. to 5:00 p.m. The CAFIs are mainly co-managed centers and form part of the Family and Community Based Program (PBFC), which seeks to promote good child-rearing practices, aimed at fathers, mothers and/or guardians applying strategies that promote the development of and adequate care for children.

⁷⁹ Under a subsidized contributory regime workers (irrespective of their status) can make contributions to social security and these contributions are matched by the State. In the Dominican Republic the SCR has not been developed. As a result, self-employed workers do not have social security protection, and those workers who are not eligible to be part of the Subsidized Social Security Regime do not have protection against labor risks, old age, and disability, or access to maternity subsidies.

minimum wages will be further expanded in April 2023⁸⁰); (d) **requiring all firms and public institutions to create grievance and redress mechanisms**, including a public noticeboard featuring the scale of minimum wage levels and the contact details of the Ministry of Labor ombudsman services; and (e) **promoting awareness among domestic service workers and employers of the new regulations that establish a minimum wage and guarantee labor rights for the domestic service sector** (Gender Assessment of the Dominican Republic, 2023, World Bank).

4.2 Boost the labor incomes of the poor through increased productivity

The Dominican Republic will need to accelerate productivity growth to reach higher income levels and reduce poverty. The country's rapid economic growth has been supported by factor accumulation (capital and labor), fueled by favorable investment incentives such as tax exemptions and a growing labor supply. However, low productivity growth and overdue structural reforms may have contributed to real wage stagnation.

Section 3.2 documented how the main obstacles to faster productivity growth at the microeconomic and aggregate levels are associated with insufficient human capital and domestic policy distortions. These obstacles include inadequate human capital performance, skills mismatches between labor supply and demand, an insufficiently competitive business environment and limited innovation capacity. Such explicit and implicit barriers in the market do not allow the growth of labor productivity and small and medium-sized companies, which generate the most jobs and thus have a major role in reducing poverty.

The following paragraphs provide some recommendations to increase labor and firm productivity and promote competitive markets.

The quality of jobs can be improved by linking upskilling and reskilling programs more closely to labor market demand, particularly as technological progress changes the demand for skills. This can involve: 1) improving the labor market information system through collection of real-time data from online job postings to provide a granular, up-to-date picture of labor market needs; 2) empowering public employment services to provide job support targeted to vulnerable jobseekers through provision of better information, digital tools, and closer links with the private sector and educational and training institutions; and 3) incorporating gender considerations into the active labor market programs, to reflect the constraints that women face both in the labor market and in benefiting from these programs.

Vocational training embedded in the DR's principal Social Protection program helps poor workers get higher wages, but should be integrated with counseling and matching services from the Ministry of Labor to increase prospects for trainees of getting a job. Previous World Bank-financed projects (Youth Development Project & Integrated Social Protection and Promotion Project) have supported government programs offering technical vocational training and apprenticeships in private firms as a route to better-paid jobs among young women and men (ages 18-29) in poverty. Randomized-control trial evaluations show that these interventions can lead to wage gains and more formal jobs for its beneficiaries (Card, D. et al., 2011; Gertler, P. et al., 2017).⁸¹

⁸⁰ National Salary Committee (CNS) announced a 19% increase in the minimum wage for non-sectorized private employees. This increase will begin to be applied in April, with a 15% increase and later in February 2024 an increase 4% for large, medium, small and micro-enterprises: https://listindiario.com/economia/2023/03/08/766173/comite-nacional-de-salario-aumenta-19-al-salario-minimo

⁸¹ A more recent randomized-control trial studies shows that a scaled-up program of vocational training targeted to poor youth also delivered higher quality jobs: youth earn a higher income from working (on average, USD 80 more every month) and in the long term,

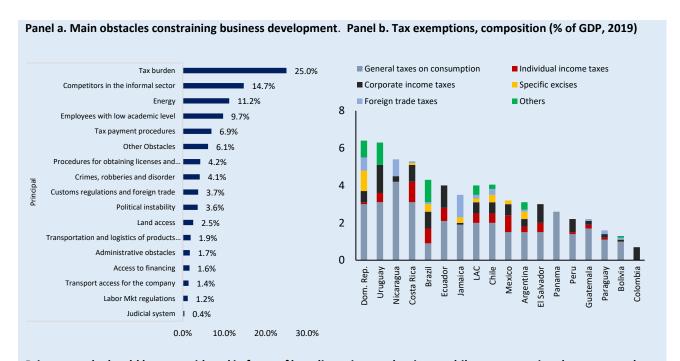
However, these DR programs have not created more jobs. A new Bank-funded government program will continue providing vocational training while providing mentoring services to trainees looking for a long-term job and linking them to temporary employment and wage subsidy programs administered by the Ministry of Labor. This scheme may have a positive impact, particularly if the poor and vulnerable benefited through the active labor market programs get continuous mentoring support to overcome aspirational or information barriers while they search for a job. However, supply side interventions in the labor market should not be considered in isolation, but rather as complements to demand-side policies such as encouraging FDI and liberalizing labor markets.

Box 13. Policies to promote growth and competitive markets

It is critical to strengthen the enforcement of competition policy. Monopoly power and a lack of competition in markets can produce benefits (like tax exemptions) that unfairly benefit large companies with low productivity, thus affecting efficiency. Yet despite being enacted in 2008, the Competition Law was only implemented in 2017. And since then, 15 out of the 18 investigations initiated by the National Commission for Competition (ProCompetencia) have been dismissed (as of March 2022) and only three decisions have been published. The prosecution capacity of ProCompetencia should be strengthened by eliminating the requirement that it issue rulings within 12 months. In addition, the Competition Law should be reformed. At present, it does not oblige companies to get ProCompetencia's approval for mergers and acquisitions that could have competition implications. Of the 54 mergers and acquisitions for a total of USD 1.7 billion that occurred between 2010-2020 in the Dominican Republic, few were reviewed by ProCompetencia. The budget and staff of ProCompetencia should also be increased to monitor and investigate anticompetitive behavior more effectively (Country Economic Memorandum for the Dominican Republic, World Bank, 2023).

Removing tax exemptions can improve productivity and widen the fiscal space for productivity-enhancing public investments. Tax burdens are the main obstacle to business development in the DR (panel a), and yet tax exemptions are among the highest in the region (panel b). Importantly, the tax collection effort is relatively low as mentioned before (14.2 of GDP in 2018) and has barely increased from 12.2 percent of GDP in 2000. Larger firms are the main beneficiaries of tax incentives but not necessarily the most productive, while smaller, more productive firms are subject to a higher tax burden (Country Economic Memorandum for the Dominican Republic, World Bank, 2023). In theory, ProCompetencia should be consulted on the granting of tax exemptions in free zones. In practice, the agency is not always notified. Simulations removing the tax exemptions in firms within SEZs (shocking price-markups in firms) does lead to increases in wages among low skilled workers (figures 64 & 65).

more of them pay TSS taxes, which indicates a more formal job. Additionally, youngster who have done the training display higher technical skills in the career they studied



Price controls should be reconsidered in favor of less distortive mechanisms, while compensating the poorest where necessary. Price controls exist in retail⁸² as well as in the electricity sector together with tariff schemes. These controls facilitate coordination among competitors and deter the entry of competitors, since they may not properly reflect real production and distribution costs. For instance, the electricity sector has been heavily subsidized⁸³ since 2003 through the Bonoluz program (formerly the Programa de Reducción de Apagones), credit lines, and the tariff stabilization fund (a reserve mechanism to cover fuel-price variations). The DR currently intends to implement a new tariff regime that moves towards full cost recovery (electricity tariffs for the Dominican Republic are the lowest in Central America) and to encourage private sector participation in the energy matrix. As it reduces end-user subsidies the government also aims to gradually expand Bonoluz to target up to 1.6 million households in 2026. This action is expected to alleviate poverty but would also cover at least 700,000 households that would not be considered poor under any definition. As such, it is important to: (i) evaluate the efficiency of covering non-poor households, and (ii) understand what eligibility criteria would guide their selection.

Source: National report of skills and employment (ENDHACE), 2020. National Statistical Office (ONE). World Bank Staff's elaboration. DR CEM. World Bank. Forthcoming.

A bundle of coordinated reforms would boost economic growth while helping to reduce income inequality.

Undertaking some of the proposed reforms above on education, market competition and tax exemptions could boost labor and firm productivity in SEZs, which in turn could increase wages for unskilled labor and the income of the poorest workers by nearly 40 percent above current trends by 2050 (figures 64 and 65). To analyze the effects of such reforms on the Dominican Republic's growth path, a computable general equilibrium (CGE)

⁸² The Presidential Decree No. 3366 of 1969 gives the Ministry of Industry and Commerce the faculty of price control to oil and its derivates. This Ministry determines on a weekly basis the prices by resolution.

⁸³ Since 2001 the government introduced a tariff mechanism, which is published periodically by the sectoral regulator (Superintendencia de Electricidad -SIE). This regulated tariff does not reflect the real costs of generation, causing operative and financial losses to the distributors, and deterring potential entrants The SIE does not disclose the criteria used to calculate the applied tariff, which undermines transparency and increases uncertainty (The Economist, 2015)

model was constructed based on the country's input-output matrix, social accounting matrix, and other relevant indicators⁸⁴.

Figure 64. Impact of reforms on wages (2050) (percentage change vs baseline scenario)

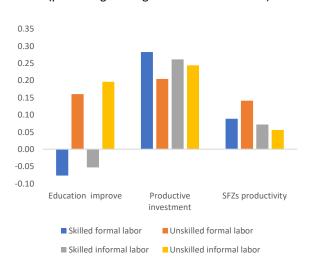
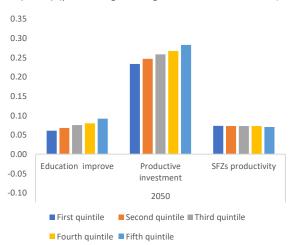


Figure 65. Impact of reforms on income quintiles (2050) (percentage change vs baseline scenario)



Source: Country Economic Memorandum (CEM) for Dominican Republic (Forthcoming).

4.3 Reduce spatial inequalities in connectivity, services and housing

Unplanned urbanization and weak urban-rural and intraurban connectivity also limit the ability of people to benefit from economic growth and the country's capacity to increase productivity. Although a full discussion of these processes is beyond the scope of this report, the following actions are feasible to achieve more inclusive territorial policies and deepen the urbanization process:

Through better territorial planning and financing

The DR should promote "smarter" urbanization through greater municipal planning. Technical capacity needs to be built in this area, and policymakers need to take a planned approach to managing urban space efficiently. This includes mapping land use and improving the quality and reliability of services. Well-managed urban land will encourage mobility and connectivity, and promote the clustering of economic activities, help protect space for public goods like infrastructure, and provide services more efficiently to large, intermediate, and small towns (World Bank. 2021d).

Municipal land use plans need to be multi-sectoral to manage conflicting or complementary land uses. Land use planning in the DR has hitherto been led by PSOTTs, development plans articulated by the Ministry of Tourism; eight of which have been completed so far. However, these sectoral plans do not provide an integrated view of the territory. Furthermore, in many PSOTTs, the tourism sector is prioritized over the needs

⁸⁴ The model simulates the following scenarios: **Education improvement**: Educated workers productivity improves by 0.2% per year, while 0.3% for non-educated workers in the period 2022-2025. Then 0.4% and 0.6% in 2026-40 respectively. Lastly from 2041-50 increases 0.6% and 0.9% respectively. **SEZs productivity**: Equalizing productivity from different sizes firms. A drop in markups is introduced. By 2050 total factor productivity increased by 30% in SEZs. **Productive investment**: The public investment increases by 0.5 p.p. as a percentage of GDP, while 2.5 p.p. in private investment and 1.7 p.p. of FDI. The TFP increases as per the associated investment plan by 0.1%-year average, due to public investment and 9,5% due to private investment.

of urban areas. The rebalancing of integral municipal land use plans could be done by the Ministry of Economy, Planning and Development (MEPyD), which leads sustainable territorial planning and development policy at the national level.

Recently approved laws on territorial planning and land use management could go a long way in reforming and updating territorial development if well implemented. The Law on Territorial Planning, Land Use and Human Settlements (Law No. 368-22) was enacted on December 22, 2022 and the Law on Unified Planning Regions to harmonize the planning territorial divisions across ministries and agencies (Law No. 345-22) was adopted in August 2022. These laws together with the Law of Housing approved in 2021 (Law 160-21) and the draft "Ley de Gestion Integral de Riesgos de Desastres" which remains to be approved, could provide an updated regulatory and institutional framework for territorial planning in the DR instead of laws approved in the 1940s/60s that do not reflect the current reality (World Bank, 2021d). Supporting the Dominican government with technical assistance and financing to implement the recently approved territorial and land use laws would therefore be critical.

The capacity of local governments to deliver land management and planning reforms needs to be strengthened, and their financial resources expanded, especially from property taxes, which hold substantial potential to finance urban development. If local governments were to receive property tax revenues rather than the central government, their aggregate revenues would increase by 13 percent (World Bank, 2021d). A reduction in exemption levels for property taxes⁸⁵ could increase the yield still further. Unlike most countries in the region, local governments in the DR are currently not allowed to impose broad-based local taxes like property taxes. On top of this, local governments have little control over the allocation of capital spending within their jurisdictions. While municipalities may have weak capacity to deliver water services or education, efforts to decentralize could improve the ability of local governments to prioritize and coordinate development within their own jurisdictions.

Connecting better people to growth poles

The regional imbalances in connectivity and services could be addressed by reducing unnecessary tax exemptions in SEZs and channeling recouped revenue into infrastructure. While a higher effective tax may have negative effects on efficiency/job creation, according to a recent World Bank survey, firms in SEZs do confer a higher value to connectivity and human capital than to tax exemptions when deciding where to settle. So the government could recoup fiscal revenue by curtailing unnecessary tax exemptions for firms in SEZs and use those revenues to boost connectivity in areas far from existing SEZs.

The DR could create jobs in semi-urban areas through better spatial diagnostics. In addition to encouraging local self-sufficiency, government policy also needs to prioritize value addition and job creation in peri-urban and semi-urban areas. Therefore, greater weight should be given to diagnostics that help to understand the spatial endowments of a territory (degree of connectivity, population density), the level of education of its labor force, and its existing industrial focus. This in turn would serve to identify the main bottlenecks for local job creation, which can be overcome by revisiting regulatory barriers to the entry of firms, upgrading skills and promoting entrepreneurship, raising the productivity of small and medium enterprises, integrating value chains, and reducing the costs of logistics.

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Properties with cadastral values under DR\$7.7 million (US\$154,000) are exempt, as are properties owned by persons over 65, and rural/agricultural land. The tax rate is one percent of the value over RD\$ 7.7 million. As a result of these extensive exemptions, the yield of the property tax is fairly low. In 2018, the central government raised only RD\$ 2,527million (US\$5.00 per capita) from this source, equivalent to 0.4 percent of its total recurrent revenues. Expressed as a percentage of GDP, this is the lowest yield of recurrent poverty taxes of any of the Latin American countries reported in the IMF Government Statistics website.

Once territorial endowments have been identified, the strategic focus of a territory decided, and potential business sectors that could be attracted to SEZs have been identified, it is important to ensure that relevant skills are available locally. In some cases, private investors can be involved in the financing of SEZs or related training, with local research centers, universities, and vocational training bodies also playing a role.

Transport subsidies or mobility stipends could help bring young skilled workers from remote, poorer regions to job clusters in and near SEZs. By keeping most SEZs close to Santo Domingo and Santiago – and providing tax incentives at the expense of fiscal revenue that could fund better connectivity elsewhere – the interaction between SEZ firms and local firms is discouraged. The DR has extensive experience in training programs that train young people in technical and socio-emotional skills and match them with non-paid internships. However, the firms offering the internships are always local, which limits their chances of finding long-term paid employment in the provinces where most jobs are. Some of the most successful experiences elsewhere in creating jobs through active labor policies involve providing transport subsidies or mobility stipends to allow youngsters to bring their skills to where demand is.

Expanded housing and basic services

Redouble efforts to improve housing and local services through slum upgrading programs will help protect citizens from environmental shocks and improve their wellbeing. Adequate land-use plans can also ensure adequate housing provision in-line with the projected growth of employment, supply chains and related agglomeration. Housing constitutes a key productive asset for many self-employed and a source for risk management against floods and hurricanes when dwellings are built of strong materials. The housing deficit inside city slums, and gaps in housing quality and availability between regions, should be addressed. Recent government programs include replacing dirt floors with cement and repainting windows and exterior walls in impoverished households across 14 provinces. A recent RCT confirms that such large-scale interventions had a positive impact on their welfare, satisfaction and health outcomes. Focusing on housing deficits to address the needs of the most vulnerable should continue to be the priority, particularly in rural areas where poorquality housing makes many susceptible to climatic shocks. Of course, building stronger homes may not suffice in those instances where households live in high flood risk areas. A number of households may need to be relocated out of the high-risk areas defined by municipal plans while ensuring appropriate incentives and mitigation measures.

Proper land-use planning and the expansion of low-income housing programs can alleviate both demandand supply-side constraints for the poorest, including property registration and permits. The current DR administration has launched programs to address the quantitative and qualitive deficit of housing. In January 2021, the GoDR launched the Happy Family National Housing Plan (PNVFF, Plan Nacional de Vivienda Familia Feliz). Under the PNVFF, 62,000 housing units are to be built in four years, including 11,000 low-cost houses in the first year.⁸⁷ Incidentally these programs can also help to build resilience against climatic shocks as they

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⁸⁶ Treated households see an increase of 6.2% in their adjusted ICV (Quality of Life Index), and they are also more likely to be satisfied with their general home quality. They report a 5% higher self-reported monthly rent value of their homes, and they are 30% and 10% more likely to be satisfied with their floor and walls quality, respectively. They are also slightly less likely to have a household member sick in the month prior to the interview. (See DR Poverty Assessment – Background note on nonmonetary poverty. World Bank. 2023). ⁸⁷ To buy his/her new home, the beneficiary covers the mortgage down payment using his/her own savings (between 2.5-10 percent of the home price), receives an initial government subsidy (between 18-33 percent of the purchase price), and takes out a 20-year mortgage loan from a participating financial institution to cover the difference in the purchase price. The initial government subsidy is made up of Bono ITBIS, Bono Inicial Familiar, and Bono Mujer. Additionally, beneficiaries also receive a 7-year subsidized interest rate.

relocate people into safer areas and strengthen the incentives to undertake preventive measures. This is important because as discussed before, families fail to undertake preventive actions against climatic risks due to the lack of security of ownership or tenancy. Many poor households are typically pushed onto steep land or into informal settlements where land is easier to come by and rents cheaper. But ownership is not guaranteed in those places, which are also more susceptible to damage by floods or landslides.

4.4 Mobilize more resources and spend them more efficiently to improve the poverty impact of fiscal policy

An increase in fiscal revenues could grant more resources to finance the provision of more and better services on education, health, water and sanitation, roads and housing to endow the poor with the skills and assets required to take full advantage of their productive capacity and live better lives. More public resources could also serve to expand the coverage and amount per beneficiary of cash transfers among poor households.

Reduce tax evasion, provide safeguards for pro-poor spending if reliance on indirect taxes grows and scale back regressive subsidies

The government could strengthen the ability of tax collection mechanisms to detect and limit tax evasion, for instance, by increasing the capacity of the Tax Administration Authority to conduct tax audits and enforce control. Revising existing tax exemptions (which are the highest in the region at over 6 percent of GDP in 2019) could also broaden the resources available and the tax base. There is a high-exemption threshold for the personal income tax and a high level of labor informality—the informal sector accounts for 57 percent of income earners.

The tax system should build safeguards for pro-poor spending if the reliance on indirect taxation continues or expands. Direct taxes (e.g., personal and corporate income taxes) are highly progressive. Indirect taxes are the main source of tax income in the Dominican Republic. They represented 68% of total taxes in 2018. The ITBIS is the most important indirect tax and is slightly progressive because it has an important set of exempted basic consumption goods and services and because many purchases are made in informal establishments. However, it remains a value added tax so if increasing revenues in the future relies on indirect taxes these could introduce adverse impacts on the poor unless policy action are taken to correct those impacts (World Bank, 2021b).

Scaling back water and energy subsidies could also free up funding to strengthen social assistance and safety nets. Enlisting more households and providing larger amounts per beneficiary will require greater fiscal space. The inclusion errors mentioned above point to the need to strengthen targeting performance, particularly given a limited budget. But the resources that go to upper income deciles through water and energy subsidies are significantly regressive. Scaling back those subsidies will improve the DR's fiscal position and free up resources for social spending on the poorest. The poverty assessment simulated the contribution of specific cash transfers on employment and wages on a nationally representative sample of households. The benefit-to-cost ratio for these programs is 1.16 over the course of ten years, meaning that for every peso spent on transfers, 0.16 pesos are gained in additional benefits (Project Appraisal Document for the Integrated Social Protection, Inclusion and Resilience Project, World Bank). By contrast, the water and electricity subsidies are regressive.

Program beneficiaries may purchase a home in selected urban developments under public-private partnerships built on state or private lands.

Improve the effectiveness of safety nets

verification.

Within fiscal policy, the DR's social assistance and safety net programs could improve their impact on poverty through the following policy reforms:

Provide larger transfers to more poor people. On average, the monthly amounts transferred to families between 2004 and 2017 ranged from just 2.4 to 11 percent of the national food basket (depending on the household consumption quintile). In May 2021, in response to the pandemic, the government increased the transfer amount for *Aliméntate*, the largest CCT from DOP 825 pesos (US\$16.5) to DOP 1,7771 pesos/per household (US\$32). However, the real monthly transfer as share of the consumption basket for the bottom income quintile declined steadily during 2022 due to surging inflation, which already reduced its real value by 10 percent as of March 2023 (see Annex 3). So it is important to increase the amounts transferred per beneficiary and index those payment to food inflation to avoid their depreciation in real terms.

The SP system's coverage of the poor is good compared with regional peers, but gaps in coverage should be resolved and the administration of separate cash transfer programs should be consolidated. According to the 2021 National Continuous Labor Force Survey (Encuesta Nacional Continua de Fuerza de Trabajo, ENCFT), 57 percent of households at the bottom 20 percent of the income distribution receive social assistance benefits. The share of beneficiary households is higher among female-headed households (62 percent) than among male-headed households (53 percent) reflecting the over-representation of women-headed households among the poor. The number of beneficiaries of the CT *Aliméntate* currently hovers around 1.5 million households and dwarfs the combined number of beneficiaries of the human capital enhancing transfers *Aprende* and *Avanza*. However, 118,342 poor and extremely poor households are still in the process of being enrolled in SUPERATE, even though they have been registered in SIUBEN since 2018. In addition, 94,790 households are potentially eligible but lack ID, which is a requirement for enrollment.

Although Aprende and Avanza are more generous than other programs (see Annex 3), their coverage among the extremely poor remains low relative to need: these programs are reached around 200 thousand households in 2023, covering the 57 percent poorest households. Yet, more than 350,000 thousand people were eligible (households in ICV-1 and ICV-2 with members between 6-18) to receive this support. Revisiting the targeting of other programs and subsidies, as proposed in a recent study (World Bank, 2022), would alone lift some of the fiscal pressures that have prevented wider coverage. In addition, the redesign of the school transfers, shifting away from primary to secondary education, may generate additional resources. In the medium to long term, these three programs should be consolidated with a common registry and common administration.⁸⁸

Improve targeting for greater impact, including by phasing out long-term beneficiaries who no longer need assistance. In the DR, the main CT programs benefit around 22 percent of the monetary non-poor. And as noted in section 2.2.4, the CT program *Aliméntate* reaches poor beneficiaries and excludes non-poor better than the CT programs *Aprende* and *Avanza*, but its targeting has room for improvement. Leakages need to be addressed using a multi-prong approach. The first level of targeting for social assistance programs is

⁸⁸ Reinstating the verification of co-responsibilities that was halted with the country lock down during the pandemic is critical, but challenging. The Ministry of Education (MINERD) still does not have and automated-electronic system to record attendance system. Reinstating this process has been more costly as the program needs to re-train the field staff, develop a technological platform to digitalize the registries, provide technological equipment, and carry-out the data collection activities to reach pre-pandemic levels of

geographic: the neediest regions/districts and city blocks are identified based on poverty maps produced from imputation techniques that link household survey data to census data. The current poverty map relies on the 2010 census, so it should be updated with the census data from 2022. Then programs try to identify their beneficiaries through information on the correlates of long-term poverty, a technique called "proxy means testing." However, sometimes it is difficult to find a set of proxies for income that distinguish the non-poor from the poor, and the calculations and data need to be updated periodically. Thus, part of the strategy to reduce inclusion errors is to improve the quality of the proxy means test. Finally, even though SIUBEN has gathered information on beneficiary and non-beneficiary households for 2004-08, 2011-12 and 2017-19, eligibility for specific programs, there has been no formal process to remove benefits from households that no longer qualify. More than a third of households (37.2 percent) have benefitted from *Aliméntate* and its previous incarnation *Comer es Primero* for ten or more years. *Supérate* needs to implement a graduation strategy for its beneficiaries to transition them into other services and create space for those eligible for its programs but currently not part of the system.

Continue protecting households from risk and shocks through safety nets and direct transfers. Although remittances from household members or mutual insurance schemes are useful, they do not necessarily benefit poor households or prove effective against large-scale shocks. Therefore, social assistance interventions that set a floor for income levels and protect households from income shocks are important tools for controlling extreme poverty and rising inequality. The DR is moving towards an adaptive social protection system (ASP) with an unconditional free-use and temporary cash transfer to alleviate the impact of climate emergencies (the *Bono de Emergencia*), a social registry with national coverage, and a flexible payment system. If well-targeted and delivered on time, these measures could have a profound impact in assisting poor households in dealing with climate and other shocks, as well as avoid unnecessarily costly government responses in times of crisis. ⁸⁹ The *Bono de Emergencia* was activated for the first time in response to Hurricane Fiona in 2022. Incentives for people to take preventive measures against risk should also be embedded in the emergency cash transfers.

⁸⁹ The emergency UCT is activated when a natural adverse event occurs, allowing the program to expand horizontally (to include new households) and/or vertically (to adjust the value of the transfer provided to current beneficiaries) to attend the affected population.

REFERENCES

Adelman, Melissa, F. Haimovich, A. Ham and E. Vazquez. (2018). Predicting school dropout with administrative data: new evidence from Guatemala and Honduras, Education Economics, 26:4, 356-372.

Alderman, K., Turner, L. R., & Tong, a. S. (2012). Floods and human health: a systematic review. Environment international, 37-47.

Aristy-Escuder, J., Cabrera, M., Moreno-Dodson, B., & Sanchez-Martin, M. (2016). Fiscal policy and redistribution in the Dominican Republic. The distributional impact of fiscal policy: experience from developing countries.

Baulch, R., and N. McCulloch. 2000. "Tracking Pro-Poor Growth." "ID21 Insights 31." IDS (Institute of Development Studies), University of Sussex, UK. www.ids.ac.uk/ids.

Barón, J. and Mola, J. (2019). "Chapter 3: Improving Outcomes in the Education Sector" in Dominican Republic Public Expenditure Review, 2012-18, pp. 62-89 (Report No. 143651).

Bergstrom, K., & Ozler, B. (2021). Improving the well-being of adolescent girls in developing countries. World Bank Group.

Bolch, Kimberly, Luis F. Lopez-Calva and E. Ortiz-Juarez. (2022). "When Life Gives You Lemons": Using Cross-Sectional Surveys to Identify Chronic Poverty in the Absence of Panel Data." The Review of Income and Wealth.

Brummund, Peter; Christopher Mann; and Carlos Rodriguez-Castelan. (2018). "Job quality and poverty in Latin America." Review of Development Economics, 22, 4: 1682-1708.

Cañete, R. and Serafin Cuello, A. (2022). Trabajo Doméstico en República Dominicana: Una aproximación a las condiciones de vida y laborales de las personas trabajadoras en el servicio doméstico y su regulación. Ministerio de Economía, Planificación y Desarrollo (MEPYD). Texto de Discusión No. 40.

Card, D., Ibarrarán, P., Regalia, F., Rosas-Shady, D., & Soares, Y. (2011). The labor market impacts of youth training in the Dominican Republic. Journal of Labor Economics, 29(2), 267-300.

Carneiro, Francisco Galrão, and Sophie Sirtaine, eds. 2017. When Growth Is Not Enough: Explaining the Rigidity of Poverty in the Dominican Republic. Directions in Development. Washington, DC: World Bank

Country Economic Memorandum (CEM) for Dominican Republic (2023). Washington, D.C.: World Bank Group.

Country Poverty Briefing (Spring Meetings 2023) - Dominican Republic. The World Bank: Washington, D.C.

Du, W., FitzGerald, G. J., Clark, M., & Hou, X. Y. (2010). Health impacts of floods. *Prehospital and disaster medicine*, 265-272.

Duque, J. C., Lozano-Gracia, N., Patino, J. E., & Restrepo, P. (2019). Urban Form and Productivity: What Is the Shape of Latin American Cities? (English). Policy Research working paper; no. WPS 8697 Washington, D.C.: World Bank Group.

David K. Evans, A. Mendez Acosta, and F. Yuan. (2023). Girls' Education at Scale. The World Bank Research Observer. The World Bank.

Ferreyra, M. M., & Roberts, M. (Eds.). (2018). Raising the bar for productive cities in Latin America and the Caribbean. The World Bank.

Fuentes, A. (2022). "Desigualdad del ingreso en la República Dominicana 2012-2019: resumen metodológico y resultados comparados", Documentos de Proyectos (LC/TS.2022/155), Santiago, Comisión Económica para América Latina y el Caribe (CEPAL), 2022.

Gertler, P., Acevedo, P., Cruces, G., & Martinez, S. (2017). Living up to expectations: How job training made women better off and men worse off (No. w23264). National Bureau of Economic Research.

Gender Assessment of the Dominican Republic. (2023). World Bank, Washington, DC.

Jalan, J., and M. Ravallion. (2000). "Is Transient Poverty Different? Evidence for Rural China." Journal of Development Studies 36, 82.

Kakwani, N., and E. Pernia. 2000. "What Is Pro-Poor Growth?" Asian Development Review 18 (1): 1–16.

López-Calva, L.F. and C. Rodríguez-Castelán. 2014. "Pro-Growth Equity. A Policy Framework for the Twin Goals." Policy Research Working Paper 7897, World Bank, Washington, DC.

Muralidharan, Karthik, A. Singh, and A. J. Ganimian. 2019. "Disrupting Education? Experimental Evidence on Technology-Aided Instruction in India." American Economic Review, 109 (4): 1426-60.

Mateo Díaz, M., and L. Rodríguez-Chamussy (2016). Cashing in on Education: Women, Childcare, and Prosperity in Latin America and the Caribbean. Latin American Development Forum.

McKay, A., and D. Lawson. (2003). "Assessing the Extent and Nature of Chronic Poverty in Low-Income Countries: Issues and Evidence." World Development 31 (3).

MEPYD. (2020). "COVID bajo la lupa – Efectos de la COVID-19 en la pobreza monetaria, desigualdad y mercado de trabajo."

MEPYD (2023). "Boletín de Estadísticas Oficiales de Pobreza Monetaria en República Dominicana 2022". No. 10, Año 8.

OECD (2019). PISA 2018 Results (Volume I): What Students Know and Can Do. OECD publishing.

Polanco, C. (2023). "Feminización de la pobreza en República Dominicana: Probabilidad de Transición y Trampas de la Pobreza". Texto de discusión No. 44. MEPYD.

Project Appraisal Document for the Integrated Social Protection, Inclusion and Resilience Project, World Bank.

Ravallion, M. (2009). How Relevant Is Targeting to the Success of an Antipoverty Program? The World Bank Research Observer, vol. 24, no. 2 (August 2009).

Ravallion, Martin, and Monika Huppi. 1991. Measuring Changes in Poverty: A Methodological Case Study of Indonesia during an Adjustment Period. The World Bank Economic Review 5 (5): 57–82.

Treviño et al. (2015). Informe de resultados TERCE: Factores Asociados. Laboratorio Latinoamericano de Evaluación de la Calidad de la Educación. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000243533

Vezza E., B. García, G. Cruces and J. Amendolaggine (2014). Youth and Employment Program, Impact Evaluation Report. 2008-2009 Cohorts. Ministry of Labor, Dominican Republic. file:///C:/Users/lizar/Downloads/PJyE-Evaluation-ENG-DIC2014-1.pdf

World Bank (2012). Teenage Pregnancy and Opportunities in LAC. The World Bank.

World Bank (2014). When Prosperity is not Shared: the Weak Links between Growth and Equity in the Dominican Republic. World Bank, Washington, DC.

World Bank. 2017. "Do Labor Markets Limit the Inclusiveness of Growth in the Dominican Republic?" Washington, DC: World Bank.

World Bank. 2021a. "Dominican Republic Public Expenditure Review." World Bank, Washington, DC.

World Bank. 2021b. "Poverty and Distributional Impacts of Fiscal Policy in Dominican Republic." World Bank, Washington, DC.

The World Bank (2021c). Dominican Republic Jobs Diagnostic. World Bank, Washington, DC.

The World Bank (2021d). Paving the way for prosperous cities and territories. Urbanization and Territorial Review of the Dominican Republic. World Bank, Washington, DC.

The World Bank (2023). Spring Macro Poverty Outlook. World Bank, Washington, DC.

ANNEXES

Annex A1. Profile of monetary (6.85 USD PPP/day) and nonmonetary (ICV) poor, by selected characteristics (2005-2021)

	•	Poverty rate (6.85 USD PPP) (%)		etary poor
	2004	2021	2007	2021
Location				
Rural	38.6	16.7	45.9	25.3
Urban	61.4	83.3	54.1	74.7
Region				
Ozama	24.5	39.6	23.7	38.8
Cibao Norte	14.8	11.9	15.6	11.6
Cibao Sur	8.5	5.6	6.9	4
Cibao Nordeste	7.2	3.8	8.1	4.2
Cibao Noroeste	5.8	3.9	6.6	4.2
Valdesia	13.7	12.5	12.7	9.9
El Valle	4.7	3.8	4.6	4.7
Enriquillo	6.5	6.8	6.6	6.8
Higüamo	8.4	5.1	8.6	5.9
Yuma	5.8	7	6.6	9.9
Household characteristics				
Number of members				
1	1.1	1.1	4.3	9.9
2	4.3	6	8.5	13.4
3	11.7	17.3	13.4	16.5
4	20	28.8	20.9	22.1
5	24.1	22.7	20.4	18.5
6+	38.9	24	32.5	19.7
Household head characteristics				
Sex				
Female	33.9	45.3	27.9	32.8
Male	66.1	54.7	72.1	67.2
Age group				
15-24	3.9	6.5	5.3	6.5
25-40	39.5	44.1	33.3	30.7
41-64	39.8	35.9	41.8	39.1
65 and over Education level	16.7	13.4	19.6	23.8
Never attended	16.9	8.4	24.6	24.8
Incomplete Primary Education	48.4	30.2	50.2	43.7
Complete Primary Education	11.6	14.7	10.1	11.1
Incomplete Secondary Education	11.2	15.5	9.3	9.9
Complete Secondary Education	7.1	21.4	4.2	8.7
Incomplete Tertiary Education	2.2	6.9	1	1.4

Complete Tertiary Education	2.6	2.8	0.6	0.2
Labor relation				
Employer	1.9	1.6	2.6	1.2
Salaried worker	42.4	46.5	39.6	39.2
Self-employed	52	42.5	56	55.7
Unemployed	3.6	9.2	1.7	3.6
Economic sector				
Agriculture, fishing, forestry and mining	26.2	12.5	31.2	22.2
Industry and construction	21	24.7	20.5	25.2
Commerce, hotels, and restaurants	23.5	23.9	21.6	21.3
Services	29.3	38.9	26.6	31.3
Informality and part-time workers				
Informal	67.2	70.7	69.8	76.3
Formal	32.8	29.3	30.2	23.7
Part-time	17.7	20.5	14.5	14.4
Full-time	82.3	79.5	85.5	85.6
Firm size/type				
Large	23.3	21.1	22.4	18.8
Small	67.6	67.4	70	71.4
Public	9.1	11.5	7.6	9.8

Source: Authors' estimations based on ENCFT.

Annex 2. Trends in deprivation for the Dominican Republic, 2007 and 2021 (% of households)

	2007	2016	Diff	2017	2021	Diff
Deprivation indicators ^a						
Education\demographics ^b						
HH head years of education	7.2	8.0	0.8	8.3	8.7	0.3
HH members +15 years of education	7.9	8.7	0.8	8.9	9.2	0.3
HH literacy share	88.4	91.0	2.6	92.5	92.7	0.3
HH school attendance share (6 -14 years old)	96.6	97.0	0.3	80.0	80.7	0.7
HH child presence share	14.5	12.3	-2.2	12.4	12.1	-0.3
Quality housing						
HH with dirt floor	2.7	2.2	-0.5	1.2	0.6	-0.6
HH with cane roof	0.3	0.2	-0.1	0.1	0.1	0.0
HH with pine wood/palm wall	11.0	8.0	-3.0	10.7	6.6	-4.1
HH with at least 2.5 people per room	22.2	16.6	-5.6	15.1	14.0	-1.1
HH not living in a house or apartment	3.0	2.5	-0.5	9.1	8.0	-1.1
Access to utilities/services						
HH without safe water provision	24.3	21.4	-2.8	13.0	11.4	-1.5
HH without sanitation (wet toilet)	35.4	23.9	-11.4	18.9	11.6	-7.3
HH without liquid cooking fuels	14.0	10.3	-3.7	8.6	4.9	-3.7
HH without trash collection	15.2	11.7	-3.5	7.0	3.1	-3.9
HH without electricity	3.1	1.3	-1.8	0.5	0.2	-0.3
Asset ownership						
HH without stove	10.5	8.2	-2.3	6.3	4.9	-1.4
HH without washing machine	31.2	23.5	-7.7	19.1	14.0	-5.2
HH without TV	17.0	11.6	-5.4	7.6	8.1	0.5
HH without refrigerator	29.6	19.6	-10.0	14.1	10.3	-3.8

Source: World Bank calculations based on ENFT, ENCFT and ICV 2A categorization methodology.

Notes: All differences are statistically significant at the 1% level. For detailed definitions of this trend deprivation's indicators see Appendix D. *HH*: Household. **Note2**: The 2016 school attendance indicator refers to 2015 data given the non-comparable data on school assistance for 2016.

Annex 3. Cash Transfer Components and Amounts for SUPERATE (formerly PROSOLI), 2022

Aprende (formerly Incentivo a la Asistencia Escolar - ILAE) HS (1st gra) HS (2nd gra) HS (3rd gra) HS (3rd gra) Avanza (former Bono Escolar Estudiando Progreso - BEEP) HS (5th gra) HS (6th gra) HS (6th gra) HS - Technical (all grades) Bonogasa) Aprende (formerly Incentivo a la Asistencia Escolar - Elementar y HS (1st gra) HS (3rd gra) BEEP) HS (6th gra) HS (6th gra) Aprende (formerly Incentivo a la Asistencia Escolar - Elementar y HS (2nd gra) HS (3rd gra) BEEP) HS (6th gra) HS (6th gra) HS (6th gra) Aprende (formerly Incentivo a la Asistencia Escolar - Elementar y HS (2nd gra) HS (3rd gra) HS (4th gra) HS (5th gra) HS (6th gra)	7771	32.2 5.45	Monthly Bimonthl	Health check- ups for pregnant women and kids 0-5
HS (1st gra) 4 HS (2nd gra) 5 HS (3rd gra) 6 Avanza (former Bono Escolar Estudiando Progreso - BEEP) HS (5th gra) 1,6 HS (6th gra) 1,7 HS - Technical (all grades) 4 Bonogasa) 4 Bonogasa) 4		5.45	Bimonthl	
Bonogasa) HS (2nd gra) HS (3rd gra) HS (4th gra) HS (5th gra) HS (6th gra) HS (6th gra) HS (6th gra) HS (6th gra) HS - Technical (all grades) Bonogasa) Annogasa	00		У	
Bonogasa) HS (3rd gra) HS (4th gra) HS (4th gra) HS (5th gra) HS (6th gra) HS - Technical (all grades) Bonogasa) Answer Bonogasa) Bonogasa) Answer Bonogasa		7.27	Bimonthl y	
Avanza (former Bono Escolar Estudiando Progreso - BEEP) HS (4th gra) HS (5th gra) HS (6th gra) HS - Technical (all grades) Bonogasa) A Bonoluz ^b)	00	9.09	Bimonthl y	
Avanza (former Bono Escolar Estudiando Progreso - gra) BEEP) HS (5th gra) HS (6th gra) HS - Technical (all grades) Bonogasa) 4 Bonoluzb)	00	10.91	Bimonthl y	School enrolled
HS (5th gra) 1,0 HS (6th gra) 1,2 HS - Technical 1,4 (all grades) Bonogasa) 4	00	14.55	Bimonthl y	and assistance >= 80%
gra) HS - Technical 1,4 (all grades) Bonogasa) 4	000	18.18	Bimonthl y	
Technical 1,4 (all grades) Bonogas ^{a)} 4 Bonoluz ^{b)}	200	21.82	Bimonthl y	
Bonoluz ^{b)} 637	100	25.45	Bimonthl Y	
Ronoluz ⁰)	70	8.55	Monthly	Non-conditional
	7.3 – 8.3	11.58 – 11.97*	Monthly	Non-conditional
SUPERATE Mujer 10,	000	181.81	Monthly	Non-conditional
Subsidio Alimenticio 4	00	7.27	Monthly	Non-conditional
IES (Incentivo Educacion Superior) 5		9.09	Monthly	Enrolled in college

Notes:

Notes: a) Transfer for LPG; b) Depends on HH's electricity bill consumption (from 1 KWh up to 100 KWh) Exchange rate (2022) = 55 DOP/ US\$