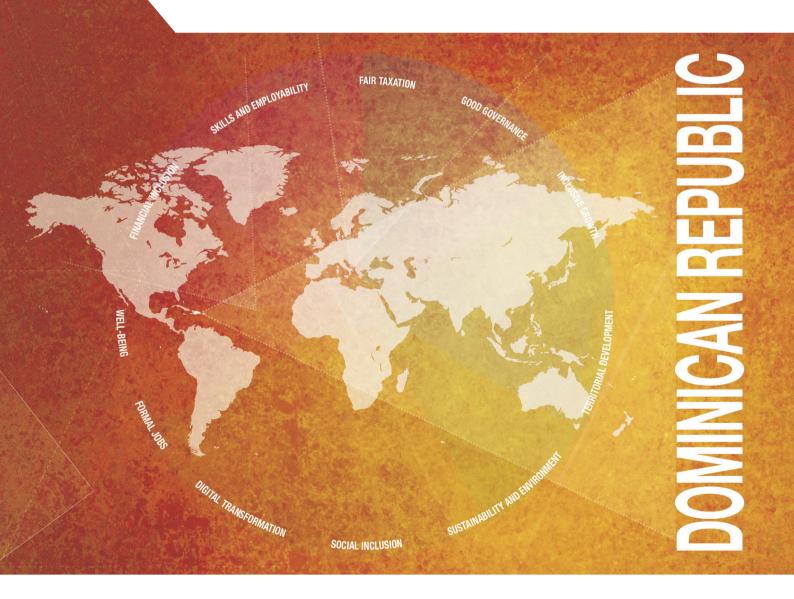


OECD Development Pathways

Multi-dimensional Review of the Dominican Republic

TOWARDS GREATER WELL-BEING FOR ALL





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Foreword

The well-being of citizens is driven by multiple, interrelated dimensions. In fact, policy makers are required to reconcile economic, social and environmental objectives to ensure that their country's development path is inclusive and sustainable and that the lives of its citizens improve. This involves looking at development from a comprehensive perspective, taking into account complementarities and trade-offs across policies.

Multi-dimensional Country Reviews (MDCRs) of the OECD Development Centre build on the above-mentioned ideas. They seek to analyse the main constraints to inclusive and sustainable development in a country from a multi-dimensional perspective. They also provide policy recommendations and aim to support the design of well-sequenced strategies for reform.

This is the first time that the Dominican Republic has benefited from a review of this kind. Others have been, or are being, conducted in Latin America and the Caribbean – including in Ecuador, El Salvador, Panama, Paraguay, Peru and Uruguay – as well as in other regions. The methodology is based on quantitative economic analysis, as well as qualitative approaches including foresight and participatory workshops that bring together the private and public sectors, civil society and academia.

This review seeks to support the Dominican Republic at a time when it is recovering from the impact of the COVID-19 pandemic and striving to build a more inclusive and sustainable development model. The global context also poses important challenges, mainly the impact of Russia's war against Ukraine, high inflationary pressures at the international level, and the acceleration of global megatrends like the digital transformation or the green transition.

The report is structured in two main parts. Part I, the *Initial Assessment*, evaluates where the country stands in the various dimensions of Agenda 2030. Part II provides an *In-Depth Evaluation* of three critical areas for the development of the Dominican Republic: i) creating better jobs; ii) mobilising more financial resources to support development; and iii) embracing the digital transformation. In each of these areas, the Review provides policy recommendations to move from analysis to action, as implementation is a fundamental part of policy making, and one where well-designed policies often fail.

This report is the result of a joint effort: it was led by the OECD Development Centre with the collaboration and financial support of the Ministry of Economy, Planning and Development of the Dominican Republic, as well as the European Union, in particular its Delegation to the Dominican Republic.

Acknowledgements

Multi-dimensional Country Reviews are the result of a collaborative effort between the OECD and the country under review. The review of the Dominican Republic was carried out by the OECD Development Centre, in close co-ordination with the Ministry of Economy, Development and Planning (MEPyD) and the European Union (EU), in particular its Delegation to the Dominican Republic.

The review was produced under the guidance and supervision of Ragnheiður Elín Árnadóttir, Director of the OECD Development Centre, and Sebastián Nieto-Parra, Head for Latin America and the Caribbean. It was led and co-ordinated by Juan Vázquez Zamora, Deputy Head for Latin America and the Caribbean. Jan Rieländer and Juan de Laiglesia, respectively Head and Senior Economist at the Country Diagnostics and Strategy team, also provided essential co-ordination and guidance.

The main authors of the report include: Nathalia Montoya, René Orozco, Mariana Rodríguez-Pico, David Schmidt, Juan Vázquez Zamora and Juan Velandia (Development Centre); Nathalie Basto-Aguirre, Paula Cerutti and Diana Hanry-Knop (formerly Development Centre); Robert Grundke (OECD Economics Department); and Montserrat Botey and Martín Grandes (external consultants). The analysis and research received invaluable contributions from João Castello Branco (Consultant), Camila Ramírez (Development Centre) and Jorge Neyro (Universidad de Buenos Aires). Agustina Vierheller (Development Centre) provided invaluable support to the project by co-ordinating administrative work.

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Member countries of the OECD Development Centre met in the Mutual Learning Group in October 2022, to review the final draft of this Multidimensional Review and share insights from their own development experience. The lead reviewer of the report was Colombia, in particular Javier Lesmes, Coordinator for Digital Transformation and Digital Economy at the Department of National Planning.

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Editorial

The Dominican Republic has achieved remarkable socioeconomic progress over the last two decades. Following a deep socioeconomic crisis in 2003-04, it became one of the fastest-growing economies in Latin America and the Caribbean (LAC), reaching upper middle-income status in 2011. Economic expansion largely stemmed from macroeconomic stability and a deeper integration in the global economy, with significant foreign direct investment flows, the development of free trade zones, and the growth of tourism and mining. Economic success drove social improvements. A Dominican youngster today is more likely than two decades ago to live a long life, access the education system or find a formal job.

Challenges remain, however: poverty still affects one in four Dominicans, inequalities remain large and institutional weaknesses persist. Citizens are aware of those and, while their perceptions have improved, around 60% believe the country is governed for and by the powerful. The impacts of COVID-19 have aggravated many of these development challenges.

There is a silver lining: the need to recover from the pandemic creates momentum for a new agenda of ambitious structural reforms. This is an opportunity to improve the well-being of all Dominicans in the longer run, while responding to the challenges and opportunities brought about by rapid economic, geopolitical and technological changes.

To that end, this *Multi-dimensional Review of the Dominican Republic: Towards Greater Well-being for All*, identifies three critical areas for policy action. First, creating *better jobs* requires a broad strategy for job formalisation, including stronger and better-targeted social protection systems; support for SMEs' transition to formality; better skills; and active production transformation policies.

Second, the country needs to mobilise *more public and private financial resources* in support of reforms. Tax revenues remain low, and there is space to make the tax mix more progressive while increasing collection, including by new forms of taxation in the green and digital economies. Fighting tax evasion and rethinking poorly targeted exemptions are also priorities, as well as more effective public expenditure. In parallel, deepening the financial system can help channel savings towards productive activities, and improve financial inclusion.

Third, new policies must ensure that *digital transformation* closes existing gaps, while not creating new ones. Households and schools need better access to quality connections and devices, and better training in digital skills. The digitalisation of the economy and labour markets must increase productivity and create better jobs. The approval of the Digital Agenda 2030 by the government in 2022 is a step in that direction, and provides a coherent and strategic mid-term horizon to guide policy action.

Reforms inevitably come with trade-offs, and at a cost. I hope – and trust – that this multi-dimensional review, with its detailed diagnostics and policy options, will help all Dominican stakeholders achieve a broad consensus on the way forward.

Ragnheiður Elín Árnadóttir Director OECD Development Centre

Executive summary

The Dominican Republic has been one of the fastest growing economies in Latin America and the Caribbean (LAC) in the last two decades. Following a severe economic crisis in 2003, progress has been remarkable. Annual GDP growth averaged 5.1% between 1993 and 2021, and in 2011 the country became an upper middle-income economy. Macroeconomic stability was an essential factor, as was deeper integration in the global economy, with significant foreign direct investment inflows, the development of free trade zones, and the expansion of tourism and mining. Remittances from Dominicans living abroad, mainly in the United States, also played a significant role.

While economic progress has come with improvements in the various dimensions of citizens' well-being, challenges remain. Poverty declined after 2003-04, but 23.8% of the population were still poor in 2021, and inequalities persist across income groups, age, gender and territories. The Dominican Republic is among the 50 countries most vulnerable to climate change worldwide, and its development model puts pressure on water and marine resources, although the forest area has expanded in the last two decades. The Dominican Republic has abundant wind and solar resources, yet fossil fuels represented 89% of total energy supply in 2019. Citizens are aware of these challenges, and their perception of progress has deteriorated in recent years. Interestingly, confidence in government has increased since the pandemic to 57% in 2021, well above the LAC average. However, 60% of the population believed that corruption is widespread, and a similar proportion thought the country was governed for and by the powerful.

The COVID-19 crisis aggravated some of these longstanding challenges, but the recovery is an opportunity to advance an ambitious reform agenda. This review highlights three areas for public action to promote greater well-being for all: 1) creating more formal job opportunities; 2) mobilising public and private financial resources for development; and 3) embracing the digital transformation.

A broad formalisation strategy with stronger social protection and production transformation

Labour informality is one of the critical and most persistent challenges in the Dominican Republic. In 2021, 45.4% of Dominicans lived in households where all workers were employed informally. This average hides important differences across income levels and territories: 64.6% of people in the poorest income quintile and 56.6% of the population in rural areas lived in a household depending only on informal employment. Labour informality is directly linked to low firm formalisation. Formality remains unattractive or unaffordable for many firms, especially the smaller ones, due to the associated tax and administrative burdens; complications stemming from the multiple sectoral and size-related variants of minimum wage regulations; and the high costs of dismissal incurred after the first year of formalisation.

Informality leaves workers with no or insufficient social protection. To reach them, the Dominican Republic must improve the targeting of programmes, with better interoperability of existing registries, and a focus on households where all workers are informal. Addressing barriers and disincentives to formalisation requires further simplifying tax and administrative procedures, providing SMEs with specific support, and

the labour force with better skills. A broad formalisation strategy should include ambitious production transformation efforts to support specific sectors and explore the potential of the digital and green transitions for job creation.

Mobilising further public and private resources to finance an ambitious development agenda

The impacts of the pandemic and international crises have further tightened fiscal space. At 12.6% of GDP in 2020, tax revenues in the Dominican Republic were significantly below the LAC and OECD averages, of 21.9% and 33.5% respectively. A tax mix with more direct taxation can improve revenues and strengthen the redistributive capacity of the system. For instance, new taxes could be explored in the green and digital economy, and better registries would improve the collection of property taxes.

Tax expenditures represent 4.4% of GDP. Reforming or eliminating outdated or poorly targeted tax incentives can increase revenues. In Special Economic Zones, the distributional and efficiency implications of incentives could be assessed more regularly. Tax non-compliance is among the highest in LAC: for VAT, it was estimated at 43.5% (3.6% of GDP) in 2017, above the LAC average of 30.1%. Broader use of electronic invoicing is one option to fight non-compliance. Addressing the challenges of the digital economy and non-compliance from multinationals is also crucial, through compliance with the OECD/G20 agreements.

Better public spending requires targeted social programmes, a stronger public investment system and solid fiscal frameworks, including the possibility of a fiscal rule. A fiscal pact, backed by broad consensus, can support a holistic and well-co-ordinated fiscal strategy for the recovery and beyond.

Deepening and strengthening the financial system is key to channelling private financing towards development. Banking depth is still low: promoting competition in the sector and improving financial inclusion are priorities, as is developing the local debt market, both public and private.

Embracing a digital transformation for all

A successful digital transformation can improve productivity, foster inclusiveness, help tackle climate change, transform public institutions and increase overall well-being. Improvements in connectivity have been remarkable. Between 2010-20, the percentage of Internet users more than doubled, from 31.4% to 76.9%, one of the highest rates in LAC. Disparities remain, however, and policies should ensure that digitalisation bridges existing divides, instead of creating new ones. Nine out of the 32 provinces in the Dominican Republic do not reach the 10% threshold of households with Internet. Progress in schools has been notable: 47% of them are equipped with effective online learning platforms, one of the highest levels in LAC. However, this level was 61% in advantaged schools but only 33% in disadvantaged ones.

Digital transformation can boost productivity, innovation and productive diversification. However, the Dominican Republic's innovation system has been underperforming, due to low investment in research and development. Better performing logistics are also critical. Finally, global digital transformation could affect employment: 12% of jobs might be at high risk of automation, against a LAC average of 16%. Hence the need to invest in digital skills. The recently adopted Digital Agenda 2030 represents a step towards a clear, ambitious and comprehensive digital strategy, showing commitment to digital transformation.

1 Overview

The Dominican Republic has made strides on many socioeconomic fronts over the years. The country has been one of the leading economies in Latin America and the Caribbean in terms of GDP growth, yet progress on the different dimensions of well-being has been more modest. In particular, socioeconomic and territorial disparities are still important, and public institutions remain insufficiently solid. For the Dominican Republic to embark on a more prosperous development path, three critical dimensions must be tackled. First, providing quality jobs for all, with particular emphasis on boosting formalisation and productive transformation. Second, mobilising more public and private finance for development, with more progressive and effective taxation systems, more efficient public expenditure and deeper capital markets. Third, accelerating digital transformation to boost productivity, enhance inclusion and support job creation. This Overview summarises the main messages of the *Multi-dimensional Review of the Dominican Republic*. Economic growth in the Dominican Republic has been remarkable, but progress in the different dimensions of well-being remains insufficient. This Multi-dimensional Review offers an *Initial Assessment* of the main challenges and opportunities for more inclusive and sustainable development, and provides an *In-Depth Analysis* of three areas found to be particularly relevant for the country's future: jobs, financing for development and digital transformation. In each of these areas, the report presents policy recommendations.

Economic growth has been strong but progress in terms of well-being remains insufficient

The recent history of the Dominican Republic is one of many socioeconomic achievements. The country has been one of the leading economies in the Latin American and Caribbean (LAC) region in terms of GDP growth, averaging a yearly rate of 5.1% between 1993 and 2021 (IMF, 2022_[1]). This led the Dominican Republic to reach upper middle-income status in 2011, only eight years after the severe banking crisis of 2003-04. However, the impact of COVID-19 revealed significant structural weaknesses, and ample room for more inclusive and sustainable development (OECD et al., 2021_[2]).

Economic growth has been mainly driven by a services-based, dual economy

Efforts to maintain macroeconomic stability have been an essential ingredient of economic growth, and of the relative resilience shown by the country to the impact of the COVID-19 crisis. Before the pandemic, structural reforms that helped increase foreign direct investment (FDI) flows – particularly in manufacturing in special economic zones (SEZs), mining and tourism –, coupled with favourable global conditions were the main drivers of growth. Remittances, mainly from Dominicans in the United States, also played a role, amounting to as much as 7.6% of GDP in 2018 (World Bank, 2018_[3]). These factors continue to be the main engines of growth in the aftermath of the pandemic: while GDP contracted by 6.7% in 2020, the country saw a strong rebound in 2021, with GDP growing by 12.3% (IMF, 2022_[1]).

Labour productivity has improved, particularly since 2010. Yet, it still represents around 65% less than in the OECD average, similar to the LAC average. This is partly the result of low labour participation rates among women, at only 43.4% (71% for men) in 2020 (World Bank, 2022_[4]).

The fastest growing economic sectors between 2010 and 2018 were mining, construction and services, in particular tourism and financial intermediation. The economic structure is dominated by the services sector, which accounts for 60% of GDP, represents about half of yearly economic growth, and employs 74% of the total workforce (Central Bank of the Dominican Republic, 2022_[5]). Among services, tourism is key, but took a particularly heavy toll as a result of the COVID-19 pandemic. Merchandise exports are dominated by manufacturing in SEZs, amounting to 56% of total merchandise exports in 2021. The mining sector has been receiving large inflows of FDI, in particular in gold and silver mining, and has increased exports significantly, accounting for 17% of merchandise exports in 2021 (Central Bank of the Dominican Republic, 2022_[5]).

The economic structure is characterised by its duality between domestic firms and firms in SEZs, which have undergone a structural shift towards medium and high-skilled manufacturing since the 2000s. While the more traditional textile and wearing apparel industries were labour intensive and employed many low-skilled female workers, the emerging industries (pharmaceutical, medical and surgical equipment, electronic products) are less labour intensive and require higher levels of skills. In 2021, medical and surgical equipment, electronic products and manufactured tobacco products accounted for 27%, 17%, and 17% of total merchandise exports from SEZs, respectively. Meanwhile, exports from firms outside SEZs are dominated by products that are resource-based or of low technology content, including agricultural and food products as well as mining. Due to the higher technology intensity of emerging industries in SEZs, and broad tariff and tax exemptions, linkages with domestic firms outside of SEZs are relatively low (OECD/UNCTAD/ECLAC, 2020[6]).

Social conditions have made slower progress than economic performance, and have deteriorated in the context of the pandemic

Strong and sustained economic growth has not translated into equally solid reduction in poverty and inequality, which have been aggravated by the pandemic. Poverty increased from 20.9% in 2019 to 23.4% in 2020 and up to 23.8% in 2021. Extreme poverty increased from 2.6% in 2019 to 3.5% in 2020, and slightly decreased to 3.1% in 2021. In previous years, poverty had recorded a steady but slow decline, from almost 50% in 2004 – largely because of the crisis – to 39.6% in 2013, accelerating thereafter (Figure 1.1). Inequality also fell between 2000 and 2021, with the Gini index declining from 0.513 to 0.396. This drop was higher than the average for LAC countries.

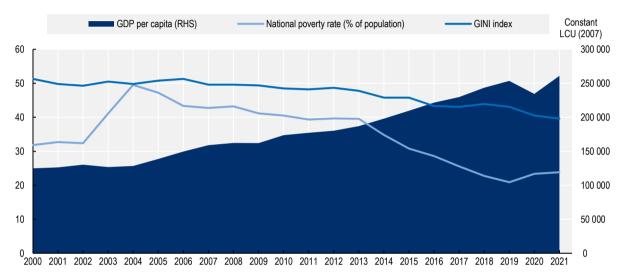


Figure 1.1. Evolution of GDP per capita, poverty rate and GINI index in the Dominican Republic

Note: Since 2016, the surveying methodology of the National Labour Force Survey changed to become the National Continuous Labour Force Survey, so poverty data may not be perfectly comparable before and after 2015. Estimates for GDP per capita begin after 2019. Source: Authors' elaboration based on (Ministerio de Economía, Planificación & Desarrollo; Unidad Asesora de Análisis Económico y Social, 2022_[7]); (IMF, 2022_[1]).

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In 2020, almost half (46.9%) of Dominicans were part of the vulnerable middle class. These are individuals living in households with a daily per capita income between USD 5.5 -13 (PPP 2011) (World Bank, 2022_[4]). Some of these are at risk of falling into poverty owing to substantial vulnerabilities, and the COVID-19-related crisis impacted them particularly.

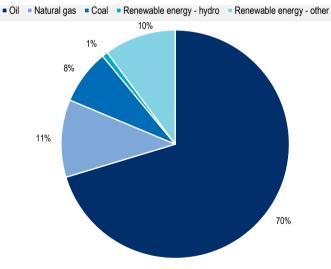
Taxes and transfers play a modest role in shaping the income distribution, as they only reduce the Gini index by less than 2 percentage points (Commitment to Equity Institute Data Centre, 2022_[8]). Nevertheless, the capacity of the state to protect the most vulnerable has improved in the last decades and social protection tools have been strengthened, particularly as a response to the pandemic. The Dominican government increased transfers in existing social programmes and put in place new emergency packages. The Employee Solidarity Assistance Fund (FASE) was created to assist formal sector workers at high risk of losing their jobs with income support. Later, the Independent Worker Assistance Program (PA' TI) sought to assist self-employed workers with financial help. The government also put in place the Stay at Home Program (Quédate en Casa), which targeted structurally poor or vulnerable households. These emergency programmes drove largely the increase in total social spending from 7.6% of GDP in 2019 to 12.2% in 2020 and 8.7% in 2021 (Ministerio de Hacienda, 2022_[9]).

Environmental risks add to vulnerability to climate-related disasters

The Dominican Republic faces growing environmental pressures. Between 2000 and 2019, it was one of the 50 most vulnerable countries to extreme weather events globally (GermanWatch, 2021_[10]). Due to its geographical location, the Dominican Republic is particularly affected by hurricanes, storms and floods. The vulnerability of housing constructions and the lack of urban and territorial planning increase physical and property damage, and can also affect economic activities like agriculture and tourism.

The current development model entails certain environmental risks. Marine resources are threatened by coastal development and overfishing. Mass tourism can also be a major threat for environmental protection. While the impact of COVID-19 reduced the flow of tourists, this had increased by 35% between 2007 and 2017, and figures for 2022 show a full recovery of this sector. Deforestation has been controlled in the last decades, and indeed the country has managed to increase forest area substantially, though pressures from agriculture and fires must be managed. Forest area increased by 5.1% between 2000 and 2010 and by 3.4% between 2010 and 2020 in the Dominican Republic, compared to -5.7% and -3% for South America for the same period. In 2020, the country's total forest cover was estimated at 44.4% of total land area (FAO, 2022[11]). The current development model also puts pressure on the water resource, which is close to the stress level in the Dominican Republic, contrary to other neighbouring countries in Central America. The efficiency rate of irrigation in agriculture is lower than 25%, due to the common practice of irrigation by flooding (Sánchez, 2016[12]). Mining has been growing in the country, with various environmental impacts, water use and contamination being among them.

The Dominican economy remains largely dependent on fossil fuels. These represented 89% of total energy supply in 2019, while renewable energies accounted for the remaining 11% (Figure 1.2) (IEA/OECD, 2021_[13]). The country has committed to reducing its emissions by 27% with respect to a business-as-usual scenario by 2030. It also set the target to reduce its per capita greenhouse gas (GHG) emissions by 25% by 2030 compared to 2010 levels (MEPyD, 2014_[14]). Investing in renewable sources of energy can help in reducing the dependency on imports of fossil fuels as well as their impact on the environment. The Dominican Republic has abundant solar and wind resources and should pursue its efforts in developing renewable sources of energy (OECD et al., 2022_[15]).





Source: Authors' elaboration based on (IEA/OECD, 2021[13]).

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Strengthening trust in institutions is key to renewing the social contract and building consensus on ambitious reforms

Despite strong economic growth, trust in public institutions has been relatively low and volatile. Confidence in national government was particularly low in 2011 (41%), 2015 (45%) and 2019 (41%), but reached higher levels more recently, with 63% and 57% of the population having confidence in the government in 2020 and 2021, respectively. Current levels of confidence remain above the LAC (38%) and the OECD (47%) averages (Gallup, $2022_{[16]}$). Other indicators point to an erosion of citizens' trust in institutions, though again with a recovery particularly since the impact of the pandemic. For instance, support for democracy fell from a maximum of 73% in 2008 to 60% in 2013, 54% in 2017, and a minimum of 44% in 2018 (Latinobarometro, $2021_{[17]}$). In 2020, support for democracy grew slightly to reach a level of 50%, presumably because part of the population perceived and appreciated efforts put in place by the government to counter the effects of the pandemic. Perception of progress in the country has also deteriorated. After a low point in 2011, more than half of the population believed that the country was progressing in the period between 2013 and 2016. However, there has been a fall in recent years, and in 2020, only 35% of the population believed that the country was progressing (Latinobarometro, $2021_{[17]}$).

There are multiple factors potentially driving these divides between citizens and public institutions in the country. On the one hand, social demands have increased, due to the expansion of the middle class, a younger and increasingly urbanised population, or the greater access to digital technologies and hence to information. On the other hand, while there have been undeniable efforts to strengthen the institutional framework, public institutions still face significant challenges. This can be related both to the lack of institutional capacities, but also to the fact that institutions are often deviated from serving the public interest, either through corruption or through policy capture to serve particular interests. Despite some significant improvements, in 2021 60% of the population still believed that corruption was widespread in the government, and 59.8% of Dominicans thought the country was governed for and by the powerful (Figure 1.3).

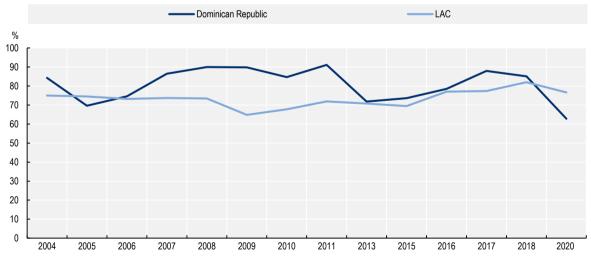


Figure 1.3. Share of the population believing that the country is governed for and by the powerful

Source: Authors' elaboration based on (Latinobarometro, 2021[17]).

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Three priority areas to achieve greater well-being for all Dominicans

As a result of the *Initial Assessment* conducted in this Multi-dimensional Review, and following dialogues held with various Dominican stakeholders, three areas were identified as critical policy domains where ambitious reforms are needed in the country to advance towards greater well-being for all. First, jobs remain a fundamental part of citizens' well-being, yet in the Dominican Republic many workers are employed informally, without adequate working conditions and with poor access to social protection. It is therefore imperative to create more formal job opportunities. Second, an ambitious development agenda will inevitably demand vast financial resources, but the country faces the rigidities of low fiscal space and a complex global scenario. It is essential for the country to advance towards a more robust, inclusive and sustainable "financing for development" model. Third, the challenges facing the Dominican Republic are taking place in a rapidly changing world, which also opens new opportunities. The digital transformation appears as a critical megatrend which the country must embrace to transform its development model.

Towards more formal jobs in the Dominican Republic

Informality is one of the critical and most persistent challenges in the Dominican Republic. Informal labour erodes tax collection, undermines productivity growth and leaves workers vulnerable to shocks due to lack of social protection. It also perpetuates low productivity levels, unsophisticated economic structures, and low levels of skills across workers. All of these factors are not only consequences of informality: they are also key contributors to it. This is why labour informality is a complex and multi-dimensional phenomenon that is both a driver and a result of low development levels.

The Dominican Republic's labour market has shown high levels of informality for decades, consistently above 50%. In 2021, the informal employment rate reached 59%, slightly above the 2019 rate of 55.3%, mainly as a result of the pandemic. This is slightly above the average level observed in LAC, at 56.5% (OECD, forthcoming_[18]). The Dominican Republic must continue its efforts to place formalisation at the centre of its development strategy for several reasons. First, formalisation is key to expanding the breadth of the social protection system and reaching the most vulnerable groups. Second, barriers to the formalisation of companies should be reduced, which can have a positive effect on productivity growth, tax collection and increased trade opportunities, hence leading to the creation of more formal job opportunities. Third, investing in skills development and production transformation are key policy areas for greater formalisation through gains in productivity as well as better prospects for employability.

Informality leaves many workers and their households without adequate social protection

In 2021, 45.4% of Dominicans lived in households where all workers were employed in informal jobs. This was more than a three-percentage-point increase from 2019 (Figure 1.4, Panel A). Analysing the incidence of informality from the perspective of the household provides a more accurate picture of its impact on vulnerability, as usually social protection associated with formality extends from the formal worker to the rest of the household members. Conversely, households where all family members are informal are particularly vulnerable as they remain completely outside the scope of the social protection system.

Most low-income and rural households in the Dominican Republic depend only on informal employment. In 2021, 64.6% of people in the poorest income quintile lived in a household that depended only on informal employment, compared with 26.4% of those in the wealthiest income quintile. Households in rural areas also have significantly higher levels of informality. As much as 56.6% of the population in rural areas lived in a completely informal household in 2021. There are also considerable differences in informal household composition between regions: 54.1% of the total population in the Southern region lives in a completely informal household, compared with 42.1% of the population in Gran Santo Domingo. The highest

proportion of mixed households (with both formal and informal workers) is found in the Eastern region (25.2%) and in Gran Santo Domingo (26.2%) (Figure 1.4, Panel B).

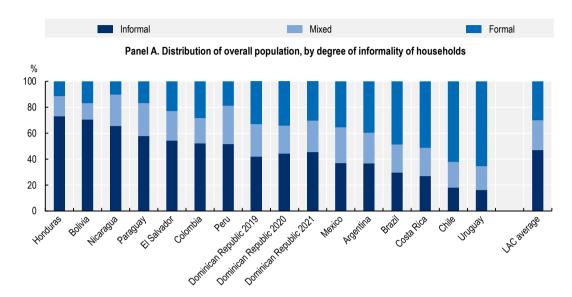
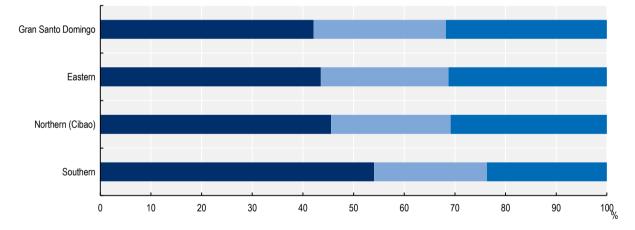


Figure 1.4. Composition of households according to their degree of informality, in total and by region

Panel B. Distribution of informality of households by region, 2021



Note: Estimates for selected LAC countries are derived from data for 2018 or the closest available year. The LAC average is the unweighted average of selected LAC countries.

Source: Authors' calculations based on (OECD, forthcoming[18]), using the KIIbIH database. In order to ensure microdata comparability and availability, the Dominican Republic's 2019, 2020 and 2021 estimates use the ENCFT for the third quarter.

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The COVID-19 crisis has underscored the importance of reinforcing social protection in the Dominican Republic. As most informal workers fall outside the coverage of traditional contributory social security mechanisms, they are more dependent on other public social assistance, non-contributory programmes, usually cash transfers, solidarity pensions and in-kind transfers. Among others, strengthening the interoperability of registries and adopting a household lens can improve the targeting of social programmes (Basto-Aguirre, Nieto-Parra and Vázquez Zamora, 2020_[19]; OECD, forthcoming_[18]).

Structural factors impede the formalisation of firms and the creation of formal jobs

Beyond mitigating the social consequences that informality causes, a strategy for formalisation must address the barriers and disincentives companies face to operate formally. In fact, firm formalisation often precedes labour formalisation. However, formalisation remains unattractive or unaffordable for many Dominican firms, especially the smaller ones. While some highly productive sectors can afford the costs of formality, other less productive sectors or firms are unable or unwilling to afford the transition to formality. In the Dominican Republic, 91% of small enterprises' employees and 22.8% of medium-sized enterprises' employees are informally employed. In contrast, only 3.7% of employees in large enterprises are informally employed (BCRD, 2022_[20]; OECD, 2021_[21]).

There are several factors creating barriers or disincentives to formalisation. The tax and administrative burden associated with the formal status can be high for some micro, small or medium-sized enterprises (MSMEs). The Dominican government has made efforts to streamline these procedures, which has helped to reduce disincentives to firm formalisation. The country has also implemented simplified tax regimes for small taxpayers, but tax rates are not differentiated for MSMEs or newly formalised enterprises. Minimum wage regulations have many sectoral and size-related variants, which lead to complexity in their application and makes it challenging to comply with the law, also pushing some firms to operate informally. Finally, some of the country's non-wage labour costs could also constitute a barrier to formalisation, particularly for small employers. While most non-wage labour costs are relatively stable over time, those in case of dismissal increase drastically after the first year, potentially exerting a disincentive for employers to hire formally.

Barriers to formalisation are also reflected in a segmented labour market, where transitions between informality and formality are relatively scarce, particularly for women. Only 12.8% of male informal workers transitioned to formal employment between 2018 and 2019, and only 9.6% of informal female workers. Around 80% of workers remained in their informal status. Between 2019 and 2020, during the COVID-19 pandemic, transitions from informal to formal employment dropped significantly, to 4.2% among men and 4.5% among women (Figure 1.5).

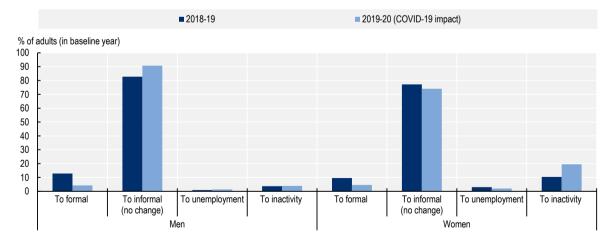


Figure 1.5. Yearly transition rates from informality (aged 30-55), by gender

Source: Authors' calculations based on (OECD, 2021[21]; BCRD, 2022[20]).

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Skills development and the transformation of the production structure are crucial to increasing labour productivity and promoting formal employment

Skills development is a critical determinant for a worker's competitiveness in the labour market and, in turn, for the productivity of companies and the production sector in general. These are fundamental dimensions to boost formalisation. However, the level of skills across Dominican workers is limited, to a large extent due to low educational attainment levels, especially among vulnerable people (Figure 1.6). As much as 79% of 15-year-old Dominican students fail to reach level 2 proficiency in reading, mathematics and science in the Programme for International Student Assessment (PISA) test. Level 2 is described as the minimum level of proficiency that all children should acquire by the end of secondary education. This challenge is also recognised by firms: 29.1% of manufacturing companies in the Dominican Republic identify an inadequately educated workforce as a major constraint (World Bank, 2016_[22]). Better skills not only make it more likely for a worker to access a formal job, they also lead to other externalities such as innovation, entrepreneurship and productive transformation in the aggregate, hence favouring the creation of more formal job opportunities.

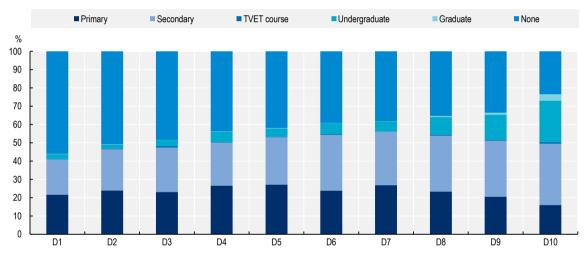


Figure 1.6. Educational attainment by level of education and income decile

Source: Authors' elaboration based on (BCRD, 2022[20]).

Technical and vocational education and training (TVET) can be critical in increasing formalisation levels. TVET supply in the Dominican Republic is fragmented and would benefit from more co-ordination and strategic guidance to better respond to current and future demands for skills. In particular, strengthening the coverage and quality of secondary and post-secondary TVET is key to building skills in the workforce. The ongoing effort to create a National Qualifications Framework is, for instance, a significant step forward in aligning TVET education with general secondary and tertiary education. Moreover, it can facilitate the identification of professional qualifications demanded in the national production system.

A better match between the demand and supply of skills is critical to favour employability and job formalisation. Currently, the Dominican Republic has scarce information on these fronts. Investing in better resources and methods to analyse the supply and demand of skills can contribute to implementing more effective education and training policies. Likewise, facilitating the transition from education to work not only reduces a burden on companies but also supports young people in getting started on their career paths.

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Box 1.1. Policy recommendations to create more formal jobs

Policy objective 1: Consolidate a robust and sustainable social protection system to protect informal workers and their household members

- 1. Strengthen social protection systems and build on the lessons learned during the COVID-19 pandemic
- Improve interoperability across different existing registries, integrating all social protection information systems and strengthening the role of SIUBEN in order to reach vulnerable, informal populations, and exploiting the potential of digital technologies.
- Enhance the conditionality associated with social protection to make it a catalyst for better educational, economic and social inclusion.
- Adopt the household lens in order to better understand household composition, and thus better identify the right mix of interventions for each type of household.
- 2. Make social protection contributions more flexible in order to include informal workers
- Progress towards a system that allows more flexibility for workers to contribute to the social protection system, particularly for those who face difficulties in making regular contributions. This is especially relevant for own-account workers (e.g. a flat rate for their contributions).
- 3. Progress towards a universal and more sustainable social protection system
- In the short to medium term, efforts should be made to extend coverage to categories of the population not covered by social protection and across all regions of the Dominican Republic.
- In the longer term, move towards a universal social protection system. Technical and political
 discussion is required to assess the convenience of developing a system where coverage
 depends less on individuals' employment status, and where general taxes, instead of workers'
 contributions, gain relevance as a source of financing.

Policy objective 2: Rethink the current institutional and policy framework to remove or alleviate existing barriers to formalisation

- 1. Provide favourable conditions for formalisation, particularly among MSMEs
- Encourage formalisation of MSMEs by providing them with special support and tax benefits, for instance by providing tax exemptions during the first years of operation for newly created firms.
- Continue efforts to simplify the taxation and regulatory administration of businesses, streamline bureaucratic procedures during formalisation and encourage more businesses to formalise. The Formalízate programme should be strengthened and expanded.
- Promote innovative mechanisms to foster the growth of MSMEs, such as business acceleration programmes, smart funds, and support in maintaining fiscal commitments.
- Expand the types of investment funding available (beyond loans) with an emphasis on independent workers.
- 2. Address main institutional barriers to the formalisation of workers and consider a reform of the Labour Code
- Rethink the minimum-wage-setting process to strike a better balance between a more simplified system that favours its application by employers and a sufficient number of minimum wages that accounts for differences across sectors and firms.
- Begin a technical discussion on the impact of severance payment on informality, in order to balance protection of the employee against flexibility in the labour market.

- Appoint a team that works to align the conditions and stakeholders required for the effective implementation of the new National Employment Plan.
- Frame the discussions around a new National Employment Plan within a broader tripartite debate at the national level, including the possibility of reforming the current Labour Code.
- Introduce a regulatory framework for digital platforms, whether within a new Labour Code or independently.
- 3. Strengthen policies to boost the creation of formal jobs in the economy
- Align employment generation policies with industrial and production policies, strengthening connections between special economic zones and the local economy.
- Create sector-specific strategies to promote formalisation in sectors where informality is high.

Policy objective 3: Invest more effectively in the workforce, focusing particularly on skills and youth, to increase labour productivity and improve employability in the formal sector

- Strengthen connections between the education and training system and the demand for skills in the economy to facilitate the transition to formality
- Strengthen technical and vocational education and training, by investing in better and more modern infrastructure, teacher training and tools for identifying labour market needs.
- Harmonise the fragmented TVET system.
- Ensure the continuity of efforts to implement the National Qualifications Framework, as this will be key in facilitating the identification of professional qualifications demanded by employers.
- Encourage partnerships between the private and educational sectors, expanding programmes that combine classroom teaching with practical training and other active labour market services, and strengthening transition programmes from school to the workplace for young people.
- Create formal entrepreneurship programmes in the last year of high school to increase the possibility of starting a formal work activity upon leaving school.
- Put in place regular skills supply and demand data collection systems. Involving the productive sector and exploiting the benefits of digital transformation are key to building such information.

Policy objective 4: Develop a broad, holistic strategy for formalisation

• Embark on a broad-based discussion on a holistic strategy for formalisation in order to integrate formalisation efforts across different policy areas and levels of government.

Financing for development in the Dominican Republic: Towards a more inclusive, resilient and sustainable model

The Dominican Republic needs vast amounts of financial resources to underpin the post-COVID-19 recovery and overcome pending structural challenges. Traditionally low fiscal space has been further tightened by the impact of the pandemic and by a very complex global scenario.

Increasing fiscal space and ensuring sufficient resources to finance a sustainable development path will require additional tax revenues in the Dominican Republic. Tax revenues are low and represented 12.6% of GDP in 2020. This is significantly below the LAC and OECD averages of 21.9% and 33.6% respectively (OECD et al., $2022_{[23]}$; OECD, $2022_{[24]}$). A variety of policy options can lead to greater tax revenues. Identifying these and finding the right balance of measures will be crucial for success and for maintaining the taxation system as a catalyst for equity and economic growth.

Rethinking the tax mix can improve revenues and strengthen the redistributive capacity of the tax system

The Dominican Republic's tax structure presents potential areas for readjustment that can help to increase revenues, expand the tax base and build a more efficient and equitable tax system (Figure 1.7). Indirect taxes represent almost two-thirds (60.7%) of total tax revenues, representing 7.6% of GDP in 2020. Notwithstanding this, the efficiency of value-added tax (VAT) (ITBIS) remains limited. In fact, tax revenues from VAT represent 4.4% of GDP in the Dominican Republic, below the LAC average of 5.7%. Significant scope exists to improve VAT efficiency and increase its revenue-raising capacity. Low efficiency in VAT collection is mainly caused by tax non-compliance, tax exemptions and weaknesses in tax administration.

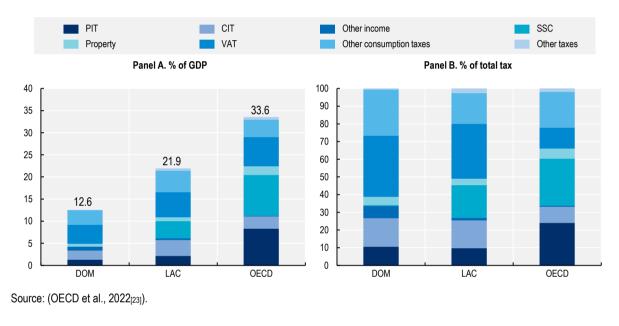


Figure 1.7. Tax structure in the Dominican Republic, LAC and OECD member countries, 2020

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Direct taxes also have the potential to contribute more to total revenues and, by their progressive nature, they can support a more equitable tax system. The two main sources of direct revenues are corporate income taxes (CIT) and personal income taxes (PIT). Tax revenues from CIT accounted for 2.1% of GDP in 2020, making it the second-largest source of tax revenues after ITBIS. However, this level is lower than the averages for LAC (3.6% of GDP) and the OECD (2.8% of GDP) (OECD et al., $2022_{[23]}$; OECD, $2022_{[24]}$). The corporate tax rate in the Dominican Republic is near the LAC average, yet CIT efficiency levels are low. This is mainly explained by the proliferation of tax incentives – mostly those used to attract investment in Free Trade Zones (FTZs) – and high tax evasion, which need to be carefully assessed in order to improve revenues from CIT.

Revenues from PIT in the Dominican Republic are relatively low by international standards, as they represented 1.3% of GDP in 2020, well below the averages in LAC (2.2) and the OECD (8.3%) (OECD et al., 2022_[23]; OECD, 2022_[24]). Several factors limit PIT revenues in the Dominican Republic. These include a small tax base, a high concentration of income earners at low income levels, high levels of informality and tax evasion, and the existence of generous exemptions, deductions or tax credits. There are several options to increase the PIT tax base. For instance, it would be useful to explore the reduction of the minimum taxable level of personal income. Similarly, a policy option is to reduce the cost of being formal, providing the correct incentives to become formally employed or rationalising tax exemptions,

deductions or credits. Utilising new technologies (e.g. large-scale automated data) to cross-check PIT with information from online vendors could also help reduce tax evasion.

Immovable property and inheritance tax revenues have potential for expansion with low distortionary effects and high redistributive impact. Yet, tax revenues from these taxes are relatively low in the Dominican Republic. Real estate taxes only accounted for 0.06% of GDP in 2020 (0.4% of GDP in the LAC average and 1% of GDP in the OECD average) (OECD et al., 2022_[23]). Several factors undermine tax revenue from immovable property, including low level of property registration, high threshold exemptions, and the lack of a unified, updated and easy-to-access property registry. Correct and up-to-date information and new digital tools can unleash the potential of immovable property taxes.

To further mobilise resources for development, new taxes can be explored in areas like the digital economy or the green transition (OECD et al., 2022_[15]). The Dominican Republic already obtains revenues from fuel taxes and several initiatives have already slowly started to create a framework of environmental taxes. Nevertheless, some options remain unexplored, such as carbon taxes which are a simple and cost-effective way to limit climate change, increase tax revenues and limit health damage from local pollution. Other taxes (such as creating a tax for vehicles that are more than ten years old) offer a new opportunity to raise tax revenues and promote green growth. Similarly, the tax system must adapt to the changes and challenges brought on by the digitalisation of the economy. For instance, a proposal currently under discussion is to extend the 18% VAT (ITBIS), or the 10% Selective Consumption Tax, to digital platforms. Estimates suggest that the potential of VAT revenue derived from taxes on digital services could have represented 0.4% of the Dominican Republic's GDP in 2018, 0.5% in 2019 and 0.6% in 2020 (Jiménez and Podestá, 2021_[25]). These efforts are essential not only for diversifying tax sources, but also for guaranteeing fair competition between these international platforms and local companies that provide these services.

Rationalising tax exemptions and fighting tax evasion are critical to improving tax collection

Rationalising tax expenditures can create fiscal space and improve the overall impact of the tax system in terms of equity and efficiency. Tax expenditures are typically used by governments to achieve different economic, social and equity objectives by providing specific conditions to incentivise behavioural change. In 2021, tax expenditures accounted for 4.44% of GDP, one of the highest levels in the LAC region (Figure 1.8). As much as 70.1% of tax expenditures came from indirect taxes in 2021, with the majority of them related to the ITBIS (54.4% of total) and taxes on hydrocarbons (7.4%). Tax expenditures from the ITBIS represented 2.41% of GDP, and all tax expenditures from indirect taxes accounted for 3.12% of GDP, while those resulting from direct taxes represented 1.32% of GDP, divided between 0.76% of GDP from income taxes and 0.56% from wealth and property tax (Ministerio de Hacienda, 2020_[26]).

Tax expenditures are not always well designed, and they can be regressive and provide greater benefits to those who need them less or are not always conducive to job creation or economic growth. A reform or elimination of outdated or poorly targeted tax expenditures that do not achieve the associated policy objectives can be a source of more tax revenues. Tax expenditures need periodical assessments to continuously evaluate their effects on growth, labour, inequality and efficiency. Similarly, avoiding arbitrariness in the criteria for admitting firms into FTZs and other special tax regimes by setting up clear qualification conditions can be an effective manner to ensure their efficiency.

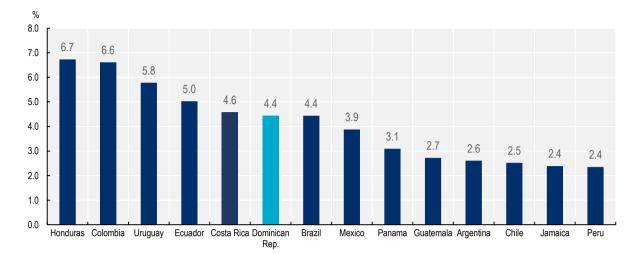


Figure 1.8. Tax expenditures across LAC countries as a percentage of GDP

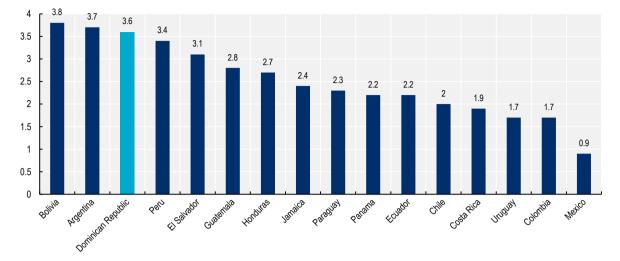
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Source: Authors' calculations based on national sources; (Redonda, Haldenwang and Aliu, 2021[27]) and (Peláez-Longinotti, 2019[28]).

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Fighting tax non-compliance can be a source of greater tax revenues, while making the tax system more equitable and fairer. Tax non-compliance in the Dominican Republic ranks among the highest in LAC, with an estimated level of 61.8% (4.2% of GDP) for CIT, 57.07% (1.68% of GDP) for PIT and 43.5% (3.6% of GDP) for VAT in 2017. Indeed, VAT evasion in the Dominican Republic is well above the LAC average of 30.1% (Ministerio de Hacienda, 2018_[29]; Gómez Sabaini and Morán, 2020_[30]) (Figure 1.9). Improving VAT efficiency to reduce non-compliance would require the use of digital tools (for instance expanding the use of electronic invoicing [e-CF]), exploring alternative and innovative policies (such as personalised VAT), and modernising and adapting to the challenges of the digital economy. Information campaigns and efforts to raise awareness and tax morale, alongside the simplification of the tax system, can also be effective short-term measures in fighting tax non-compliance.

On the international front, it is critical to address both the challenges arising from the digitalisation of the economy and from non-compliance across multinationals. Sometimes businesses artificially shift profits to low- or no-tax locations where they have little or no economic activity, or they erode tax bases through deductible payments such as interests or royalties. This international challenge is addressed by the OECD/G20 Inclusive Framework on BEPS. Continuing to comply with the agreements and actions of this Framework will be fundamental to tackle tax avoidance in the Dominican Republic.





Source: Authors' elaboration based on (Gómez Sabaini and Morán, 2020[30]).

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Public spending must be made more efficient, as part of a comprehensive fiscal pact

Reduced levels of fiscal space underscore the need to spend more efficiently, striking a balance between short-term challenges and long-term development. Inefficiencies in public spending in the Dominican Republic are relatively large and are estimated at 3.8% of GDP, slightly below the LAC average of 4.4% of GDP (World Bank, 2019_[31]). Inefficiencies are primarily caused by leakages in transfers and procurement waste. Enhancing efficiency will require improved targeting of social programmes alongside the strengthening of the institutional framework for public spending. This includes multi-year budgetary frameworks that promote greater transparency and consider the phase of the business cycle (for instance with a fiscal rule) and protect capital investment and key social spending. Similarly, *ex ante* evaluations can help guide budget allocations to increase efficiency, improve the design of future policies and increase transparency by providing more accountability to citizens.

The challenges to raise additional revenues and spend in a more efficient manner underscore the need for a comprehensive fiscal pact in the Dominican Republic, as foreseen in the National Development Strategy 2030. The role of fiscal policy for the post-COVID-19 recovery must be holistic, making use of all fiscal policy tools and co-ordinating measures. In this respect, and while there are several political economy implications in advancing a fiscal pact, this should also be seen as an opportunity to build an inclusive and sustainable development path. Bundling the various fiscal reforms into a comprehensive package can help to build fiscal legitimacy, as well as reduce political constraints, facilitating political support and addressing distributional issues by making the system more progressive (OECD et al., 2021_[2]).

Deepening and strengthening the financial system would help to channel private resources towards development

Developing domestic debt markets can be growth-enhancing and promote socio-economic development. Long-term financing through bond issuances and other related securities allow to raise investment capital for infrastructure, housing or equipment, to smooth consumption, and to cope with climate and health emergencies, thus supporting long-term economic, social and environmental progress. The COVID-19 pandemic increased the need to provide financing through bond issuances and the Dominican Republic also increased its market access at the lowest rate on record, issuing a mix of foreign and domestic bonds. High international liquidity (and in particular capital flows towards sovereign bonds) in emerging markets during the pandemic contributed to these positive outcomes. As a result, consolidated public sector debt reached 70.3% of GDP in 2020, almost 20 percentage points higher than in 2019 (53.2%) (IMF, 2022_[32]). As much as 56.4% was external debt (Ministerio de Hacienda, 2021_[33]). Public debt was reduced to 62.1% of GDP in 2021 and the ratio should continue to trend downward, to an estimated 59.2% in 2022 (IMF, 2022_[32]). Non-financial public sector debt, according to national data, was at 40.4% of GDP in 2019, increased to 56.6% in 2020, and decreased again to 50.4% in 2021 and to 46.5% by October 2022 (Ministerio de Hacienda, 2021_[34]).

The market of local currency bonds is being developed, but additional efforts are needed. Co-ordination between the Central Bank and the Treasury is critical to avoid debt fragmentation, unnecessary competition, yield curve distortions and additional issuance costs (OECD, 2012_[35]). In recent years, both institutions have made efforts to meet regularly to strengthen the co-ordination of public debt issuances in the local market.

The local private bond market in the Dominican Republic also remains underdeveloped. Since 2013, the total amount of private debt issued as a percentage of GDP has fluctuated between 0.7% and 0.2%, while in LAC countries it has ranged from 25% to 50% of GDP (Abraham, Cortina and Schmukler, 2020_[36]). This could be partly due to the fact that large local companies prefer to issue international notes or to access credit facilities or loans in international markets in foreign currencies. Similarly, pension funds continue to invest a large portion of their portfolios in public sector bonds, reducing the liquidity in the private bond market. On a positive note, new players are coming into the local private bond market. The Dominican Republic public authorities have also been active as new laws have been passed to improve minority investor protection and market functioning, and laid the foundations for further innovations in the domestic market, such as green and social bond issuances.

The banking system in the Dominican Republic has proven to be resilient, though there is room for improvement in its contribution to financing development. Banking depth has been improving, but it still remains below LAC and the OECD. In 2019, the banking-credit-to-GDP ratio stood at 28.9% of GDP, below the 50% of GDP in LAC and the 80% in the OECD average (World Bank, 2022_[4]). The banking system remains concentrated, and real interest rates and spreads are relatively high. The ten largest entities by assets held controlled 90.2% of deposits by the end of 2020, 3.3 percentage points higher than in 2012. Among a sample of 19 LAC economies, the Dominican Republic presented the fourth-most concentrated financial system (Tambunlertchai et al., 2021_[37]). In the case of real lending interest rates faced by the private sector, they remained high, at close to 10%, between 2010 and 2019 (Banco Central de la República Dominicana, 2022_[38]). High real interest rates are key barriers to accessing banking finance in the formal sector of the Dominican Republic's economy.

Box 1.2. Policy recommendations for a more inclusive, resilient and sustainable "financing for development"

Policy objective 1: Strengthen tax revenues by restructuring the tax mix

- 1. Rebalance the tax structure to increase the share of direct taxes and the level of progressivity
- Launch a technical and political discussion on the feasibility of decreasing the minimum taxable personal income, so that high-income deciles are effectively included.
- Explore the potential of personalised VAT (ITBIS) as a way of increasing overall revenues from these taxes, while compensating low-income taxpayers to reduce the regressive nature of VAT.
- 2. Enhance the revenue potential of other taxes
- Strengthen property registries in order to boost revenues from property taxes by: 1) moving towards a unified and simplified property registry with an up-to-date land and property registration in central cadastres; and 2) reducing information asymmetries in immovable property, closing the gap between the appraised value and the market value.
- Explore the potential of new taxes adapted to the emerging economy, such as digital and green taxes, which serve the dual purpose of raising revenues while creating the incentives for a greener and more digitalised development model.

Policy objective 2: Rationalise tax exemptions to raise revenue capacity and improve the overall impact of the tax system in terms of equity, efficiency and simplicity

- 1. Rethink tax exemptions on main sources of revenue
- Rethink VAT (ITBIS) exemptions in order to improve efficiency and reduce its regressive impact

 for example, exemptions applied to financial services or to the imports of low-value goods, or
 exemptions on certain non-essential goods and services such as those related to tourism or
 certain cultural products. Measures aimed at reducing VAT exemptions should be accompanied
 by clear measures to directly compensate lower-income groups.
- Evaluate PIT deductions, like exemptions for educational expenditure, which can be regressive.
- 2. Evaluate the overall impact of special economic regimes and consider a gradual phasing out of those where the costs in terms of forgone tax revenues outweigh the benefits
- Rethink tax incentives associated with special economic regimes through periodical assessments of their distributional and efficiency implications.
- Include an analysis in tax expenditure reports of how these incentives contribute to key development objectives like economic growth, job creation or support to low-income groups.
- Limit the potential arbitrariness associated with special economic regimes by, for example, strengthening the criteria for admitting companies; rethinking their governance to balance the distribution of power; including all tax expenditures in the tax code; or giving the Ministry of Finance the main responsibility for granting these incentives.

Policy objective 3: Fight tax non-compliance

- 1. Use digital tools to fight evasion and to leverage existing international agreements
- Expand the use of the electronic invoice (e-CF) and advance towards making it compulsory, and work to strengthen the implementation of the destination principle.
- As a member of the OECD/G20 Inclusive Framework on BEPS, continue to advance in the implementation of the two-pillar solution in order to address the challenges of digitalisation.

- 2. Use digital tools to increase tax compliance through the simplification of the tax system or a better taxation of digital trade
- Launch information campaigns, increase efforts to raise awareness, and use nudges, all of which can have an impact on lowering tax non-compliance.
- Adopt recommendations from the OECD/World Bank VAT Digital Toolkit for Latin America and the Caribbean, aimed at addressing the VAT challenges of digital trade.
- Use new technologies to cross-check information (for example, large-scale automated data and cross-checking of PIT against information from online vendors), to reduce tax evasion.

Policy objective 4: Improve the quality and efficiency of public expenditure

- Improve the targeting of social programmes, strengthen the interoperability of existing registries, and make use of household level analysis and of innovative ways of reaching informal workers.
- Accompany new policies with ex ante evaluations led by the central budget authority. Ex ante evaluations can help guide budget allocations in order to increase efficiency, improve the design of future policies, and increase transparency by providing more accountability to citizens.
- Strengthen solid fiscal frameworks. Instituting a multi-year budgetary framework that includes a fiscal rule can promote greater transparency and protect capital investment as well as key social spending at different stages of the economic cycle or against internal or external shocks.

Policy objective 5: Implement a fiscal pact to support the recovery and build a more inclusive and sustainable financing model in the Dominican Republic

 Build a holistic and well co-ordinated fiscal strategy for the recovery, backed by a broad consensus, and advance towards the objective established in the National Development Strategy 2030 of increasing tax revenues to 21.5% of GDP by 2025 and 24% of GDP by 2030.

Policy objective 6: Strengthen the banking system to channel financial resources to productive activities and increase financial inclusion

- Seek further reductions of real lending interest rates to promote investment and long-term growth, through increased competition among banks and other financial institutions, including by promoting Fintech or digital banks.
- Advance in an ambitious National Strategy for Financial Inclusion.

Policy objective 7: Deepen and further develop the public and private debt market in the country

- Elaborate a new Medium-Term Debt Strategy (MTDS) with new guidelines which reflect the new environment after the COVID-19 shock and the lessons learned from the previous MTDS (2016-2020) to enhance risk management and planning capabilities of the Debt Management Office.
- Continue strengthening the co-ordination between the Treasury, the Central Bank, and other regulatory bodies like the Superintendencia de Valores in the local market to lower lending interest rates, promote long-term bond liquidity and continue diversifying in the investor base.
- Advance in efforts to develop a local-currency risk-free bond yield curve, and develop the private debt market, promoting the diversification of the investor base through appropriate changes in pension fund and mutual portfolio regulations and tax incentives for individuals.

A digital transformation for all

The digital transformation represents a profound and impactful global trend that could bring enormous opportunities for inclusive and sustainable development in the Dominican Republic. Indeed, digital innovation has the potential to improve productivity, foster inclusiveness, help tackle climate change, transform public institutions and increase the overall well-being of citizens. However, if not accompanied by an adequate policy mix, the digital transformation can also deepen existing inequalities and create new gaps, generating digital divides that could be a source of exclusion (OECD et al., 2020[39]).

Embracing the digital transformation and making it work for all in the Dominican Republic will require strong policy ambition. In 2021, Decree 71-21 created the Gabinete de Transformación Digital (Digital Transformation Cabinet) and the National Dialogue on Digital Transformation (Dialogo de las reformas 2021: Transformacion Digital) was initiated (Consejo Económico y Social, 2021_[40]). These two milestones provide good evidence of the political commitment to enable a digital transformation in the country, which resulted in the approval in 2022 of a Digital Agenda 2030.

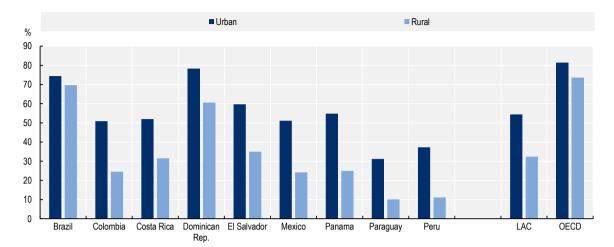
Making the digital transformation work for households and schools

More people are connected to the Internet than ever in the Dominican Republic, yet providing access and connectivity to all is a pending challenge. The country made improvements in terms of fixed broadband connections from 2014 (5.9 connections per 100 inhabitants) to 2020 (9.5 connections per 100 inhabitants), but it is still below the averages for LAC (14.2 connections per 100 inhabitants) and OECD member countries (33.6 connections per 100 inhabitants) (ITU, 2021_[41]). Around 32% of households had access to a fixed broadband connection to the Internet in 2018, below the LAC (42%) and world (55%) averages, despite significant improvements between 2014 and 2018 (ONTIC, 2020_[42]).

Active mobile broadband subscriptions per 100 inhabitants have also increased notably, from 31.2 subscriptions in 2014 to 70.9 subscriptions in 2020. This is slightly below the LAC average (72.1 subscriptions) and below the average for OECD member countries (110.9 subscriptions) (ITU, 2021_[41]). The prevalence of mobile phones in society suggests that building a strong mobile broadband network can be an effective method of ensuring Internet access for all. This is the case in the Dominican Republic, where 80% of mobile broadband Internet access is through cellular devices (INDOTEL, 2021_[43]). This is similar to the trend across LAC, where active mobile broadband subscriptions in 2018 were more than five times higher than fixed broadband subscriptions (OECD et al., 2020_[39]).

The expansion of fixed and mobile broadband in the Dominican Republic has led to a significant increase in the overall number of Internet users. As of 2020, the Dominican Republic had one of the highest rates of Internet users in LAC. Since 2010, the percentage of Internet users has more than doubled, from 31.4% to 76.9%, being around ten percentage points below the OECD average (ITU, 2021_[41]).

While the Dominican Republic has experienced a rapid expansion of connectivity, disparities in access and usage across territories, socio-economic status, age and gender persist, and these may have been exacerbated during the pandemic. Territorial disparities represent one of the major inequalities. In fact, the share of households with access to Internet ranges from 44.4% in highly populated and developed provinces such as the Distrito Nacional or 34.4% in La Altagracia, to the low levels of connectivity in smaller, less developed provinces, such as Elías Piña (5.4%) or Independencia (4.9%). There is a difference of 45.8 percentage points between the region with the highest and the lowest share of households with Internet connectivity. Nine out of the 32 provinces in the Dominican Republic do not reach the 10% threshold of households with Internet (INDOTEL, 2021[44]). Territorial disparities in the Dominican Republic are similar to those in other LAC countries, and larger than in the OECD (Figure 1.10).

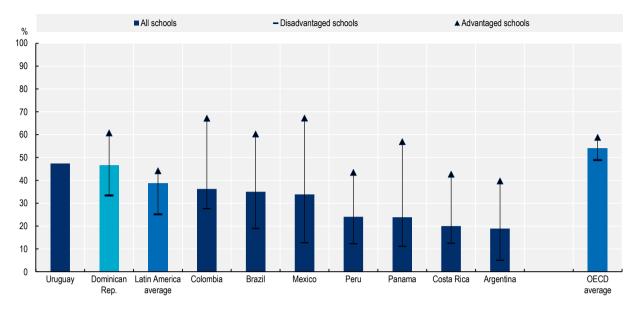




Source: Authors' elaboration based on (ITU, 2021[41]).

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The Dominican Republic has seen an increase in access to ICT in schools in recent years. In fact, the number of students per computer has declined since 2015. In 2018, there was one computer available per 1.4 students, and almost one computer with an Internet connection per 2 students. This places the Dominican Republic in a slightly better position than the LAC average, but worse off than the OECD average, which in 2018 had approximately one Internet-connected computer for every student (OECD et al., 2020_[39]). However, notable gaps still exist across different socio-economic groups in terms of access to ICT both at school and at home. As an illustration, on average 47% of schools were equipped with effective online learning support platforms, one of the highest levels across LAC countries. This level was 61% in advantaged schools and only 33% in disadvantaged schools (i.e. a 28-percentage-point difference) (Figure 1.11).





Source: (OECD et al., 2020[39]).

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The digital transformation of the economy and jobs

The digital transformation can be a catalyst for productivity growth, triggering innovation and productive diversification. Harnessing the opportunities this presents depends on how economies, productive sectors, institutions and societies position themselves to absorb and adapt to digital technologies. These new technologies change the way companies produce goods and services, innovate, and interact with other companies, workers, consumers and governments. Digitalisation opens the door for superior data storage capacities and increased processing capabilities, while artificial intelligence enables companies to automate increasingly complex tasks (OECD et al., 2020_[39]).

Having a strong innovation system is critical to making the most of the digital transformation and promoting productivity growth, yet the Dominican Republic underperforms in this area. Research and development (R&D) investment is low: the country reported R&D investment of 0.01% of GDP in 2015, lower than the LAC (0.7%) and OECD (2.34%) averages in 2018. Greater efforts in R&D and innovation could boost productivity as well as the quality of production (OECD/UNCTAD/ECLAC, 2020_[6]). A high-performing logistics system is another critical dimension of building a stronger digital ecosystem that is conducive to productivity growth. The Dominican Republic's score on the Logistics Performance Index has decreased in recent years and is currently below the LAC average (CAF, 2020_[45]).

The impact of new forms of employment on the Dominican Republic is uncertain but, based on its current economic structure, 12% of jobs are at high risk of automation (Figure 1.12). This is slightly below the impact on LAC countries overall, where 16% of jobs, on average, are at high risk of automation and another 16% of occupations may change substantially due to the digital transformation. The economic structure of the Dominican Republic can explain the limited impact of the digital transformation on jobs. With a large share of employment concentrated in low-skilled services and sectors like retail and construction, which are not easily automatable, job destruction may be less prevalent. However, this may also indicate low

levels of sophistication in the productive structure, with a low penetration of ICT and an inability to shift the production structure towards higher-value-added sectors.

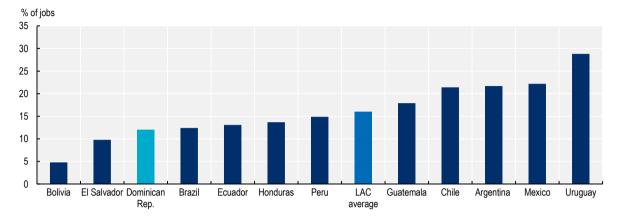


Figure 1.12. Percentage of jobs at high risk of automation

Source: Authors' elaboration based on (OECD et al., 2020[39]) and (Weller, Gontero and Campbell, 2019[46]).

Two policy areas stand out as particularly relevant to making the digital transformation a catalyst for better jobs. The first is skills: workers need a mix of skills, including strong cognitive and socio-emotional skills, as well as high-level ICT skills in technology-related occupations. The Dominican Republic ranks 106th in the world in terms of ICT skills (Network Readinness Index, 2020_[47]). The second policy area is lifelong learning: these systems can enhance the accessibility and quality of education and provide training and learning opportunities throughout all stages of life, increasing workers' chances of acquiring the required skills to adapt to a rapidly changing labour market.

A strategic vision for the digital transformation

The digital transformation affects and creates opportunities in almost every dimension of public policy. Thus, embracing the digital transformation calls for policies and practices that address digital issues in a holistic and coherent manner. In this context, the success in moving towards a digital economy and society relies greatly on the capacity to develop a clear, ambitious and cross-cutting digital agenda (DA) that is also linked to a country's broader and longer-term development strategy (OECD et al., 2020_[39]).

In 2021, the Dominican Republic established the Gabinete de Transformación Digital (Digital Transformation Cabinet) to oversee the Digital Agenda (DA) 2030, which was approved in 2022. There are several criteria that are relevant for the success of a DA, many of which are reflected in the Digital Agenda 2030 (OECD et al., 2020_[39]). Clear responsibility and adequate implementation powers are crucial. A high-level body leading the strategy can be particularly helpful in co-ordinating a swift digital transformation. In addition, effective co-ordination among government bodies, beyond ICT-related ministries, is also essential for the implementation of a coherent DA, and must be complemented by a comprehensive data governance framework in order to ensure proper data management throughout the DA's life cycle. Similarly, as the digital transformation is promoted by multiple stakeholders, including businesses, individuals and other non-government stakeholders, it is important to ensure an open multi-stakeholder dialogue, which can help identify obstacles, exchange best practices and create opportunities for public–private partnerships. An effective oversight framework is important for monitoring the implementation of and evaluating the DA. It is also important that the DA is well aligned with national development plans (NDPs) (OECD et al., 2020_[39]).

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Box 1.3. Policy recommendations to embrace the digital transformation and make it a driver of greater well-being for all

Policy objective 1: Increase connectivity throughout the Dominican Republic to ensure a successful and inclusive digital transformation

- 1. Design policies that continue to increase broadband Internet connections in the Dominican Republic and close the gap with LAC and the OECD
- Invest in communication networks, creating the conditions to attract private investment and to foster public–private partnerships.
- Expand the deployment of 4G networks across the country.
- 2. Reduce gaps in access, particularly in rural areas and across low-income populations
- Expand connectivity in rural areas by making full use of existing technologies.
- Expand connectivity through enhanced public networks, particularly in remote areas.
- Subsidise access to the Internet for low-income populations, making use of existing sources of information to better identify and target vulnerable households.
- 3. Improve affordability and availability of digital devices and services
- Continue to distribute digital devices to students, particularly those from less advantaged socioeconomic backgrounds, accompanied by training for both teachers and students.
- Create conditions for affordable access to digital devices and services.

Policy objective 2: Enhance digital skills and the use of digital tools in the education system and in the transition to the new world of work

- 1. Develop digital skills among students and teachers as well as across the adult population
- Mainstream digital skills and tools across the education system, starting from early childhood. Develop specific programmes to train the adult population in digital skills.
- Develop an ambitious programme of training for current and future teachers in digital skills, including innovative pedagogical methods that are adapted to the needs of the digital society.
- 2. Reinforce the availability of digital tools within the education system
- Bridge the gap in ICT across schools in different socio-economic backgrounds, including access to online educational resources and platforms and digital devices for teaching and learning.
- Develop a national map that identifies the needs of schools in terms of connectivity, ICT and digital endowments in order to develop targeted actions in the most disadvantaged areas.
- 3. Strengthen linkages between the education system and the emerging digital economy
- Strengthen the digital component within vocational education and training, as well as in higher education, with specific degrees related to emerging professional profiles in the digital economy.
- Develop mechanisms to identify the demand for skills and, in particular, the emerging needs of the digital economy.

Policy objective 3: Create a digital ecosystem to boost the development of the digital economy

- 1. Enable the use of digital tools and services by MSMEs and favour the emergence of a digital industry
- Put in place specific public programmes to support MSMEs in the adoption of digital technologies and their use to better connect with larger companies and global value chains.

- Develop specific instruments and incentives for the development of the digital industry in the Dominican Republic.
- 2. Develop a holistic digital ecosystem in order to facilitate the digital transformation of production processes by all companies in order to promote productivity growth
- Develop a strategic plan to enhance the digital ecosystem as a catalyst for greater productivity, acknowledging that this must include key complementary investment in R&D; infrastructure and logistics; and skills and human capital, including organisational and managerial capabilities.

Policy objective 4: Adopt a strategic, well co-ordinated vision of the digital transformation

- 1. Ensure a coherent and holistic approach to the digital transformation, as presented in the Digital Agenda 2030, that is well connected with the broader National Development Strategy 2030
- Assign clear responsibilities and adequate implementation powers to a high-level body leading the Digital Agenda 2030 (e.g. to the Gabinete de Transformación Digital).
- Ensure effective co-ordination among government bodies (beyond ICT-related ministries); a comprehensive data governance framework; open multi-stakeholder dialogue; and an effective oversight framework.
- 2. Strengthen statistical digital capacities
- Enhance the use of digital technologies to improve the collection and use of statistical data and to strengthen their potential to inform public policies (e.g. use of big data).
- Develop mechanisms to regularly produce digital indicators that allow monitoring of progress in the Digital Agenda 2030 and a better understanding of emerging challenges and opportunities as the digital transformation continues to advance.

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Part I Initial assessment

2 Multi-dimensional constraints analysis in the Dominican Republic

This chapter describes the country's performance across well-being dimensions and the SDGs and identifies the key constraints to development. First, it outlines the history and context of the Dominican Republic's development and identifies a set of risks and trends that will impact its future development. Second, it presents performance across a range of well-being and SDG indicators. It then analyses the Dominican Republic across the five Ps of the 2030 Agenda: People, Prosperity, Partnerships, Peace and Institutions, and Planet.

Introduction

The recent history of the Dominican Republic is one of many socioeconomic achievements. The country has been one of the leading economies in the Latin American and Caribbean (LAC) region in terms of GDP growth, averaging a yearly rate of 5.1% between 1993 and 2021 (IMF, 2022_[1]). This led the Dominican Republic to reach the upper middle-income status in 2011 (following the World Bank classification), only eight years after suffering the severe banking crisis of 2003. Likewise, poverty significantly declined, and well-being improved in that period, with progress also on areas like access to public services, life satisfaction, and employment rates. Life expectancy has also improved significantly, from 67.8 years in 1990 to 70.5 years in 2000, 72.7 years in 2010, and 74.2 years in 2020 (relative to 80.6 years on average for OECD countries in 2020) (World Bank, 2022_[2]).

However, the impact of COVID-19 in the country revealed that the Dominican Republic was facing significant structural weaknesses already before the pandemic, and that previous progress had not been sufficiently inclusive and sustainable. The Dominican Republic is indeed a country undergoing "development in transition," as defined in the *Latin American Economic Outlook 2019* (OECD et al., 2019_[3]). In this respect, before the pandemic the country was already facing various development traps in its transition towards greater levels of development. These were well reflected in the strategic priorities of the National Development Strategy (*Estrategia Nacional de Desarrollo 2030*, NDS 2030) which represents the common, long-term vision of development for the Dominican Republic. The multi-dimensional approach to development provided in this *Multi-Dimensional Country Review (MDCR) of the Dominican Republic* is needed to better understand the specific barriers to development facing the country, as well as their interactions and the best policy mixes to address them effectively.

This MDCR is being undertaken to support the country in its efforts to achieve greater levels of well-being for all and build a robust and inclusive recovery. This MDCR includes two main parts. The first one is this *Initial Assessment*, which builds on the 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs) to identify the main constraints to achieving inclusive sustainable development. In this respect, it identifies key constraints and the underlying development challenges that the Dominican Republic must address. The second part is an *In-depth Analysis* which focuses on specific policy areas, in particular: i) labour market formalisation; ii) financing for development; iii) digital transformation. In these three areas, the report examines main challenges and opportunities and provides policy recommendations to move from *Analysis to Action*. The analysis and recommendations are based on OECD expertise and experiences of other countries, as well as on dialogue with Dominican stakeholders, which took place in several bilateral meetings as well as in three thematic workshops held in Santo Domingo.

The *Initial Assessment* describes the Dominican Republic's performance across well-being dimensions and the SDGs and identifies the key constraints to development. First, it outlines the history and context of the Dominican Republic's development and identifies a set of risks and trends that will impact its future development. Second, it presents performance across a range of well-being and SDG indicators. It then analyses the Dominican Republic across the five Ps of the 2030 Agenda: People, Prosperity, Partnerships, Planet and Peace. Whenever relevant and subject to data availability, the Dominican Republic is compared with a set of benchmark economies in Latin America (Costa Rica, Chile, Colombia, Ecuador, Panama and Peru), in the OECD (Hungary, Korea, New Zealand, Portugal, Türkiye) and Asia (Indonesia and Thailand).

A brief history of the Dominican Republic's development

The second half of the 20th century was filled with major events that marked the Dominican Republic's development path. After three decades under Trujillo's dictatorship, his death in 1961 gave way to a convoluted period that was marked by a *coup d'etat* in 1963, a civil war in 1965 and the subsequent occupation by the United States that lasted between April 1965 and September 1966. The Constitution

approved in that year started a period known as the 4th Republic, which lasts until today and where new Constitutions have been approved in 1994, 2002, 2010 and 2015.

In economic terms, the 4th Republic started with a period of sustained growth, with an annual expansion of GDP of around 8% between 1966 and 1976. Economic development was mainly based in the production and exporting of primary commodities (Pozo et al., 2010_[4]). Throughout this period, and similar to most economies in LAC, the government was supporting a policy of "import substitutions" to encourage the industrialisation of the country, which gained impetus in the late 1960s. This included measures related to trade, exchange rates and public investment. The first free-trade zone (FTZ) of the country was created in 1969.

The Dominican Republic was affected by the wave of economic crises that hit various LAC economies during the 1980s. These were mainly characterised by high levels of public debt and unsustainable fiscal deficits, in a context of tight international financial conditions and high volatility. This gave way to a series of structural reforms in the 1990s, much in line with the predominant doctrine of the Washington Consensus, oriented towards the liberalisation of certain markets, opening up to the global economy and the privatisation of SOEs, among others. The structure of production was transformed, with a transition from an economy mainly based on agriculture to one based on services, and with areas like telecommunications, financial services and tourism, together with exports from free-trade zones, becoming core engines of economic growth. This declining role of agriculture was one of the drivers of a process of urbanisation that started to gain strength: in 1993, 56% of the population lived in urban areas and ten years later 64.6% did (81% in 2018). Some rural areas became pockets of poverty.

The early 2000s were marked by the banking crisis of 2003, which had a strong impact on the country's main macroeconomic and social indicators. The country signed a programme with the International Monetary Fund that supported the recovery in the subsequent years, linked to a package of structural reforms. The Conditional Cash Transfer programme "Programa Solidaridad' was created in this period, in 2005, to support vulnerable populations and then was transformed into the programme "Progresando con Solidaridad in 2012. Since then, and until the impact of COVID-19, growth was strong and social progress was positive in many fronts, but with large gaps in different dimensions of well-being that the pandemic came to accentuate and that are the main subject of analysis of this *Initial Assessment*.

Looking ahead: Internal and external trends

In addition to the specific development challenges that are analysed in the following sections, there are a number of key trends with both immediate and long-term impact that cut across many dimensions of development and need to be considered in any future development strategy. This section briefly describes some of these key trends, namely population ageing, the rise of an urban middle-class, the digital transformation and climate change.

Population trends

The Dominican Republic is experiencing a process of population ageing, which is usual in most countries as they advance towards greater levels of development. This process is also linked to global advancements related to healthcare improvements and better nutrition patterns, among others. The old-age dependency ratio will have jumped from a level of around 11 in 2022 to around 25 by 2050 (meaning that there will be one person aged 65+ per each four people in working age) and to around 50 by 2090 (Figure 2.1).

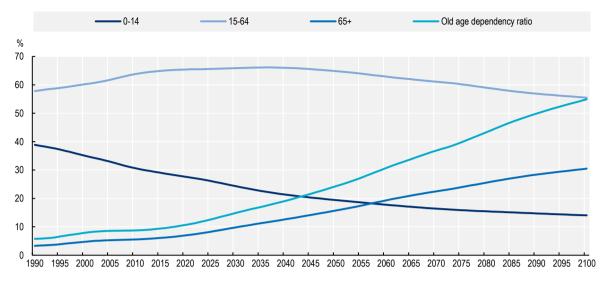


Figure 2.1. Demographic trends in the Dominican Republic, 1990-2100

Note: Estimates for 2022-2100 are from the medium fertility variant scenario. Old-age dependency ratio, is the ratio of older dependents –people older than 64– to the working-age population–those ages 15-64. Data are shown as the proportion of dependents per 100 working-age population.

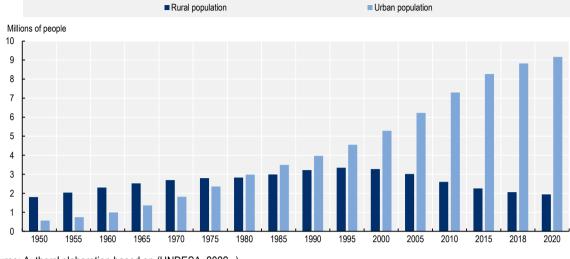
Source: Authors' elaboration based on (UNDESA, 2022[5]).

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These demographic trends have relevant implications for public policy and well-being. Labour markets will have to adapt, as the working-age population will shrink in relative terms and hence improving productivity will become central. Careers will tend to be longer, with implications in terms of re-skilling and up-skilling, which will demand innovative responses from education and training systems. Likewise, social protection systems will have to adapt, with an evident need to develop a strong old-age pension system and to advance towards a sustainable and adaptable healthcare system.

A growing urban middle-class

The Dominican Republic has been undergoing a process of rapid urbanisation. While in 1980 one in two Dominicans lived in urban areas, in 2020 around 84% of the population lived in cities, and by 2050 around 92% of the population will be settled in urban areas (Figure 2.2). This trend overlaps with the expansion of the middle-class, which in 2018 represented around one-third of the population, mostly living in urban areas. This middle-class is also expected to continue growing if current trends of economic expansion are sustained and the recovery from the COVID-19 pandemic is robust. The implications of these trends are numerous and will affect mainly the provision of good quality public services in cities. Public transport, health, education, water and electricity, among others, will have to be adapted to the rising demands of the middle-class but also to the increasing pressures of serving a large and densely concentrated population.





Source: Authors' elaboration based on (UNDESA, 2022[5]).

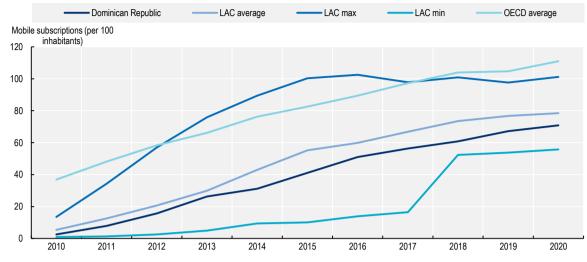
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The digital transformation entails risks and opportunities

Technological progress has accelerated globally, and major shifts are underway that are radically transforming economies and societies. The current period is one of transition towards a digital economy and society. Artificial intelligence, big data analytics, block chain technologies, the Internet of Things and the radical transformation of information and communication technologies are some prominent examples of this trend and make up for what many have labelled as the "the "next production revolution" (OECD et al., 2020_[6]; OECD, 2017_[7]).

The digital transformation offers many opportunities for overcoming the main development traps in LAC countries and in the Dominican Republic. One of the key elements for this digital transformation to work for all is that access to quality internet connections is enhanced. In the Dominican Republic, 71% of citizens had a mobile broadband connection in 2020, slightly below LAC average but still well behind the OECD average (Figure 2.3).

Figure 2.3. Mobile broadband penetration



Active mobile-broadband subscriptions per 100 inhabitants

Note: LAC is a simple average of Argentina, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Mexico, Panama, Paraguay, Peru, and Uruguay. OECD is a simple average of all 38 member countries. Source: Authors' elaboration based on (ITU, 2021[8]).

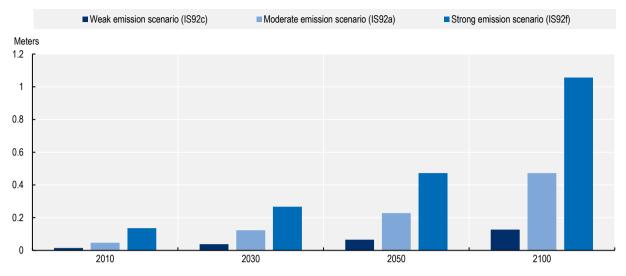
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Climate change risks will become more pressing

Climate change mitigation and adaptation are becoming increasingly important in the Dominican Republic and in the Caribbean, given the vulnerability of this area to climate risks (OECD et al., 2022_[9]). Located in the centre of the Antillean Arc, the Dominican Republic shares the Caribbean island of Hispaniola with Haiti. Climate projections to 2050 predict an increase in average annual temperature of 1-2.5°C, a decrease in average annual precipitation by over 23% from 2010 levels and an increase in the number of consecutive "dry" days of 7.2% to 17.4%. It is most likely that the global average intensity of tropical storms will raise from 2% to 11% in 2100 (PLENITUD; Caribbean Community Climate Change Centre; Consejo Nacional para el Cambio Climático y Mecanismo de Desarrollo Limpio; Ministerio de Agricultura; UE, 2014_[10]).

The economic costs of climate change in the Dominican Republic are estimated to reach 86% of GDP by 2100 (Burke, Hsiang and Miguel, $2015_{[11]}$). One of the effects of climate change is rising sea levels that create stress on coastal ecosystems. The sea-level projections estimate a 3 cm rise in sea level by 2030, a 6 cm by 2050 and a 12 cm by 2100 on a weak emission scenario. Alternatively, a strong emission scenario would involve a 26.73 cm rise in sea level by 2030, 47.27 cm by 2050 and 105.67 cm by 2100 (Figure 2.4).

Figure 2.4. Sea-level rise in the Dominican Republic, 2010-2100



Sea level projections based on three emission scenarios

Note: According to the first national communication, three emission scenarios are considered: one weak IS92c, one moderate IS92a and one strong IS92f. The base year is 1990.

Source: Authors' elaboration based on (PLENITUD; Caribbean Community Climate Change Centre; Consejo Nacional para el Cambio Climático y Mecanismo de Desarrollo Limpio; Ministerio de Agricultura; UE, 2014[10]).

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Well-being and Sustainable Development Goals (SDG) Analysis

How's life in the Dominican Republic? Through the OECD well-being lens

The well-being of citizens can be comprehensively assessed with the OECD's "How's Life?" toolbox. Wellbeing encompasses people's diverse experiences in all dimensions that matter to them, including households' material conditions (e.g. income, jobs and housing), but also their broader quality of life (e.g. health, education, environment, life satisfaction). Recognising the importance of how people themselves evaluate their lives, the OECD Framework for Measuring Well-Being and Progress uses a mix of objective and subjective indicators (OECD, 2017_[12]).

Using a well-being lens can help to identify trade-offs between different policy goals and reduce departmental silos. A growing number of countries in LAC and in the OECD and beyond are taking steps to embed well-being more deeply and systematically into policy processes (Durand and Exton, 2018_[13]; OECD, 2021_[14]). In LAC, countries like Bolivia, Colombia, Ecuador and Paraguay have drawn on well-being evidence to inform their National Development Strategies and performance frameworks. In the case of the Dominican Republic, increasing well-being is the superior objective around which the National Development Strategy 2030 (NDS 2030) *Estrategia Nacional de Desarrollo 2010-2030: un viaje de transformación hacia un país mejor* is built.

Compared to countries at a similar level of development, the Dominican Republic performs similar to them in many dimensions of well-being (Figure 2.5). Performance is stronger in areas like life satisfaction, for instance regarding satisfaction with healthcare, with roads and with housing. However, citizens feel less safe in the Dominican Republic than it would be expected by its level of development, and satisfaction with water quality is also below the expected value. Areas where the Dominican Republic underperforms are

education, both in terms of quantity (enrolment rates and mean years of schooling) and quality, as shown by low PISA scores. Health, social protection and quality of jobs are other areas where the country performs below what would be expected for its level of development.

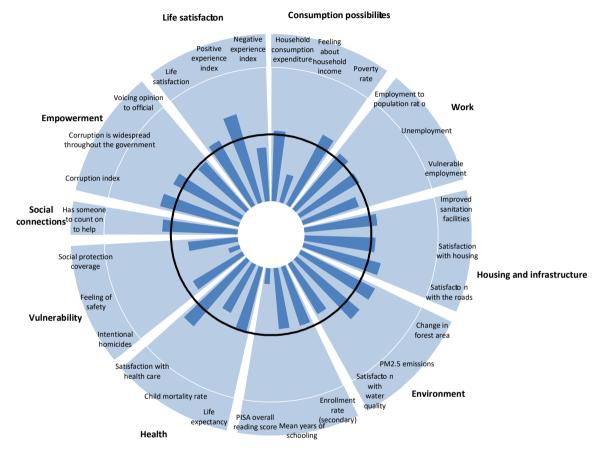


Figure 2.5. Current and expected well-being outcomes for the Dominican Republic: Worldwide comparison

Education and skills

Note: The observed values falling inside the black circle indicate areas where the Dominican Republic performs poorly in terms of what might be expected from a country with a similar level of GDP per capita. Expected well-being values (the black circle) are calculated using bivariate regressions of various well-being outcomes on GDP, using a cross-country dataset of around 150 countries with a population over a million. All indicators are normalised in terms of standard deviations across the panel.

Source: Authors' elaboration based on (World Bank, 2022_[2]; Gallup, 2022_[15]; UNESCO, 2022_[16]; Transparency International, 2019_[17]; OECD, 2022_[18]; ILO, 2022_[19]).

Moving ahead on the SDGs

The SDGs consist of 17 goals and 169 targets with the ultimate objective of ending poverty, protecting the planet and ensuring prosperity and peace for all. They came into effect in January 2016 and provide guidelines for all countries up to 2030. The Dominican Republic has a solid commitment with the 2030 Agenda with a level of alignment of 91% between the SDGs and the national planning set in the National Development Strategy 2030, and the UN's voluntary national reporting (Gobierno de la República Dominicana, 2021_[20]).

The Dominican Republic shows mixed results in its performance across the SDGs. Furthermore, progress towards SDGs has been severely affected by the impact of COVID-19 and the subsequent socioeconomic

crisis, as well as by a complex global context in the aftermath of the pandemic (OECD et al., 2022[9]). To move forward, further progress is needed in various dimensions to advance towards more inclusive and sustainable development (Figure 2.6). Some of the greatest challenges ahead are gender equality, decent work, sustainable cities and clean energy.

Figure 2.6. Progress towards the Sustainable Development Goals (SDGs) in the Dominican Republic

Progress towards the 2030 targets by 2021 (relative to 2010 baseline)

	Fallel A. Feople							
	Target	2010	2021	Target 2030 ⁻⁵⁰	■ 2021 0 50	100		
1: No poverty	Poverty headcount ratio at USD 1.9 a day (2011 PPP) (% of population) *	2.5	2.2	0				
2: Zero hunger	Prevalence of undernourishment (%) *	20.4	6.7	0	-			
3: Good health and well-being	Life expectancy at birth (years) (1)	72.0	74.2	80.6		2030 SE		
	Under-five mortality rate (deaths per 1 000 live births) *	35.1	33.8	25		2030 SDG target		
4: Quality education	Adult literacy rate, population over 15 years of age (%)	89.5	95.2	100				
5: Gender equality	Proportion of seats held by women in national parliaments (%) *	20.8	27.9	50				

Panel A. People

Panel B. Prosperity

T aller B. Trospenty								
	Target	2010	2021	Target 2030 ⁻⁵⁰	(■2021)	50	100
7: Access to energy	Access to electricity (% of population) *	98.1	100	100				
8: Economic growth and decent work	Share of informal workers in non-agricultural employment (%) *	49.8	54.6	0				
9: Industry and innovation	Individuals using the Internet (% of population) *	31.4	73.9	100		_		2030 \$
10: Reduced inequalities	Income share held by lowest 20% (2)	4.6	6.2	7.6		_		SDG target
11: Sustainable cities	Population living in slums (% of urban population) *	14.8	14.8	0				et.
TT: Sustainable cities	Average mean levels of PM2.5 exposure (µg/m3) *	17.1	18.2	10		-		

Panel C. Planet

				Target		■2021		
	Target	2010	2021	2030 -50)	0	50	100
6: Clean water and sanitation	Piped improved drinking water (% of population access) *	79.3	80.9	100				
6: Clean water and sanitation	Population using basic sanitation services (%) *	82.5	87.2	100				
7: Clean energy	Share of renewables in total primary energy supply (%) * (3)	13.7	11.0	33.4		-		203
12: Responsible cons. and prod.	Material footprint per capita * (4)	6.8	9.5	5.7		[2030 SDG target
13: Climate action	Production-based CO2 productivity (4)	6.3	7.6	8.4				rget
14: Life in the water	Marine protected areas (% of territorial waters) *	9.1	18.0	10				
15: Life on land	Terrestrial protected areas (% of total land area) *	23.0	26.2	10				

	Target	2010	2021	Target 2030 ⁻⁵	0	■2 0	021 50	100
16: Peace and justice	Intentional homicides (per 100 000 people) *	25.5	8.9	0				2030
	Confidence in the judicial system (% of respondents) (5)	33.0	41.0	55.3				2030 SDG target
	Perception of corruption (5)	72.0	60.0	55.0				et
	Panel E. Partnerships an	d finan	cing					
	Target	2010	2021	Target 2030 ⁻⁵	0	■2 0	2021 50	100
17: Partnerships and Financing for Development	General government tax revenues (% GDP) * (6)	12.2	12.6	33.5				2030 SI
	Total debt service (% of exports of goods, services and primary income) *	10.1	30.4	0				SDG target

Panel D. Peace and institutions

Note: Progress is measured using data from 2021 or latest year available. Indicators marked with an asterisk (*) are official SDG's indicators for monitoring progress. Targets are as set by the Sustainable development goals when available (with baseline 2010). For the following indicators 2030 target were set equal to: (1) 2020 OECD average; (2) 2019 OECD average; (3) 2020 OECD average; (4) OECD 2030 targets calculated based on (OECD, 2019_[21]); (5) 2021 OECD average; (6) 2020 OECD average. Marine and terrestrial protected area baseline is 2016 instead of 2010. Production-based CO₂ productivity is GDP per unit of energy-related CO₂ emissions (2015 USD per kg).

Source: Authors' elaboration based on (World Bank, 2022_[2]; Gallup, 2022_[15]; UNESCO, 2022_[16]; IMF, 2022_[1]; ILO, 2022_[19]; ECLAC, 2022_[22]; Inter-Parliamentary Union, 2021_[23]; Gobierno de la República Dominicana, 2021_[20]; OECD, 2022_[24]; WHO/UNICEF, 2022_[25]) (IEA/OECD, 2021_[26]).

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People – Towards better lives for all

Prior to the impact of the COVID-19 pandemic, the Dominican Republic enjoyed one of the strongest growth rates in Latin America and the Caribbean (LAC) over a period of 25 years. Yet economic growth was not sufficiently inclusive: around one in four Dominicans remain below the poverty line. The COVID-19 pandemic had a negative impact on GDP in 2020, with a contraction of 6.7% (OECD et al., 2021_[27]). Despite the country's efforts to counter the effects of the crisis on most vulnerable groups, key social indicators were negatively affected. Poverty increased from 20.9% in 2019 to 23.4% in 2020 and up to 23.8% in 2021; while extreme poverty increased from 2.6% in 2019 to 3.5% in 2020, and decreased to 3.1% in 2021 (Ministerio de Economía, Planificación y Desarrollo, 2021_[28]).

Even before the pandemic, the expansionary cycle had a limited impact on reducing poverty and inequality, in part because growth did not sufficiently translate into quality jobs. In fact, the sectors largely driving economic growth showed falling labour shares. Low-skilled workers became increasingly concentrated in low-quality jobs and in sectors that showed low productivity growth, while labour informality remained high and persistent. Additionally, the gap widened between productivity and earnings.

This section examines the evolution of key social indicators that reflect efforts undertaken and challenges faced by the Dominican Republic in a bid to transform economic progress into inclusive and sustainable development. The first sub-section summarises the main achievements in relation to tackling poverty and inequality over past decades and identifies ongoing challenges. The second examines the level of social spending and the effects of taxes and transfers on income distribution and poverty alleviation. The third analyses the country's labour markets. The fourth, fifth and sixth sub-sections identify the main constraints that hinder expanding and improving education, health and social protection services.

Growth has not been sufficiently inclusive

The strong economic growth evident in most of the past 20 years in the Dominican Republic (before the COVID-19 pandemic, and with the main exception of the 2003 crisis) did not render the expected poverty reduction. Although economic expansion enhanced the living standards of citizens, including of those at the lower end of the income distribution, it did not result in significant poverty reduction. Over the 15 years following the domestic crisis of 2003, the rate of poverty declined only modestly. In 2019, more than 2 million people, representing one-fourth of the population, lived below the national poverty line. This level began to clearly decrease only after 2013, but poverty has been picking up in recent years, largely owing to the impact of the pandemic. In parallel, income inequalities are significant in the Dominican Republic: people in the top 20% of the income distribution hold more than ten times the share of income held by the bottom 20% (OECD, 2022_[29]).

Poverty and inequality declined in the last two decades but remain important

The domestic crisis of 2003 had negative long-term and durable effects on poverty, inequality and wellbeing in the Dominican Republic. In the aftermath of the banking crisis, the economy recovered rapidly while poverty decreased at a significantly slower pace. During the early 2000s, approximately one-third of the population lived below the national monetary poverty line (Figure 2.7); the domestic financial crisis of 2003 escalated the poverty rate to almost 50%. Ten years later (by 2013), poverty had fallen by 10 percentage points to 39.6% of the population – still well above the earlier figure. The extreme poverty rate followed a similar path, having doubled from 7.9% in 2000 to 15.4% in 2004, after which it gradually decreased to 9.3% in 2013. Although positive, this poverty reduction was modest in contrast to the strong growth experienced by the Dominican economy during this period (Carneiro and Sirtaine, $2017_{[30]}$).

The banking crisis also had long-lasting social effects, in part due to the lack of suitable fiscal stabilisers and counter-cyclical policies. In times of economic shocks, especially when monetary policy is constrained, automatic fiscal stabilisers and fiscal measures become particularly effective to reduce the long-term effects of a crisis (OECD, 2018_[31]). This requires a fiscal policy framework that creates sufficient fiscal space during upturns to support a stimulating fiscal policy response during downturns, including rapidly scaling up income support and active labour market programmes as needed – and mechanisms to scale them down quickly as conditions return to normal.

The impact of economic growth on poverty reduction gained momentum after 2013. Poverty fell sharply in 2014 to 34.8% and to 30.8% in 2015 (on par with levels prior to the 2003 crisis). By 2019, it hit a record low of 20.9%. It should be noted, however, that the National Labour Force Survey methodology was changed in 2016; as such, estimates from 2016 to 2021 are not perfectly comparable with previous figures (Figure 2.7).

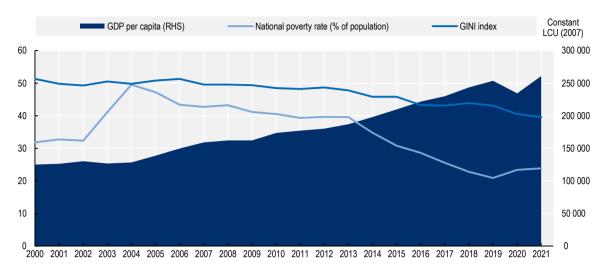


Figure 2.7. Fast growth in income per capita versus slower decline of poverty and inequality

Note: Since 2016, the surveying methodology of the National Labour Force Survey changes to become the National Continuous Labour Force Survey, so poverty data may not be perfectly comparable before and after 2015. Estimates for GDP per capita from WEO April 2022, start after 2019, base year is 2007.

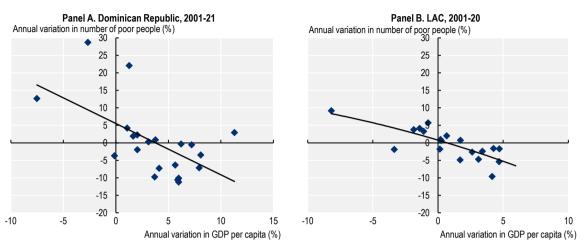
Source: Authors' elaboration based on (Ministerio de Economía, Planificación y Desarrollo, 2022[32]; IMF, 2022[11]).

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In comparison to LAC, poverty in the Dominican Republic has been more sensitive to economic contraction than to growth, particularly between 2004-13. From 2000 to 2004, while the GDP per capita increased by 0.7%, more than 1.5 million people fell into poverty (poverty increased at a compound rate of 13.2%). During the subsequent period (2004-13), when GDP per capita increased at a compound annual growth rate of 4.3%, poverty declined by only 1.4% per year. On a positive note, this relationship has changed since 2014: while GDP per-capita growth increased to an average of 5.3% per year (2014-18), poverty declined, on average, at a higher rate of 9.2% annually (Figure 2.8).

At the aggregate LAC level, comparing the annual rate of change in the number of people living in poverty and the annual rate of change in per-capita GDP, poverty in LAC over the past 15 years has correlated closely with the business cycle (Figure 2.8). Between 2002 and 2008, when the region experienced vigorous growth of per-capita GDP of 3.2% per year, the number of poor people fell at a compound annual rate of 3.7%. Between 2014 and 2016, as GDP per capita contracted by 1.3% annually, the proportion of poor people increased by 4.8%.

Figure 2.8. Links between growth and poverty reduction are weaker in the Dominican Republic than in LAC



Variation in poverty and in per-capita GDP

Note: Poverty data for Dominican Republic is from National poverty lines, and data for LAC is from (ECLAC, 2022_[33]) based on data from Household Surveys Database (BADEHOG). For the GDP per capita data is from WEO April 2022, base year is 2007, and estimates start after 2019.

Source: Authors' elaboration based on (ECLAC, 2022[22]) (Ministerio de Economía, Planificación y Desarrollo, 2022[32]) (World Bank, 2022[2]) (IMF, 2022[1]).

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Addressing child and old-age poverty is one of the biggest challenges in terms of poverty reduction in the Dominican Republic. At present, children (0-14 years old) represent 27% of total population. Relative poverty among children in 2020 was 36.5%, when defining poverty as the share of the population in each age group whose average per-capita income is below the poverty and extreme poverty line. Against the level of 42.6% in 2000, this is a small reduction. Adult poverty varies by age group, ranging from 23% for those between 25-34 years down to 8.1% for the age group 55-64 and 8% for the elderly (65 years or more) (ECLAC, 2022_[34]). If the poverty line is taken as half the median household income of the total population, the rate of poverty is about 15% for youths (18-25) and adults (26-65); it climbs to 22% among children and 28% for the elderly – almost double the adult average (OECD, 2022_[35]). Notably, while children and elderly make up around one-third of the population of the Dominican Republic, they account for about half of the poor population. Considering different approaches to analyse the poverty situation among age groups confirms that children and the elderly people are particularly vulnerable – largely reflecting that they are not participating in labour market and have little or no perceived income. Clearly, these age groups could benefit most from social protection systems, public services and targeted programmes.

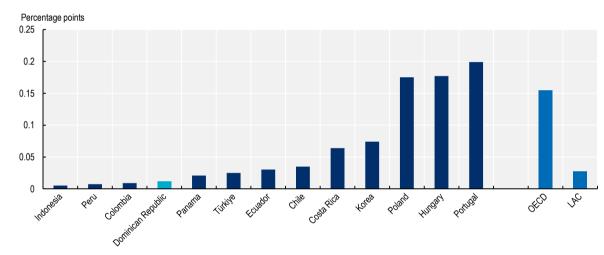
Income inequality also remained high during the almost 20 years of strong growth in the Dominican Republic, with upward economic mobility remaining relatively low. Overall, inequality fell, with the Gini index declining from 0.513 in 2000 to 0.396 in 2021 (a higher decline than the LAC average). Nevertheless, limited upward economic mobility means the disparities have become even more marked. Over the period 2004 to 2014, less than 7% of the population in the Dominican Republic moved up in the income ranks, in sharp contrast to 41% in the LAC region (Baez et al., 2014_[36]). The middle class, composed of individuals living in households with a daily per-capita income between USD 13-70 (PPP 2011), remained relatively stagnant at around 26% of the population between 2006 and 2013. However, after 2014 and as poverty

reduction accelerated, the middle class reached 42.4% of the population in 2019, before falling back to 37.1% in 2020 as the effects of COVID-19 continued to undermine progress (World Bank, 2022_[37]).

Almost half (46.9%) of Dominicans were part of the vulnerable middle class in 2020 (World Bank, 2022_[37]), defined as individuals living in households with a daily per-capita income between USD 5.5 -13 (PPP 2011). Some of these are at risk of falling into poverty owing to substantial vulnerabilities such as low labour income, insufficient skills, informal employment and poor access to quality public services (Ferreira et al., 2013_[38]).

Taxes and transfers have little power to reduce inequality and poverty

Taxes and transfers play only a modest role in shaping income distribution in the Dominican Republic. Direct and indirect taxes and transfers reduce the Gini index by less than 2 percentage points (Figure 2.9). Similarly, the poverty reduction incidence of direct transfers is modest. Households in the poorest decile receive transfers and indirect subsidies worth 10% of their market income, which is relatively low compared to most countries in LAC, OECD and benchmark economies (Aristy-Escuder et al., 2016_[39]).





Note: Data displayed is the difference between income market Gini and disposable income (after taxes and transfers) Gini. The year of the data varies among countries from 2011 to 2021.

Source: Authors' elaboration based on (Commitment to Equity Institute Data Centre, 2022[40]; OECD, 2022[41]).

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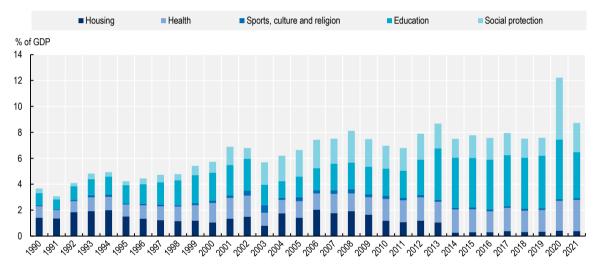
Transfers have played a slightly progressive role, with the modest impact being partially related to low social spending in the Dominican Republic, which is considerably lower than the averages in LAC, OECD and benchmark economies. It should be noted that, in the context of the COVID-19 pandemic, the government has made extraordinary efforts to protect the most vulnerable populations (see Chapter 3 for more details). Although social spending has been gradually increasing in the last three decades, it has expanded at a very slow pace (Figure 2.10). In the 1990s, growth in social spending was mainly driven by education, health and social protection, while spending in housing remained constant with the largest share of expenditure. During the early 2000s, only social protection expenditure continued to expand, as the new conditional cash transfer was introduced. Spending composition changed significantly in 2013 with the *Pacto Nacional Para La Reforma Educativa* (National Pact for Educational Reform), which established a minimum annual education spending of 4% of GDP.

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In 2020, due to the COVID-19 pandemic, expenditure on health and social protection increased significantly, from 1.7% in 2019 to 2.3% for health, and from 1.4% to 4.8% for social protection. Expenditure on health was maintained at 2.4% of GDP in 2021, but social protection expenditure dropped again to 2.2%. This drop can be explained by the fact that, although net expenditure increased from 2020 to 2021, GDP grew more than social expenditure in 2021 (Figure 2.10).

The Dominican government responded to the COVID-19 crisis with increases in the transfers of existing social programmes and the creation of new emergency measures. Regarding labour force, the Employee Solidarity Assistance Fund (FASE) was created to provide income support to formal sector workers at high risk of losing their jobs. Later, the Independent Worker Assistance Program (PA' TI) was created to provide financial help to self-employed workers (WTTO, 2022_[42]). To assist vulnerable households, the government created the Stay at Home Program (QEC), which targeted structurally poor or vulnerable households with Quality of Life Index (QLI) of 1, 2 and 3. These emergency programmes drove the increase in social spending from 7.6% of GDP in 2019 to 12.2% in 2020 and to 8.7% in 2021 (Figure 2.10).





Source: Authors' elaboration based on (Ministerio de Hacienda: Dirección General de Presupuesto, 2022[43]; IMF, 2022[1]).

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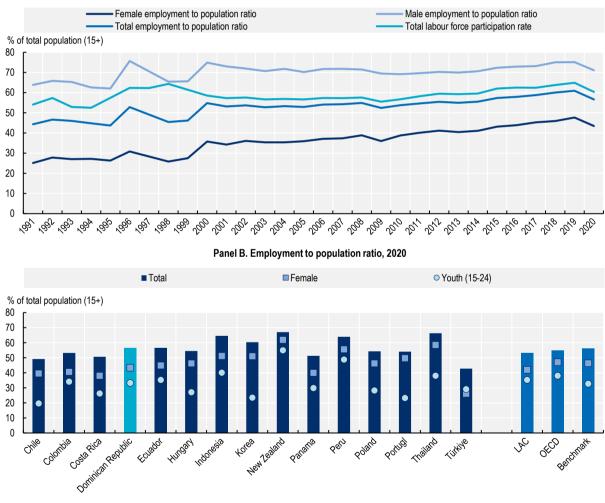
Growth did not translate into sufficient – and better – jobs

The coexistence of strong growth and modest social inclusion can be partly attributed to labour market falling short in channelling the benefits of growth to the population, which in turn contributed to making the effect of the 2003 crisis more durable. Labour force participation remained low, particularly for the poor, and unreactive even as economic activity recovered. At the same time, while strong growth was accompanied by an increase in labour productivity, wages remained stagnant. Additionally, the sectors largely driving economic growth experienced falling labour shares, possibly due to "biased" technical change that increased productivity while lowering demand for labour (World Bank, 2017_[44]). Low-skilled workers became increasingly concentrated in low-quality jobs and in sectors that showed low productivity growth, while labour informality remained high and persistent.

Labour force participation is persistently low in the Dominican Republic

While labour force participation in the Dominican Republic has been expanding, still less than two-thirds of adults participate in the labour market. Overall, labour participation remained relatively stable during the past decades, at a lower level than in most LAC, OECD and benchmark economies. In 2019, participation reached 60.9% of the Dominican population (15+) active in the labour market, whether working or looking for work (Figure 2.11). Subsequently, it decreased to 56.7% in 2020. Total employment levels have been on par with the averages for LAC, OECD and benchmark economies since 2018, while female employment remains below OECD and benchmark averages, and youth employment is lower than LAC and OECD averages (World Bank, 2022_[2]).

Figure 2.11. Economic growth has only modestly translated into more jobs in the Dominican Republic



Panel A. Evolution of employment in the Dominican Republic, 1991-2020

Note: The values for benchmark countries are a simple average. Source: Authors' elaboration based on (World Bank, 2022[2]).

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The low employment to population rate in the Dominican Republic is mainly explained by low female and youth participation. In 2020, only 43% of women aged 15+ were employed. This is partly the result of a high level of discriminatory social institutions and norms (OECD, $2022_{[45]}$). Similarly, at 33%, youth labour force participation is low; only one in five young Dominicans has a formal job. If lower participation was a result of high levels of school enrolments or training, then it could be a driver of better employment opportunities in the future. Unfortunately, only a small part of the low participation rate reflects enrolments in education and training. One in five Dominicans aged 15 to 24 are not in employment or in education. It is important to highlight that female and youth participation in employment were particularly hit by the COVID-19 pandemic, with participation decreasing by 5 percentage points compared to 2019.

Besides low participation rates, the Dominican labour market is characterised by a large share of ownaccount workers. In 2018, almost 1.5 million own-account workers represented 37% of the employed population. Usually, own-account workers hold poor quality jobs with 96% making no contributions to the social security system (Central Bank of the Dominican Republic, 2017^[46]).

Economic growth did not lead to sizeable job creation

Behind the robust but only modestly pro-poor growth process, there is low creation of jobs and relatively low elasticity of employment to growth. While the aggregate elasticity of employment to growth from 2000-16 was 0.39, estimates have changed during different periods of growth (Figure 2.12), varying from 0.32 during 2000-04, when GDP grew at 2.9% annually, to 0.40 during 2012-16, when GDP grew at 5.6% annually.

Employment elasticity represents a convenient way to summarise the employment intensity of growth or the sensitivity of employment to output growth. It is a measure of the percentage change in employment associated with a 1 percentage-point change in economic growth. As such, it can indicate the ability of an economy to generate employment opportunities for its population – as a percentage of its growth process – and can be used to track sectoral potential for generating employment (Islam and Nazara, 2000_[47]) A positive employment elasticity of growth indicates that increased output is associated with increased employment. An elasticity lower than 1 indicates that output is growing more quickly than employment, signifying both increases in productivity and in employment.

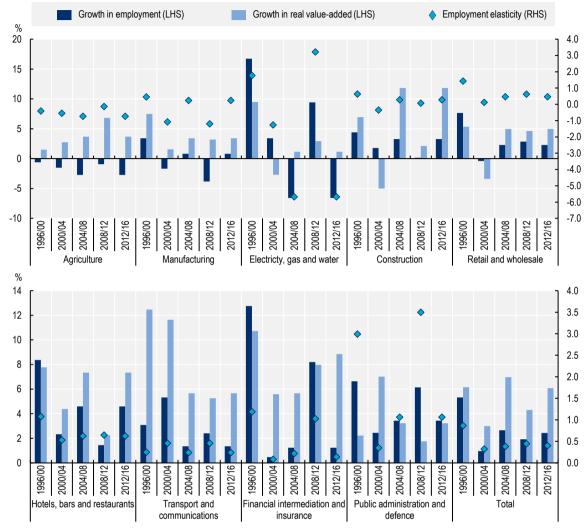


Figure 2.12. Elasticity of employment to growth is relatively low in most sectors driving growth in the Dominican Republic

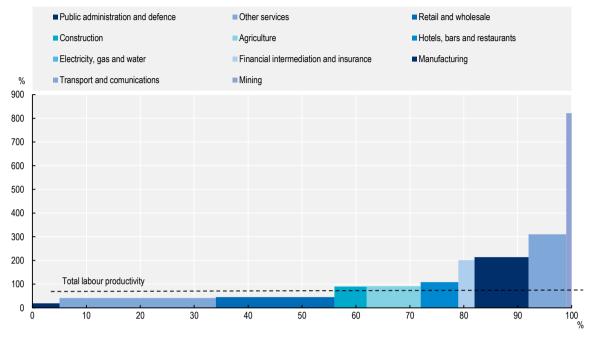
Source: Authors' calculations based on (Central Bank of the Dominican Republic, 2017[46]).

The buoyant sectors of the economy in the Dominican Republic have shown poor job-generation capacity. From 2008 to 2016, productivity gains in most of these sectors have been achieved while elasticity of job creation to economic growth has fallen or remained steady overall. Figure 2.12 shows growth in real gross value-added, employment and employment elasticity of growth across the sectors with the largest employment shares in the economy. Elasticity varies considerably across sectors ranging from construction to retail and wholesale, which experienced the most job-friendly growth. In contrast, electricity, gas and water sectors show workforce reductions during two of the five periods analysed. The services sectors (including hotels, bars and restaurants; retail and wholesale; and transport and communications) have generally been employment-intensive during the past decade. Yet, they show falling elasticity as fast employment growth was accompanied by steady productivity growth. Figure 2.13 shows the distribution of productivity and employment levels across economic sectors in the Dominican Republic.

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Figure 2.13. Productivity and the distribution of labour in Dominican Republic, 2016

Relative value-added as a percentage of workers and employment by economic sectors (y axis: 100 = total labour productivity and x-axis: % of employment)



Source: Authors' elaboration based on (Central Bank of the Dominican Republic, 2017[46]).

Most new jobs created in the last decade are in the low productivity services sector. There are significant productivity gains to be realised through labour reallocations from less to more productive sectors as well as by endowing workers with better skills. In the Dominican Republic, as in many LAC countries, jobs are moving out of agriculture and manufacture into the services sector. While productivity increased in both sectors and employment fell by 11% in agriculture and 15% in manufacture between 2008-16, rescinding more than 120 000 jobs. In parallel, almost 70% of all new jobs were created in retail, wholesale and other services while sectors that drove strong growth – e.g. construction, transport and communication, hotels, bars and restaurants – created only 18% of new jobs. Retail and wholesale and other services employed the largest shares of the population while having the lowest productivity levels; although labour productivity in both sectors increased, it was still very low (below 50%) compared to overall labour productivity.

Box 2.1. Migration in the Dominican Republic

International migration – both emigration and immigration – are a significant feature in the Dominican Republic, offering substantial potential for development. Emigration has been consistently growing since 1990, from approximately 458 000 people to 1.6 million in 2020, with around 1.1 million emigrants (68.8% of total) living in the United States. Emigrants have been a particularly resourceful boon to the Dominican economy. In 1980, they remitted USD 183 million – a figure that remained relatively stable until 1990. In 1992, the amount remitted almost doubled to USD 347 million; by 2000, remittances were estimated to be nearly USD 2 billion. In 2019, they surpassed USD 7 billion, equivalent to 8.6% of GDP (World Bank, 2022_[2]); just two years later (2021), personal remittances of USD 10.7 billion accounted for 11.3% of GDP (UN Migration, 2022_[48]). In comparison, foreign direct investment (FDI) inflows were

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at 3.4% of GDP in 2018, while official development assistance was at 0.2% of GNI in 2017 (World Bank, $2019_{[49]}$). Remittances are thus an important financial flow.

The Dominican Republic also has a growing number of immigrants, with a sharp increase evident between 2010 and 2015 after the earthquake in Haiti. In 2017, there were over 500 000 estimated immigrants, primarily from Haiti (336 000, 67%) (World Bank, 2018_[50]).Immigration has continued increasing, reaching more than 600 000 in 2020 (UN Migration, 2022_[48]). The Dominican Republic is among several developing countries dealing with increasing immigration and integration challenges, with mixed results.

The role of migration is acknowledged in national development planning in the Dominican Republic, through the National Migration Council and the National Migration Institute. However, migration's development potential is not fully reflected in its policy framework. A study by the OECD Development Centre, based on empirical data collected in the Dominican Republic in 2014 and 2015, shed light on the complex relationship between migration and sectoral policies (OECD/CIECAS, 2017[51]) It found that the various dimensions of migration – emigration, remittances, return migration and immigration – have both positive and negative effects on key sectors of the Dominican economy. Similarly, sectoral policies have indirect and sometimes unexpected impacts on migration and its role in development. Understanding these impacts is critical for developing coherent policies. For example, the analysis found that vocational training programmes may encourage citizens to emigrate - especially women and urban residents - by making them employable abroad. It also found that formal titles to land can help develop land markets while allowing households to use land as collateral, without fear of losing the land when they emigrate. In fact, having an official land title is positively linked to a household having an emigrant. Public policies also affect remittances. Households with a bank account were more likely to receive remittances. Yet almost two-thirds of households sampled in the OECD study were found to be unbanked and only a few had participated in a financial training programme in the past five years.

The 2017 OECD study shows that many sectoral policy makers do not yet sufficiently take migration into account in their areas of influence and some policies seem to be inadvertently contributing to emigration. Migration needs to be considered in the design, implementation, monitoring and evaluation of relevant sectoral development policies. In turn, a more coherent policy framework across ministries and at different levels of government would help to optimise migration.

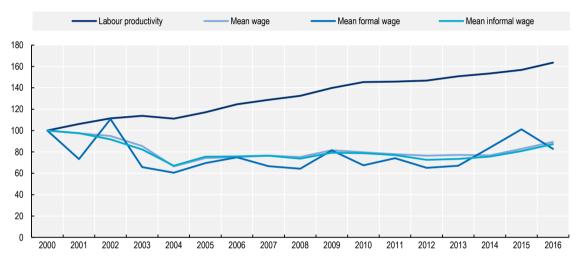
Another study by the OECD Development Centre focuses specifically on immigration and three dimensions of its economic contribution to the Dominican Republic: labour markets, economic growth and public finance (OECD/ILO, 2018_[52]). It found that immigrants have higher labour force participation and employment rates than the native-born population and tend to replace native-born workers, particularly those with low skills. The study also found that immigrants contribute to economic growth: given the sectoral distribution of workers and their productivity, immigrants are estimated to contribute between 3.8% and 5.3% of the value added in the Dominican Republic, compared to their share in the population at 4.2%. In 2007 (the latest year for which data were available), immigrants made a positive and larger net fiscal contribution than the native-born population, reflecting that they paid more in indirect taxes and benefited less from public expenditures on social security, social assistance and education. The limited impact of immigration on the economy means that the Dominican Republic is not fully leveraging its potential for development. A lack of integration can cause problems with social cohesion in the Dominican Republic and hamper the way immigrants contribute to development. Priorities should therefore be given to policies that invest in migrant integration.

Sources: (World Bank, 2022[2]; World Bank, 2019[49]; OECD/CIECAS, 2017[51]; OECD/ILO, 2018[52]; UN Migration, 2022[48]).

Productivity and wages have decoupled

Aggregate labour productivity growth in the Dominican Republic decoupled from real average compensation growth in a period of analysis spanning 2000-16. The robust – but only modestly inclusive – growth was largely fuelled by fast-growing labour productivity. Aggregate labour productivity grew by 68% from 1996 to 2016 but presumably only part of the benefits of these productivity gains were translated to workers. Overall, increasing productivity did not appear to raise real wages for the average worker, as illustrated by three measures of real labour compensation: average national wage, average formal national wage and average national informal wage (Figure 2.14).

Figure 2.14. Labour productivity growth decoupling from growth in wages in the Dominican Republic, 2000-16



Index 2000 =100

Note: Labour productivity is the annual value-added per hour worked. Source: Authors' elaboration based on (Central Bank of the Dominican Republic, 2017[46]).

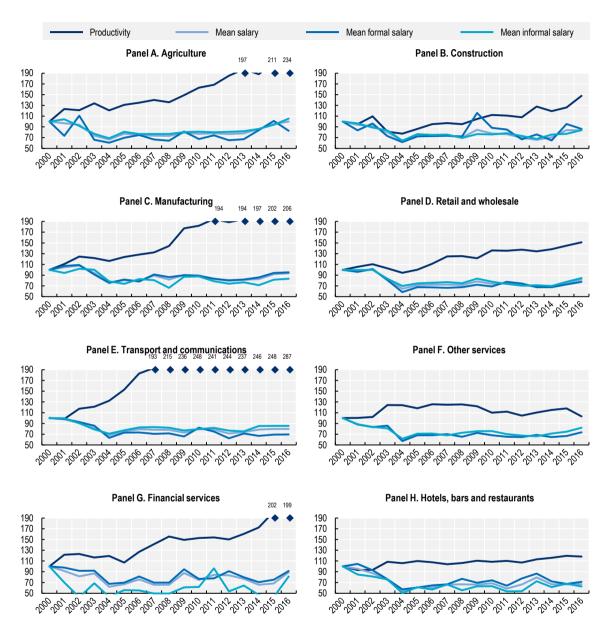
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At the sector level, productivity and wages followed the aggregate trend. It should be noted that sectoral categories aggregate medium and small enterprises (MSMEs) as well as large business that have different levels of productivity and wages. Labour productivity growth in all sectors decoupled from real average compensation growth. In agriculture, manufacturing, transport and communications, as well as in financial services, productivity and wages followed very different paths compared to the other sectors (Figure 2.15). In fact, productivity rapidly spiked while wages decreased, suggesting that firms failed to compensate workers for gains in productivity. In contrast, productivity grew at a slower pace in construction, retail and wholesale, hotels, bars and restaurants, and other services. Both patterns suggest that a role exists for public policies to ensure productivity gains are better shared in some industries while not eroding competitiveness in others.

The sectoral analysis also reveals that labour productivity grew less in sectors with higher job creation capacity, concentration of informality and unskilled workers. Employment in construction, retail and wholesale, hotels, bars and restaurants, and other services accounted for 64% of the labour force of the Dominican Republic. Labour productivity growth in most of these sectors was less dynamic than in the rest of the economy. In fact, in the hotel, bars and restaurant sector, productivity gains account for less than

20% in 16 years. This confirms that poor and vulnerable workers were relatively more clustered in low-skilled, lower productivity economic activities (World Bank, 2017^[44]).





Index 2000 =100

Note: Labour productivity is the annual value-added per hour worked. The diamonds are values that outstand the scale of the graph and correspond to the productivity series.

Source: Authors' elaboration based on (Central Bank of the Dominican Republic, 2017[46]).

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Labour market institutions can be strengthened in the Dominican Republic

Many Dominican workers have few alternative employment options and low bargaining power. With less than 10% of the workers unionised, collective bargaining and trade union coverage is low (OECD/ILO, 2018_[52]). Moreover, informal and self-employed workers have almost no scope to organise and bargain collectively. Strong power imbalances that favour employers over workers tend to put downward pressure on labour demand and wages; effective policies can help restore the balance and improve both equity and efficiency (OECD, 2018_[31]).

Collective bargaining and social dialogue can complement government efforts to make labour markets more inclusive. They can also be useful institutions to help companies respond to demographic and technological changes by allowing them to adjust wages, working time and work organisation as well as adapt tasks to new needs in a more flexible and pragmatic manner than through labour regulation (while remaining fair). In some OECD countries, social partners play a significant role in providing active support to workers who have lost their jobs and in anticipating skills needs (OECD, 2018_[31]).

At present, the system of minimum wage in the Dominican Republic is complex, with several wage levels depending on different criteria. The National Salary Committee (*Comité Nacional de Salarios,* CNS), which is part of the Ministry of Labour, is in charge of fixing the minimum wages through meetings organised with employers and employees of the sector concerned (Chapter 3). This complex minimum wage system offers flexibility to tailor the evolution of the minimum wage to the conditions in each sector. However, more complex minimum wage matrices are more difficult to communicate, enforce and monitor, and require higher institutional capacity on the part of the state. In fact, they require that members of a minimum wage board understand the characteristics of all the sectors, firms and regions. Thus, systems that are overly complex, as is the case in the Dominican Republic, tend to lose their effectiveness (World Bank, 2017_[44]).

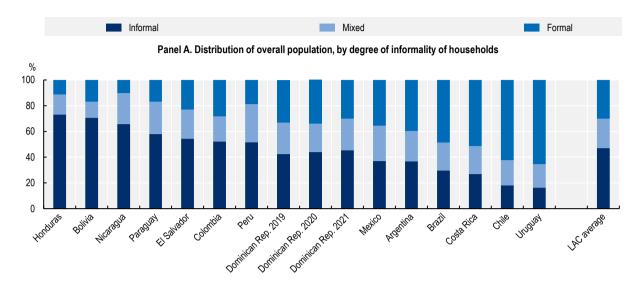
While the minimum wage sets a floor informed by technical criteria, it should be distinguished from collective bargaining, which can be used to set wages above an existing floor. In the long run, strengthening collective bargaining at the firm or sector level would make the current complex matrix unnecessary. As working conditions would be negotiated between workers and firms and/or sectors, salaries would better reflect productivity changes, thus guaranteeing that both workers and firms profit from them.

A large share of jobs are still informal

Labour informality has remained almost stagnant at around half of the country's jobs for the past two decades. Informal work, by definition, leaves workers without the right to a pension, health insurance and the general entitlements of the formal sectors (this report uses this definition). In 2021, the informal employment rate reached 59% (up from 55.3% in 2019) and 45.4% of the population lived in households where all workers were employed in informal jobs (Figure 2.16).

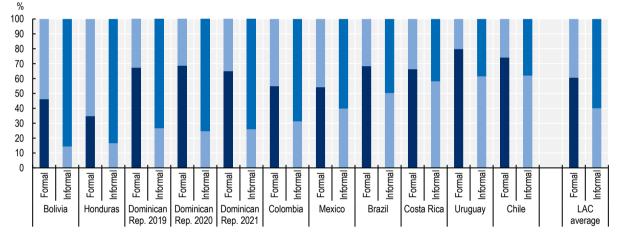
Informality is one of the main obstacles to making the labour market in the Dominican Republic more inclusive. The incidence of informality is much higher for workers from poor and vulnerable households, youth, and the less educated, perpetuating the vicious cycle of inequality and low productivity (see Chapter 3 for more details).

Moreover, inequalities in the labour market start early. Young workers from poor or vulnerable families are more likely to hold informal jobs than those from the middle class. In turn, youth from these households leave school earlier than their peers in better-off households. At age 15, nine of ten youth living in poor households are in school; at age 30, seven of ten are informal workers or inactive. In vulnerable households, six of ten young people are informally employed or inactive. Remarkable differences are observed among consolidated, middle-class households: at age 15, nine of ten youth are in school; at age 30, seven of ten have formal jobs. This suggests that a certain degree of labour market segmentation exists in Dominican Republic, making the transition from school to work a particularly relevant stage in young people's careers and futures (OECD/CAF/ECLAC, 2018_[53]) (Chapter 3).





Panel B. Distribution of formal and informal workers, by degree of informality of their household



Note: Estimates for selected LAC countries correspond to 2018 or the closest available year. The LAC average is the unweighted average of the 14 LAC countries studied. To ensure microdata comparability and availability, estimates for the Dominican Republic use the ENCFT data for the third guarter of 2019, 2020 and 2021.

Source: Authors' elaboration based on (OECD, forthcoming_[54]), using the Key Indicators of Informality based on Individuals and their Household (KIIbIH) database.

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Education outcomes have improved mostly in terms of access, but quality remains a challenge

Despite progress, educational attainment in the Dominican Republic is low in international comparison (Figure 2.17). Although coverage has expanded over the last decade – especially in pre-primary and secondary education – the country lags behind benchmark economies. Only 34% of the population aged 25-64 had completed secondary education in 2016, in contrast with the OECD average of 71% (OECD, 2018_[55]). Moreover, only 12% of this population had attained a higher education degree. In 2016 (the latest internationally comparable data available), the mean years of schooling of the population 25 years and

older in the Dominican Republic was 9, compared to 9.8 years for benchmark economies in 2020^{1} (UNESCO, $2022_{[16]}$). The gross graduation ratio from first degree programmes in tertiary education remained low at 31.4% in 2017.

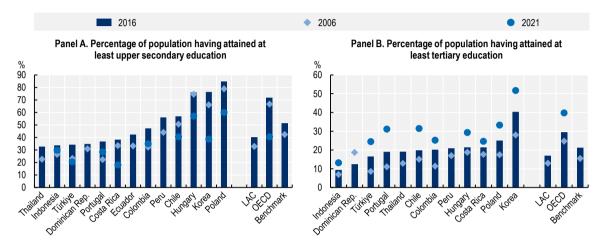


Figure 2.17. Educational attainment in the Dominican Republic remains low despite some improvements

Note: For tertiary education in 2006, values for Costa Rica and Chile are from 2007, from 2008 for Poland, and from 2009 for Hungary and Korea; for 2016, values are from 2015 for Dominican Republic, Chile, Peru, and Korea. For upper secondary education in 2006, values are from 2007 for Dominican Republic, Costa Rica, Ecuador and Chile, 2008 for Poland, 2009 for Hungary and Korea, and 2010 for Panama. For upper secondary education in 2016, values are from 2015 for Dominican Republic, Chile, Korea and Peru. Data not available for Panama after 2010. The values in 2021 are from 2020 for Chile.

Source: Authors' elaboration based on (OECD, 2022[18]; UNESCO, 2022[16]).

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Learning outcomes in the Dominican Republic remain insufficient and the gap with respect to LAC, OECD and benchmark economies is large and has persisted across time, directly impacting the well-being of the population. Moreover, the COVID-19 pandemic caused prolonged school closures. Over the period March 2020 to May 2021, schools in the Dominican Republic remained closed for 33 weeks, higher than the LAC average of 26 weeks (OECD et al., 2021[27]). This has negative consequences for children and adolescents such as falling enrolment rates, learning loss, increasing risk of malnutrition, increasing risk of domestic violence and affectations on mental health (Azevedo et al., 2020[56]; Busso and Camacho, 2021[57]). As closures continued during 2020, the Dominican Republic managed to implement distance learning solutions such as: digital content for teachers, parents and students that was published through the website of the Ministry of Education; distribution of physical learning material; use of social media, radio and television to disseminate educational content; and delivery of electronic devices (IDB, 2020[58]). To move forward, the country must increase efforts to collect data to diagnose the content lost in the learning process and quantify these losses. This is fundamental to design appropriate interventions that target these losses globally and identify the most-affected students. Also, strategies should be developed to locate and try to reintegrate students who dropped out (Näslund-Hadley and Ortiz, 2022[59]). Evidence shows that the survival rate² to the last grade of primary education sharply decreased from 85.2% in 2019 to 56.2% in 2020 (UNESCO, 2022[16]).

School enrolment and student retention are low for some levels of education

Education in the Dominican Republic is compulsory and free from pre-school to secondary school. The system is structured into three main blocks. Initial education covers all pre-primary education, yet only preschool (age 5) is compulsory. Primary education consists of a 6-year cycle (corresponding to Level 1 of the International Standard Classification of Education [ISCED]). Secondary education also consists of a 6-year cycle (corresponding to ISCED Levels 2 and 3).

In terms of coverage, despite improvements in the past decade, enrolment rates across all education levels remain below LAC, OECD and benchmark economies. Similar to other LAC economies, while almost all primary age students attend school, the Dominican Republic exhibits low enrolment rates for pre-primary (57%), secondary (71%) and tertiary (61%) education (Figure 2.18).

Most of the recent progress has been made in pre-primary education, although coverage is still low. Since 2014, pre-primary education has been free when provided in public schools, which led to a relatively high pre-school enrolment rate. The gross enrolment rate in initial education was 47.9% in 2015, up from 35.1% in 2007, sharply below rates of over 93% in primary education (World Bank, 2022_[2]). International evidence has shown that quality preschool and early child development programmes can have a significant impact on future school performance and, ultimately, on earnings, with the highest impact on children from low-income families (World Bank, 2018_[50]). In terms of enrolment, secondary and tertiary education also remain key challenges for education progress. Since 2014, enrolment rates in secondary education increased by 7 percentage points up to 70.6%. In line with other countries in the region, the Dominican Republic shows a rapid increase in access to tertiary education; although the enrolment rate of 61.2% surpasses the LAC average, it remains low compared to OECD and benchmark economies.

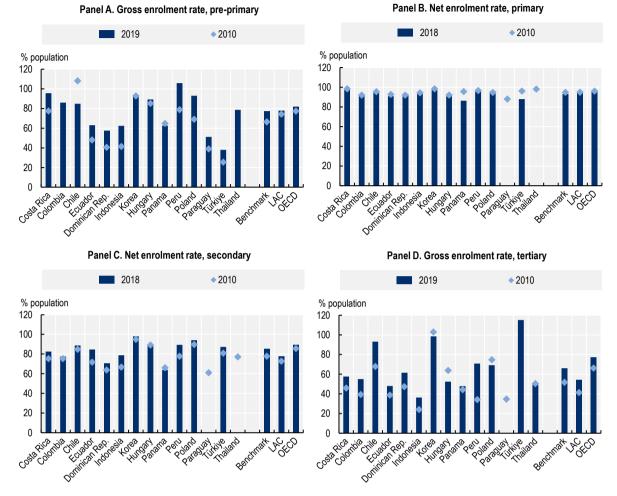


Figure 2.18. Enrolment rates remain low for some levels of education in the Dominican Republic

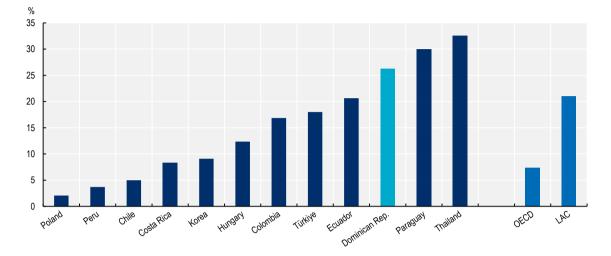
Note: Certain values are from different years, as follows. For pre-primary enrolment, 2010 data for Korea are from 2013; 2019 data are from 2020 for Colombia and Paraguay, and from 2018 for Indonesia. For primary enrolment in 2010, data are from 2011 for Costa Rica and from 2009 for Türkiye; for 2018, data are from 2017 for Chile, Korea, Hungary, Panama, Poland and Türkiye while older values for Paraguay (2012) and Thailand (2009) were not included. For secondary enrolment in 2010, data are from 2011 for Costa Rica; values for 2018 are from 2017 for Chile, Korea, Hungary, Panama, Poland and Türkiye while older values for 2018 are from 2017 for Chile, Korea, Hungary, Panama, Poland and Türkiye while older values for 2018 are from 2017 for Chile, Korea, Hungary and Panama. For tertiary enrolment in 2010, values are from 2011 for Costa Rica; from 2008 for Ecuador and from 2006 for Peru; values for 2019 are from 2016 for Panama and Thailand, from 2017 for Peru, and from 2018 for Indonesia. Gross enrolment rates were used when net enrolment data was not available.

Source: Authors' elaboration based on (World Bank, 2022[2]).

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Although enrolment rates have improved in the Dominican Republic, few students graduate from secondary education, which undermines strong skills acquisition. For the basic education programme, of every 100 students who begin school in first grade, only 75 complete fourth grade, 63 complete sixth grade, and 52 complete the programme on time (World Bank, 2018_[50]). Dropping out of school before completing secondary education truncates the path towards higher education, exacerbates inequalities and reduces the skill base of the labour force. More than 10% of lower secondary school students drop out of school every year and drop-out rates have increased since 2009. The rate of repetition in lower secondary had been decreasing – from 8.2% in 2015 to 2.9% in 2019 – but significantly increased again to 9.4% in 2020. In that year, more than 25% of secondary students were out of the school system before completing their studies (Figure 2.19), a trend that has remained unchanged for the past ten years and that places the

country above most benchmark economies. This rate increased sharply to 32% in 2021 (UNESCO, 2022_[16]), evidencing some of the negative effects the COVID-19 pandemic has on school attendance.





Note: Data corresponds to 2020 or latest year available. OECD (2018) and LAC (2019) are simple averages. Number of youth of official upper secondary school age who are not enrolled in upper secondary school expressed as a percentage of the population of official upper secondary school age.

Source: Authors' elaboration based on (UNESCO, 2022[16]).

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Education and skills can play a major role in tackling inequality

For all levels of education and age groups, education enrolment in the Dominican Republic is higher for students in higher income households than for those from lower income households (Figure 2.20). Differences are particularly wide for pre-primary and tertiary education. In 2016, 74% of children aged 3-5 years in households from the top income quintile were attending an educational institution, compared to 64% of children in the lowest quintile. The smallest difference is in primary school (ages 6-12), with only 4 percentage points difference between the top and bottom income guintiles and net enrolment rates being very high (100%) for the top quintile. A large net enrolment gap exists for secondary education between adolescents from the lowest guintile (56%) and the highest guintile (88%). This evidences that students from the lowest income guintile are more susceptible to lag behind, drop out or remain out of school when they reach secondary education. Consequently, the gap widens at tertiary education at which point only 12% of youth from the lower income guintile enrol compared to 49% from the top guintile. The enrolment rate for the age group 18-23 is much higher than that for tertiary education, meaning youth in this age group are enrolled at secondary or non-tertiary education. The enrolment gap at this age group is 20 percentage points, being 40% for students in the lowest quintile versus 60% in the top quintile. In parallel, enrolment rates are higher among children living in cities than in rural areas. The low coverage and significant differences in pre-primary, secondary and tertiary education enrolment prevent the country from advancing towards equal education opportunities for all children, in particular for low-income households.

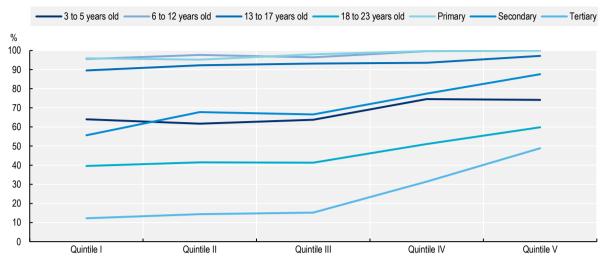


Figure 2.20. Enrolment by income quintiles and ages, 2016

Source: Authors' elaboration based on (CEDLAS/World Bank, 2022[60]).

Wide territorial disparities are evident in terms of educational coverage and attainment. On average, citizens of the Santo Domingo Capital District attain 8.9 years of education; in contrast, people living in Baoruco, Elías Piña and Pedernales attain five years of education or less. Except for primary education, the urban/rural coverage gap has persisted over a long time. Gaps are especially large in pre-primary and tertiary education, although they have been progressively narrowed. For example, in San Pedro de Macorís, more than 56% of children of age 5 or younger attend school, while only 19% do so in Pedernales. Likewise, more than 71% of the tertiary education population in Santo Domingo Capital District is enrolled in the education system compared to only 31% in El Seibo.

Access to education in the Dominican Republic is mainly equal across gender. Differences in enrolment rates between females and males are visible only at upper secondary and tertiary education. In 2019, the gender parity index (GPI) in pre-primary, primary and lower secondary education was 1.0, revealing enrolment parity. At upper secondary and tertiary education, however, enrolment of females was higher reflected in GPIs of 1.2 and 1.4,³ respectively (World Bank, 2022_[61]).

Low education quality is a major obstacle for inclusiveness

The Dominican Republic faces great challenges to improve learning outcomes in both primary and secondary schooling. Recent expansion in education spending (4% of GDP annually) will take some years to produce better outcomes. The increase in access in the past two decades has not been accompanied by parallel improvements in quality, which impedes students from advancing to higher stages of education.

The overall quality of the education system is insufficient. Among more than 70 countries participating in the OECD's Programme for International Student Assessment (PISA) in 2018, the Dominican Republic was the lowest performer in mathematics and science, and the second-lowest performer in reading (after the Philippines) (OECD, 2019_[62]). As much as 75% of young Dominican students enrolled in high school did not acquire basic-level proficiency in all three subjects (i.e. performed below Level 2, the baseline level of skills needed to fully participate in society). In particular, 79.1% of students performed below Level 2 in the reading test, a much poorer result than the average of 53.3% for LAC countries participating in the PISA test and significantly below the 22.6% average in OECD countries (Figure 2.21). This presents a major challenge for countries transitioning into knowledge-based economies in which citizens need to

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innovate, adapt and leverage advanced skills. In terms of pertinence for the Dominican Republic, the matching between skills demand and supply is still poor.

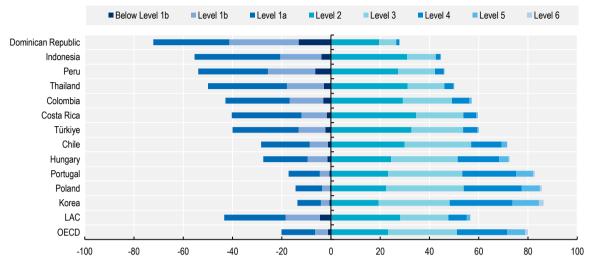


Figure 2.21. Student proficiency in reading in PISA 2018

Note: Countries and economies are ranked in descending order of the percentage of students at Levels 2, 3, 4, 5 and 6. LAC is simple average (Argentina, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Mexico, Peru, Trinidad and Tobago and Uruguay). Source: Authors' elaboration based on (OECD, 2019₍₆₂₎).

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Electricity, water and sanitation services are insufficient

The Dominican Republic has advanced in providing households with electricity, water and sanitation services, yet these systems face numerous challenges. Electricity access has improved the most, now covering 100% of those living in urban and rural areas. Provision of the electrical service, however, remains caught in a vicious cycle of regular blackouts, high operating costs, large losses, and low bill collection rates, while a system of direct and indirect subsidies that add an excessive fiscal burden to the government budget. As a result, many consumers have opted to pay high costs to ensure alternative self-generated electricity (World Bank, 2014_[63]).

These inefficiencies were addressed in the *Pacto Nacional para la Reforma del Sector Eléctrico en la República Dominicana (2021-2030)* signed in February 2021. The pact aims to build an efficient, competitive and sustainable electric system, including a responsible environmental vision. Some of the goals are to reduce energy losses to 15% in six years, increase the standards and supervision of the quality of the service and the measuring appliances, and gradually decrease subsidies to reach a maximum rate of 12% in 2023. The high inflation post-COVID-19 context forced the government to pause future increases in electricity rates and start conversations to revaluate the goals of the pact (Presidencia de la República Dominicana, 2021_[64]).

In terms of water and sanitation, significant advances have been made in the last 20 years but access is still not universal. At national level, on average 90% of the population has access to safe water and 87% to sanitation facilities. Conversely, sewerage coverage still lags, with only 22% of the population having access – far below the LAC average of 58% (Figure 2.22). For the rural population, the shares drop to 76% for safe water, 66% for sanitation and 3% for sewerage. The country shows a high mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene with 2.2 deaths per 100 000 inhabitants in 2016, well above average rates for LAC (1.8 deaths), OECD average (0.4 deaths) and all benchmark economies except those in Southeast Asia (World Bank, 2022_[2]).

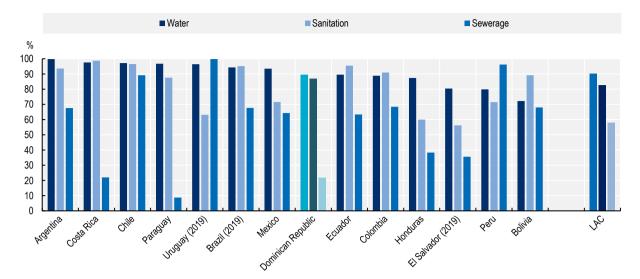


Figure 2.22. Water, sanitation and sewerage access, 2020

Note: LAC is a simple average of Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Mexico, Paraguay, Peru and Uruguay.

Source: Authors' elaboration based on (CEDLAS/World Bank, 2022[60]).

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Inequalities persist beyond rural and urban zones, present also in sub-national regions of the Dominican Republic. Access to water and sanitation and electricity infrastructure is unequal across territories. The largest disparities can be observed in water and sanitation services, partially because they lag in terms of coverage. A difference of 50 percentage points is evident across sub-national regions between the highest and lowest coverage of both water and sanitation infrastructure.

Access to good quality health remains unequal

While the impacts of COVID-19 showed some of the weaknesses of the health system in the Dominican Republic, it also served as an opportunity to identify areas for improvement. For instance, measures were adopted in 2020 to include 2 million citizens into the subsidised regime of the National Health Service (SENASA), among which were those whose jobs had been suspended in the context of the pandemic and who were initially protected by temporary programmes. This involved moving from a coverage of around 7.9 million people in December 2019 (76% of the population) to 9.65 million in December 2020 (92%) and 9.9 million in July 2021 (93%) (CISS, 2022_[65]).

The quality of care and health outcomes of the Dominican Republic are low. The country faces a double burden of high maternal, neonatal and child mortality rates, and an increasing share of non-communicable diseases, including cardiovascular disease (CVD), cancer, diabetes and chronic renal diseases (CRD) (Figure 2.23). Poor improvements in outcome indicators leave the country well behind the averages for LAC and benchmark economies. Special attention should be placed on under-five mortality rate (35% per 1 000 live births), which more than doubles the LAC average (16%) and triples that of all benchmark economies (11%).

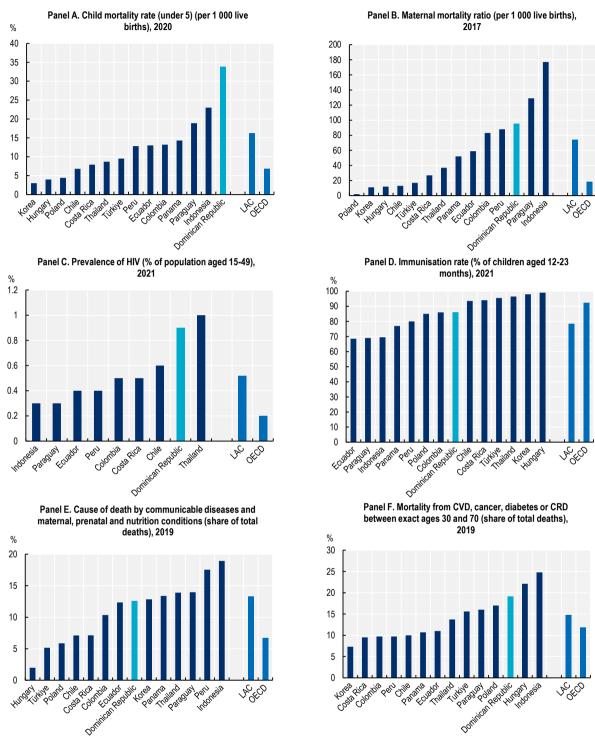


Figure 2.23. The quality of care and health outcomes of the Dominican Republic is insufficient

Notes: The immunisation rate is the average of the immunisation rate of measles and of diphtheria, pertussis and tetanus (DPT). Values of the prevalence of human immunodeficiency virus (HIV) for the OECD do not include Belgium, Canada, Finland, Iceland, Israel, Korea, Rep., Latvia, Poland, Sweden, Switzerland, Türkiye, United Kingdom and United States. Source: Authors' elaboration based on (World Bank, 2022_[2]).

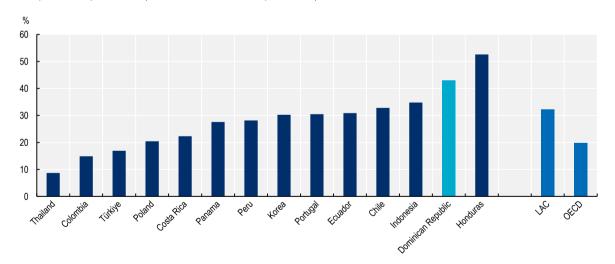
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Large gaps persist between coverage and the quality of services provided across health systems in the Dominican Republic. Analysing the extent to which health services translate into improved health outcomes is one common way to assess the quality of the health service. Trends in maternal and child mortality, as well as in premature deaths (deaths under age 75 that could potentially be avoided, given effective and timely healthcare) serve as indicators for a combination of access and quality of health services. Almost 13% of total deaths in the Dominican Republic are attributed to communicable diseases – double the OECD average (7%). Likewise, 19.1% of deaths among people aged 30 to 70 are attributed to CVD, cancer, diabetes or CRD, which is significantly higher than averages for LAC (14.8%) and OECD (11.8%).

The poor quality of public services is reflected in the large share of the population using private facilities, especially among the higher income quintiles (World Bank, $2018_{[50]}$). Almost 66% of Dominicans used public facilities for outpatient consultations in 2015, while only 50% used the inpatient services. These shares are significantly lower than in other upper middle-income LAC countries such as Costa Rica (80%) and Panama (70%) (World Bank, 2018_{[50]}).

Despite recent efforts, the Dominican Republic falls short on achieving universal health coverage. In the past decade, the country has especially advanced in terms of population coverage and access to basic health services (e.g. immunisation, family planning, prenatal care, skilled attendance at birth, and improved water and sanitation). Yet population coverage remains insufficient, public spending on health is low and out-of-pocket payments are high (Figure 2.24). As a result, citizens – especially those in the poorest quintiles – find it difficult to receive needed health services without facing financial hardship (World Bank, 2015_[66]).

Figure 2.24. Individuals assume a relatively large share of total health expenditures in the Dominican Republic



Out-of-pocket expenditure (% of current health expenditure), 2019

Note: The LAC average is a simple average of 33 countries for which data is available. The OECD average is a simple average for 38 member countries.

Source: Authors' elaboration based on (World Bank, 2022[2]).

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Individuals in the Dominican Republic assume a relatively large share of total health expenditures. In 2019, they paid 43% of health expenditures out of their own pockets, more than double the 20% recommended by the World Health Organization and also higher than the averages for LAC (32.2%) and OECD countries

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(19.8%) (Figure 2.24). Moreover, health expenditures have been increasing and accounted for 14% of the poverty gap in 2016. In 2018, 8.2% of the Dominican population was spending more than 10% of household consumption or income on out-of-pocket health care expenditure. Lower out-of-pocket expenditure on health reduces the risks of catastrophic or impoverishing health spending while higher public spending is associated with higher financial protection (WHO, $2016_{[67]}$; WHO, $2017_{[68]}$). This indicator reflects the extent to which public health systems offer protection to citizens. High out-of-pocket payments are of great concern as they may force low-income households to cut back in relevant areas such as food and education or fall into deeper poverty levels when faced with large exogenous health shocks (WHO, $2017_{[68]}$).

The social protection system is fragmented, limiting the efficiency of service delivery

Despite recent improvements, social protection coverage is low in the Dominican Republic compared to the rest of LAC. In 2016, only 38.5% of the economically active population contributed to a pension system (Figure 2.25) Low coverage is strongly related to the high prevalence of labour informality, which affects more than half of Dominican workers (Chapter 3).

In terms of pensions in the Dominican Republic, two systems co-exist – the old defined benefit system and a new defined contribution system – both with very low coverage. Overall, the pension system is a contributory scheme. Since the pension reform of 2001, it is based on individual capitalisation accounts. All workers, both public and private, and their employers must contribute to their respective capitalisation accounts and must pay an insurance premium for disability and survivor coverage. In parallel, the old defined benefit scheme still offers old-age insurance coverage to a closed group of affiliates aged 45 or older at the time that the law went into effect. This group encompasses both public employees and a limited segment of formal workers in the private sector (OECD/IDB/The World Bank, 2014_[69]). Public-sector workers who opted not to join the individual account system remain in the old social insurance system for public-sector workers.

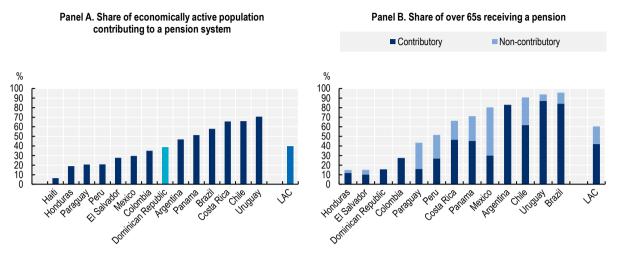
New labour-market participants must enter into the mandatory scheme of the new Dominican Pension System, including those affiliated to the previous schemes who were 45 years old or younger when the reform went into effect. Workers contribute 2.87% while employers contribute 7.1% of base wages for old age, disability and survivors' insurance. Of this amount, 8 percentage points are allocated to individual capitalisation accounts. Disability and survivor insurance premiums are established by law up to a maximum of 1% of the contributory wages. In turn, administrative fees are established by law up to a maximum of 0.5% of wages, although the pension fund management companies also charge up to 30% of the returns on investments above a certain threshold. A charge of 0.07% applies to finance the Superintendent of Pensions' operating costs and a contribution of 0.4% goes to the Social Solidarity Fund. Benefits can be drawn as programmed retirement or annuities indexed to the consumer price (OECD/IDB/The World Bank, 2014_[69]).The retirement age for both women and men is 60 years old.

Concurrently, the old pay-as-you-go social system for private-sector workers was closed to new entrants in 2003 and is being phased out. It still covers two groups: private-sector workers who were aged 45 or older in 2003 and chose to remain in this system; and private-sector pensioners who began receiving their pensions before June 2003.

Subsidies to individual accounts for self-employed, informal and other vulnerable workers have not yet been implemented. The 2001 social security law introduced a social assistance for old-age and disability, as well as a survivor pension; so far, however, this scheme has not been fulfilled. As a result, coverage remains low and old-age poverty high.

Figure 2.25. Pension coverage is low in the Dominican Republic

2016 or latest year available



Notes: Panel B shows the ratio of the total number of pension beneficiaries (contributory or non-contributory) over the total population of individuals aged 65 and over. Contributory beneficiaries include those receiving old age, disability, and widows' pensions. Data for Brazil, Chile and Panama is from 2015; from 2012 for Haiti.

Source: Authors' elaboration based on (IDB, 2018[70]).

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Prosperity: Structural reforms to boost inclusive growth

Growth has been strong, but the labour productivity gap relative to high-income countries is still large

Since the early 1990s, the Dominican Republic has experienced a period of stable growth, which has allowed the country to reduce its living standards gap relative to high-income countries (Figure 2.26). On average, real GDP grew by 5.1% between 1993 and 2021, raising GDP per-capita from 6.6% to 13% of US GDP per capita. Structural reforms and stabilisation policies facilitated strong growth performance during the 1990s and 2000s. Together with the proximity to North American markets, this helped attract FDI in the manufacturing and tourism sectors. Investment became the fastest-growing component of domestic demand, contributing to 16.6% of GDP in 1991 and 30% in 2021. The COVID-19 pandemic triggered a decline of GDP per capita by 7.5% in 2020 which was followed by a rebound of 11.3% in 2021 (IMF, 2022_[1]).

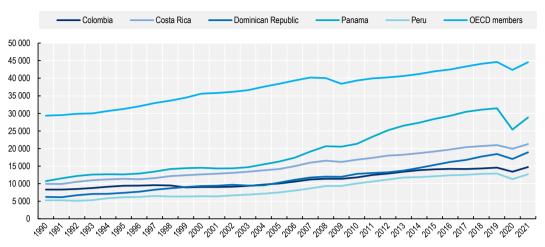


Figure 2.26. Growth in the Dominican Republic has been strong since the early 1990s

Note: The graph shows real GDP per capita in USD PPP of 2017. Source: Authors' elaboration based on (World Bank, 2022_[2]).

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Strong capital accumulation and increases in total factor productivity (TFP) led to a considerable surge in output per worker, raising the average living standards of the Dominican population. TFP growth and capital deepening accounted for more than 50% of real GDP per-capita growth during the last two decades (Figure 2.27). The rise in employment rates, as well as an increase of the working age population relative to total population, have contributed 0.8 percentage points to real GDP per-capita growth between 2013 and 2018. However, the demographic dividend is shrinking. Population projections indicate that the rise in working age population will slow significantly and will not contribute to further GDP per-capita growth. To maintain current growth rates, structural reforms are needed to increase labour productivity and employment rates.

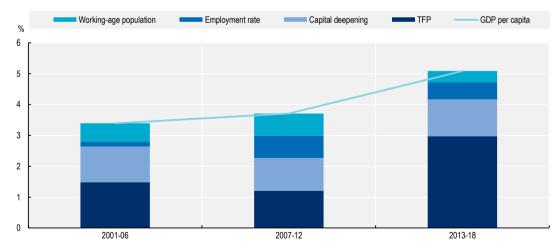


Figure 2.27. Real GDP per-capita growth was mainly driven by TFP growth and capital deepening

Note: The figure shows the decomposition of real GDP per-capita growth into its components (TFP growth, capital deepening, the growth of the employment rate and the growth of the working age population relative to total population) for three different sub-periods. The figure shows average annual growth rates for six-year periods.

Source: Authors' calculations based on (IMF, 2019[71]; Central Bank of the Dominican Republic, 2022[72]).

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Despite considerable improvements since the early 1990s, labour productivity is still far behind the average levels of high-income countries (Figure 2.28). Moreover, a labour utilisation gap persists, mainly due to the low labour force participation of women, which stood at only 43% in 2020 (compared to 71% for men) (World Bank, 2022_[2]). Policies that increase labour force participation and formal employment of women could aid structural reforms aiming to bolster productivity growth. But, so far, the benefits of economic growth have not been equally shared among the population: wages have lagged behind productivity growth, inequality remains high, and poverty still affects around one-fourth of the population (see section on "People"). Recent improvements in real wages and poverty reduction have helped marginally. To ensure that productivity gains are shared, and economic growth is more inclusive, further policy action is needed.

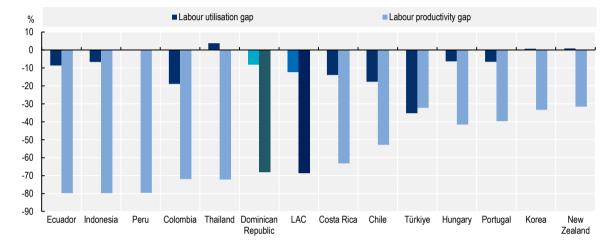


Figure 2.28. The labour productivity gap with respect to high-income countries remains large

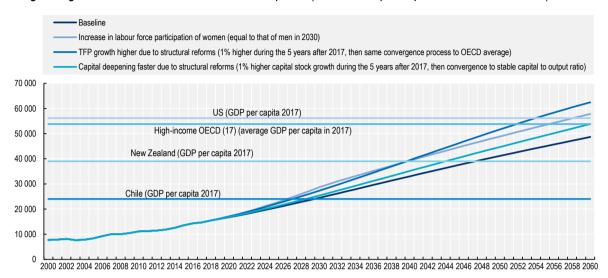
Note: Compared to the simple average of the 17 OECD countries. Since the decomposition is multiplicative, the sum of the percentage difference in labour resource utilisation and labour productivity does not equate to the GDP per-capita difference. Labour productivity is measured as GDP per employee. Labour resource utilisation is measured as employment as a share of population. Source: Authors' calculations based on (Feenstra, Inklaar and Timmer, 2015_[73]).

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At the current pace of reforms, a simple growth model shows that the Dominican Republic would not reach average living standards currently enjoyed by OECD high-income countries until 2060 (Figure 2.29). However, structural reforms that add one percentage point to the growth of TFP or capital per worker during the next ten years would allow the Dominican Republic to obtain the current average living standards of OECD high-income countries by 2053. Similarly, matching the labour force participation of women to that of men by 2030 would boost GDP per-capita growth by around 1.5% per year until 2030. This would enable the Dominican Republic to achieve the current average living standards of high-income countries by 2055.

Figure 2.29. Additional structural reforms are needed to support the Dominican Republic to reach higher living standards

Long-term growth scenarios for the Dominican Republic (in real GDP per-capita in USD PPP of 2011)



Note: The long-term growth scenarios build on simplified assumptions for the convergence of TFP growth and capital per output ratios taken from the OECD long-term model (Guillemette and Turner, 2018[74]).

Source: Authors' calculations based on (Feenstra, Inklaar and Timmer, 2015_[73]).

StatLink mis https://stat.link/v5m267

Among the structural reforms that would boost productivity and inclusive growth in the Dominican Republic, reducing barriers to entrepreneurship, creating a level playing field and increasing competition in domestic markets have significant potential for generating additional GDP per-capita growth (Table 2.1). High administrative burden and anti-competitive regulations favouring incumbents complicate the entry and growth of young, innovative firms. This leads to low innovation outcomes, low productivity, higher prices of goods and services, and a lack of high-quality jobs in domestic markets. Underdevelopment of domestic capital markets also hinders productivity growth (see Chapter 4). Barriers to finance, such as high lending rates, are particularly detrimental for small and young firms.

Increasing government effectiveness and reducing corruption could raise the quality of public services, and public trust in them, and achieve significant growth impacts (see section on "Peace and Institutions").

Table 2.1. Structural reforms to boost inclusive growth

Estimated impact of selected reforms on growth of real GDP per capita

Structural reform	Additional annual growth rate (over a 10-year horizon)
Reducing barriers to entrepreneurship, creating a level playing field and increasing competition in domestic markets (e.g. by cutting administrative burden, limiting anti-competitive effects of regulation and strengthening the role of the competition agency)	0.8%
Improving the functioning of domestic capital markets (e.g. improving co-ordination between the treasury and the Central Bank when issuing public debt; improving co-ordination among supervision authorities; and increasing competition among banks and other financial institutions)	0.6%
Improving government effectiveness (e.g. by undertaking systematic audits and evaluations; reducing duplication of government agencies; and improving management of state-owned	0.4%

enterprises)	-
Reducing corruption (e.g. by improving procurement laws and whistle-blower procedures)	0.2%
All of the above	2.0%

Note: These estimates were obtained on the basis of three sources. i) A numerical indicator of the Dominican Republic's policy stance in each policy area, taken from OECD/World Bank Product Market Regulation indicators, the World Bank's World Governance Indicators and World Development Indicators. ii) A simulated policy shock to the indicator, defined as moving the Dominican Republic to the average of the six regional peers Chile, Colombia, Costa Rica, Ecuador, Panama and Peru. iii) The OECD quantification framework, which provides an estimate of the impact of changes in the indicator on long-term output growth with a time horizon of ten years (Égert and Gal, 2017_[75]). These quantifications are subject to uncertainty, both about their size and about the time horizon of their materialisation. Source: Authors' calculations.

Growth performance has been uneven across different sectors of the economy

Since 2010, mining, construction, financial intermediation, and transport and storage have been the fastest-growing sectors of the economy. Due to large FDI in gold and silver mining, the mining sector has been growing around 21% per year, but only accounts for 1.9% of GDP (Figure 2.30). It is also the least labour-intensive sector in the economy. Domestic manufacturing accounts for 12.4% of GDP and around 6.5% of total employment and has been growing slightly slower than manufacturing in free economic zones. Agriculture accounts for 6% of GDP and 8% of total employment, and construction for 15% and 9%, respectively.

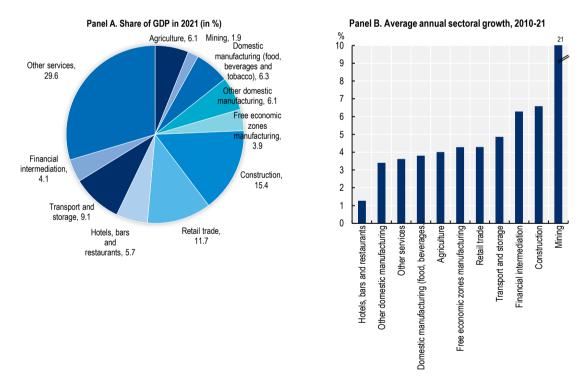


Figure 2.30. GDP growth since 2010 was mainly driven by services sectors and mining

Source: Authors' elaboration based on (Central Bank of the Dominican Republic, 2022[72]).

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Among services, tourism is the most dynamic sector, followed by financial intermediation. Travel and tourism accounted for around 5.4% of GDP, over 39% of total exports and around 5% of total employment.

Including indirect links with other sectors of the economy, such as construction, food manufacturing and transport, tourism accounted for 11.8% of GDP and 16.7% of total employment in 2021 (World Bank, 2018_[50]). Besides natural endowments and the proximity to North American markets, low wage costs, broad tax and tariff exemptions, and preferential access to electricity distribution are additional reasons for strong foreign investments and growth of the sector. As all-inclusive tourism dominates the sector (around 75% of all visitors), linkages with the domestic agricultural and food sectors are still low. Developing non-all-inclusive tourism could change this, as well as creating a more level playing field for all firms (World Bank, 2018_[50]). In addition, the degradation of natural endowments is an important challenge for the sector (see section on "Planet").

During the 1990s, a series of structural reforms stimulated FDI and growth in the Dominican Republic. These included liberalisation of foreign exchange transactions, elimination of price controls and foreign investment restrictions, establishment of new trade agreements and strong tax incentives. These FDI inflows were concentrated in free economic zones. In those, broad tax and tariff exemptions, proximity to North-American markets and preferential market access (due to the Multi-Fiber Agreement) prompted investments in textile, wearing apparel and other low-skilled manufacturing industries. Natural endowment, with beaches and the proximity to the United States and Canada, led to strong FDI in the tourism sector, which has been one of the fastest-growing sectors since the 1990s.

The ratio of goods and services exports to GDP fell from 23.1% in 2019 to 18.3% in 2021 due to COVID-19, and it returned to 21.8% in 2022 (World Bank, 2022_[2]). Services exports, including tourism, accounted for around 45% of total exports before the pandemic. In 2020, this share dropped to 31%, but rebounded to 39% in 2021. In 2019, tourism accounted for 38.4% of total exports of goods and services. Due to the COVID-19 pandemic, this share declined to 19.3% in 2020 before recovering slightly to 28.9% in 2021 (although the level of total exports is still considerably lower than before the pandemic) (World Bank, 2018_[50]; WTTC, 2022_[76]).

Merchandise exports are highly driven by manufacturing in free economic zones. With an average annual growth of 5% since 2010, these represented 56% of total merchandise exports in 2021 (Figure 2.31). The mining sector is also relevant, representing 17% of total merchandise exports in 2021. This is partly driven by large inflows of FDI, particularly in gold and silver mining, which supported an annual growth of 30.6% of mining exports between 2010 and 2021. Compared to free economic zones, exports from the domestic manufacturing sector are less dynamic and represent a total of 19% of total merchandise exports. They are comprised mainly of food manufacturing, including sugar, rum or manufactured coffee, but also some chemical, metal and plastic products. Exports of domestic agricultural products, such as bananas, cacao and vegetables, have seen a slow growth since 2010 (World Bank, 2018_[50]; World Bank, 2022_[2]).

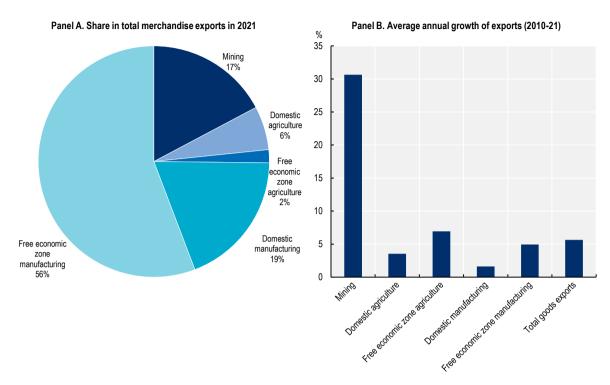


Figure 2.31. Merchandise exports are dominated by free economic zones and mining

Source: Authors' elaboration based on (Central Bank of the Dominican Republic, 2022[72]).

In terms of trading partners, the concentration of Dominican exports is very high. The United States, Switzerland and Haiti account for 73% of total merchandise exports (Figure 2.32). The United States is not only the main export and import partner, but, together with Canada, it is also the main source country for FDI and tourist arrivals. Most firms in free economic zones produce for the North American market and source a large share of their inputs abroad. Export concentration among domestic firms is somewhat lower than in free economic zones, but the Unites States is also an important destination for domestic agricultural and food products. In recent years, Haiti has gained prominence, particularly for food, metal and textile products (World Bank, 2018_[50]). This strong dependence on single export markets poses a risk to the domestic economy. During the US subprime crisis, for example, the Dominican Republic's exports significantly decreased, which negatively affected the current account and economic growth. Similarly, strong dependence on fuel imports for transport and electricity generation, which accounts for almost 16% of total imports, poses a substantial risk for macroeconomic stability. Building up renewable energy sources could help mitigate this (see section on "Planet").

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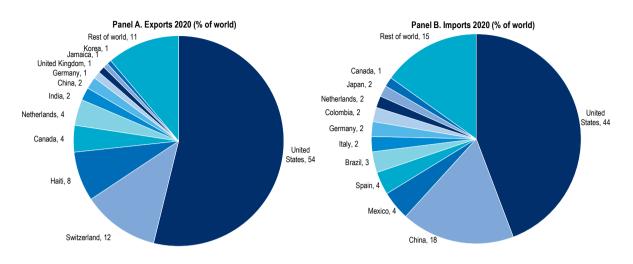


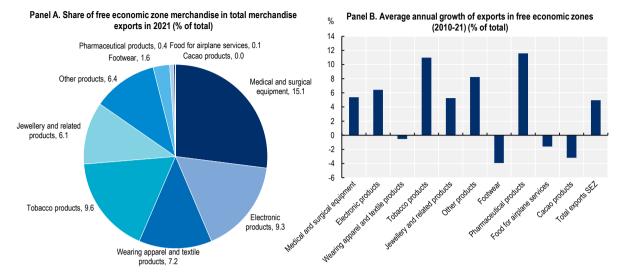
Figure 2.32. The diversification in terms of export partners is relatively low in the Dominican Republic

Source: Authors' elaboration based on (WITS, 2022[77]).

In terms of product diversification, technology and value- added content of exports, there is a strong duality between domestic firms and firms in free economic zones. Since the early 2000s, the free economic zones underwent a structural shift toward medium- and high-skilled manufacturing – largely due to the end of the Multi-Fiber Agreement in 2005 and increasing international competition in the textile and apparel industries. In 2021, shares of total merchandise exports had shifted to medical and surgical equipment (15.1% of total merchandise exports and 27% of free economic zones exports), manufactured tobacco products (9.6% and 17.2%) and electronic products (9.3% and 16.6%). Pharmaceutical exports grew over 11.6% per year between 2010 and 2021 (Figure 2.33). In contrast, the export of textiles and wearing apparel declined and accounts for 7.2% of merchandise exports and 12.8% of free economic zones exports in 2021. Exports from firms outside of free economic zones are dominated by products that are resource-oriented or of low technology content, such as agricultural, food and mining products (OECD/UN, 2020_[78]).

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Figure 2.33. Exports of free economic zones are shifting towards medium-high skilled manufacturing



Source: Authors' elaboration based on (Central Bank of the Dominican Republic, 2022[72]).

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Changes in the production structure of free economic zones have led to significant changes in employment and skill demands. Textile and wearing apparel industries, for example, are labour-intensive and employ many low-skilled female workers. Their share of total exports from free economic zones declined from 24.9% in 2012 to 12.4% in 2021. In contrast, the emerging industries such as medical equipment and surgical equipment or electronic products are much less labour-intensive and require a higher level of skills. This partly explains the decline in workers as a share of total exports, from 39.6 in 2002 to 25.5 in 2021. As a positive effect, the emergence of medium-high-skill manufacturing is correlated with a steady increase of the average wage (World Bank, 2018_[50]; Consejo Nacional de Zonas Francas de Exportación, 2021_[79]).

However, the overall growth of the free economic zones can compensate for the relatively lower demand for labour, which is why employment continues to increase. After having fuelled economic growth during the 1980s and 1990s, employment in free economic zones declined from 189 853 employees in 2004 to 112 618 in 2009, following the expiration of the Multi-Fiber Agreement and due to increased international competition in the textile and apparel industry. Since then, employment has steadily increased to 183 232 in 2021 (Consejo Nacional de Zonas Francas de Exportación, 2021_[79]).

Linkages with domestic firms outside of free economic zones have also been transformed in recent years. This is due to the higher technology intensity of emerging industries in free economic zones, low-quality domestic products, and broad tariff and tax exemptions for firms inside the zones. Firms producing medical and surgical or electronical equipment source less than 3% of their inputs domestically (World Bank, 2017_[80]). On the other hand, local expenditures of free economic zones, which is seen as an indicator of the linkages between the free trade zone sector and the local economy, have increased since 2002, also relative to total exports generated.

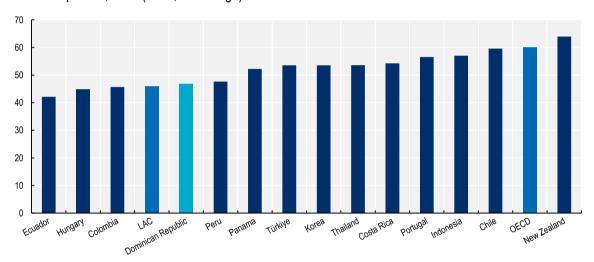
Structural reforms to create a level playing field and make growth more inclusive

An uneven playing field exists between different economic sectors and firms. This has resulted in a misallocation of scarce domestic resources, impeding stronger productivity and job growth. When market distortions prevent capital and labour from flowing to more productive and innovative sectors or firms,

where new and better-paying jobs could be created, aggregate productivity and job growth are low (Brandt, Van Biesebroeck and Zhang, 2012_[81]; Criscuolo, Gal and Menon, 2014_[82]; Criscuolo and Timmis, 2017_[83]; Hsieh and Klenow, 2009_[84]). Lack of opportunities in domestic labour markets is one main reason for the emigration of young and educated Dominicans to the United States (World Bank, 2018_[50]).

Market concentration in the Dominican Republic is above the regional average (Figure 2.34), and this concerns particularly food processing industries, fuel production, constructions materials, telecommunication, ports and domestic transport, and the electricity sector as well as the financial sector (DGII, 2018_[85]; World Bank, 2018_[50]). Concentration may be taking place only in specific subsectors and not in the sector as a whole. Notwithstanding this, as low competition leads to lower product quality and higher prices – and many of these highly concentrated sectors are inputs for other sectors of the economy – the higher production costs for domestic firms decrease their competitiveness in international markets. In turn, higher prices for food and other consumption goods disproportionally hurt poorer households, which spend a larger share of their income on these products.

Figure 2.34. Domestic competition can be improved in the Dominican Republic



Domestic competition, 2019 (0 low, 100 is high)

Note: This indicator is based on surveys among business leaders who answered to the following question: In your country, how do you characterise corporate activity? [1 = dominated by a few business groups; 7 = spread among many firms]. OECD/LAC/EU averages are simple averages. The LAC average includes Argentina, Bolivia, Brazil, Barbados, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Honduras, Haiti, Jamaica, Mexico, Nicaragua, Panama, Peru, Paraguay, El Salvador, Trinidad and Tobago, Uruguay and Venezuela.

Source: Authors' elaboration based on (World Economic Forum, 2019[86]).

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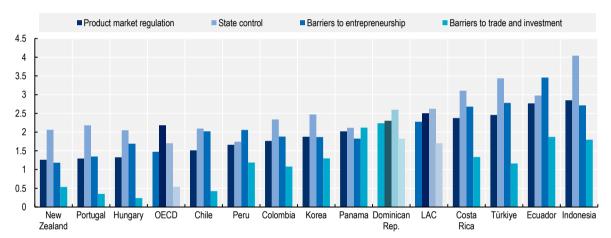
Several factors could explain the high market concentration in many sectors. Firstly, the competition agency's capacity to enforce competition law is relatively weak. Many services sectors, such as finance, insurance, utilities and telecommunications, are excluded from the competition law. Instead, they are supervised by specific agencies for which competition regulation is not always the main focus. The competition agency can investigate the abuse of market power, but it has no authority to intervene *ex-ante* or *ex-post* in mergers and acquisitions that lead to excessive market power. Moreover, the tools the agency can apply to enforce the competition law are limited. For sanctions to break up highly concentrated markets (anti-trust measures), in which there are no whistle-blower provisions, for example, there is no specific prosecutor specialised in competition enforcement. The ordinary, often slow, judicial procedures complicate investigations of suspect

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firms. In addition, when competition does impede regulation, the agency has only a consulting function; it cannot force a governmental agency to act upon its recommendations.

Secondly, some regulations in the Dominican Republic could complicate the entry of young and innovative firms in domestic markets. This reduces competition and incentives for incumbent firms to innovate, adopt new technologies, increase product quality and lower prices. Relative to other countries in the region, the Dominican Republic has high barriers to entrepreneurship, according to the OECD product market regulation indicator (Figure 2.35). Complicated regulatory procedures and licence and permit systems make administrative duties burdensome for new market entrants and small firms. Moreover, regulatory protection of incumbents and entry barriers in network and services sectors are high. The time to prepare tax declarations is among the longest in the region, as special tax regimes are not harmonised within the tax code (World Bank, 2019_[49]). Efforts to simplify administrative procedures should be strengthened to facilitate firm entry. Reductions in regulatory protection of incumbents and harmonisation, as well as the simplification of the tax code, should complement this.

Figure 2.35. Barriers to entrepreneurship in the Dominican Republic can be further alleviated



Product market regulation

Note: This graph presents the most recent data that is comparable to the data of the Dominican Republic from 2014: 2013 data for New Zealand, Portugal, Hungary, Chile, Peru, Türkiye, and Indonesia; 2014 data for Colombia and Costa Rica; 2016 data for Panama and Ecuador. Source: Authors' elaboration based on (OECD/World Bank, 2022[87]).

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Thirdly, although the Dominican Republic has established several trade agreements since the 1990s, tariffs and services trade restrictions can still be lowered further, as suggested by international comparisons (Figure 2.36, Figure 2.37). High tariffs on consumer goods, such as footwear, textile and food products, contribute to low competition and high domestic prices in these sectors (DGII, 2018_[85]). Reducing these import barriers would result in increased competition, forcing domestic companies to address inefficiencies and upgrade their production processes to advanced technologies which eventually lowers product prices and increases quality (Amiti and Khandelwal, 2013_[88]; De Loecker et al., 2016_[89]). Price reductions in consumer goods would increase the purchasing power of poorer households, as they spend a relatively larger share of their income on these products.

Tariffs on capital goods can still be lowered such as in transport equipment, optical and medical products, metal products and machinery, and electronical equipment (Figure 2.36). Lowering these tariffs, with a view towards aligning them with the zero rates faced by firms in free economic zones and tourism, would improve the sourcing options for capital goods for domestic firms, lower their production costs and may make

technological improvements to production processes more financially accessible (Amiti and Konings, 2007^[90]). Price reductions due to lower services trade restrictions would also lower costs and increase quality of services inputs.

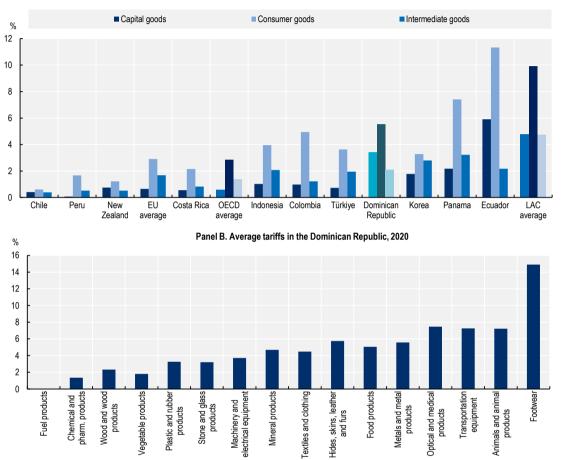


Figure 2.36. Tariffs for consumer and capital goods are relatively high in the Dominican Republic

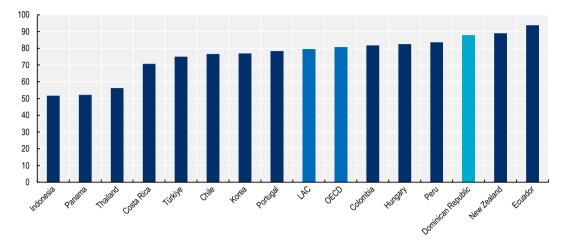
Panel A. Weighted average tariffs, latest year available

Note: The first figure shows the weighted average tariffs in percentage from the latest year available. OECD/LAC/EU averages are simple averages. The LAC average includes Antigua and Barbuda, Argentina, the Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, French Polynesia, Grenada, Guatemala, Guyana, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, and Uruguay. The second figure shows the weighted average tariffs in percentage in 2020.

Source: Authors' elaboration based on (WITS, 2022[77]).

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Figure 2.37. Service trade restrictions are high in the Dominican Republic



Services Trade Restrictiveness Index, 2018 (0 - low barriers to entry, 100 - high barriers to entry)

Note: OECD/LAC/EU averages are simple averages. The LAC average includes Argentina, Bolivia, Brazil, Barbados, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Honduras, Haiti, Jamaica, Mexico, Nicaragua, Panama, Peru, Paraguay, El Salvador, Trinidad and Tobago, Uruguay, and Venezuela.

Source: Authors' elaboration based on (World Economic Forum, 2019[86]).

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Some special tax regimes provide broad tax exemptions to specific sectors and firms. This can distort the allocation of scarce domestic resources. Firms in these zones enjoy exceptions from multiple costs, including: corporate income tax; local taxes; tariffs on intermediate inputs and capital goods; taxes on assets; and value added tax (VAT). Special tax regimes for tourism and border zones are less generous, but exempt firms from paying corporate income tax, tariffs for inputs and capital goods, property tax, and VAT.⁴

Firms in free economic zones and tourism also have access to cheaper and more reliable electricity supply than domestic firms. This is due to their ability to negotiate direct contracts with electricity producers and circumvent the public distribution network. These firms also benefit from specific large-scale public infrastructure projects and receive publicly subsidised credit when located in border provinces (World Bank, 2018_[50]).

To create a more level playing field and stimulate job creation in the domestic economy, the government should seek to harmonise and rationalise the different special tax regimes – gradually aligning the tax burden faced by firms inside and outside of these regimes.

For tourism, the absence of tax incentives during the 1990s has not harmed the development of the sector (Daude, et al., $2014_{[91]}$). But to increase connectivity between free economic zones, the tourism sector and the domestic economy, capital good and input tariffs for domestic firms should be aligned with the zero rates paid under special tax regimes. If all firms benefit from the same tax and tariff structure, as well as equal access to quality infrastructure, the tourism sector can help generate business opportunities – from leisure services to restaurants and transportation – for both rural and urban populations.

Institutional and market deficiencies, which increase production costs and reduce competitiveness of small, young firms, further contribute to an uneven playing field between various firms and sectors. Shallow capital markets and high financing costs are a major obstacle to firm entry and firm growth (see section on "Partnerships").

Low quality public infrastructure leads to higher costs, especially for electricity and other utilities (Figure 2.38). The electricity sector suffers from a distorted incentive structure and management of stateowned distribution companies can be improved. Despite considerable annual public transfers, the electricity sector is burdensome on firms (World Bank, 2018_[50]). They are obliged to pay higher prices for often unreliable supply: power outages are frequent and lengthy compared to other countries in the region (World Bank, 2018_[50]). The public water and waste management system is also highly deficient, posing a considerable risk to public health and the future of the tourism industry and other related sectors (see section on "Planet"). Although the quality of ground transport, port and shipping has improved somewhat in recent years, high concentration in these sectors has led to high prices. This has negatively affected production costs economy-wide and reduced the Dominican Republic's participation in global value chains (World Bank, 2018_[50]).

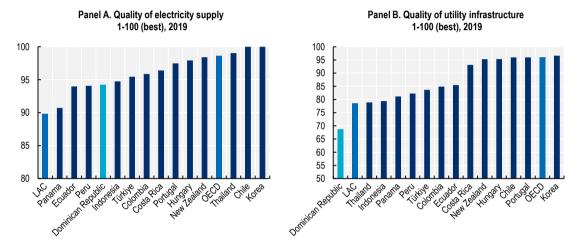


Figure 2.38. The quality of public infrastructure can be improved in the Dominican Republic

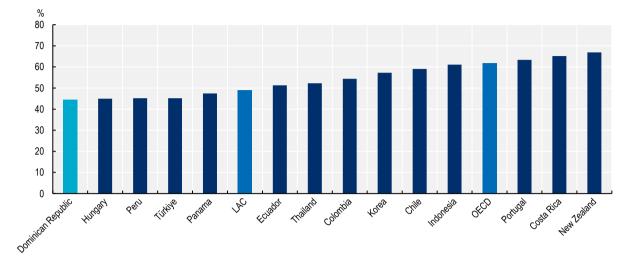
Note: OECD/LAC/EU averages are simple averages. The LAC average includes Argentina, Bolivia, Brazil, Barbados, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Honduras, Haiti, Jamaica, Mexico, Nicaragua, Panama, Peru, Paraguay, El Salvador, Trinidad and Tobago, Uruguay and Venezuela.

Source: Authors' elaboration based on (World Economic Forum, 2019[86]).

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Recent increases in educational spending (around 4.6% of GDP in 2020) (World Bank, 2022_[2]) have resulted in rising access to education, but the quality of education remains low (see section on "People"). For domestic firms, it is increasingly difficult to recruit employees with desirable skills (Figure 2.39). Many high skilled graduates emigrate to the United States or are attracted by companies in free economic zones (World Bank, 2018_[50]). This hinders domestic investment and firm growth. Increasing the quality of education will help create a more dynamic domestic economy. Improving co-ordination between the private sector and universities (or other professional training institutions) will also benefit. The alignment of curricula with private sector skill demands, as well as co-ordinated vocational and educational training programmes, can help reduce the existing skill mismatch (Chapter 3).

Figure 2.39. Skill mismatch in the Dominican Republic labour market is relatively high



Skills of graduates matching the skill requirements of business

Note: This indicator is based on surveys among business leaders who answered to the following two questions: "In your country, to what extent do graduating students from secondary education possess the skills needed by businesses?" and "In your country, to what extent do graduating students from university possess the skills needed by businesses?" In each case, the answer ranges from 1 [not at all] to 7 [to a great extent]. OECD/LAC/EU averages are simple averages. The LAC average includes Argentina, Bolivia, Brazil, Barbados, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Honduras, Haiti, Jamaica, Mexico, Nicaragua, Panama, Peru, Paraguay, El Salvador, Trinidad and Tobago, Uruguay and Venezuela.

Source: Authors' elaboration based on (World Economic Forum, 2019[86]).

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Besides the lack of incentives to innovate due to insufficient competition across multiple markets, regulatory and institutional capacities can also play a role in improving the quality of domestic products. Since the 2000s, agricultural and food exports have increased from 14% to 23% of merchandise exports in 2021, employing more than 50% of the rural population. Quality of these products, however, has decreased in recent years, mainly due to the weak domestic system of product quality testing and a lack of co-ordination among firms (World Bank, 2018[50]; OECD/UN, 2020[78]; World Bank, 2022[2]). The number of import rejections due to non-compliance with US and EU product standards is higher than for other countries in the region. Main reasons cited include contamination with pesticides, salmonella and other harmful organisms (Grundke and Moser, 2019[92]). Consequently, Dominican fruits and vegetables are subject to more frequent and stringent inspections at EU and US borders, which poses a considerable risk to all firms in the sector. To remedy this, information sharing and co-ordination between firms is essential for streamlining the domestic product quality testing system. This should include: increased co-ordination of border and guality testing agencies - including both domestic agencies and agencies in major export markets; product standard harmonisation; improved co-operation with international standard-setting institutions; capacity building; more efficient testing laboratories; and the introduction of pre-export quality tests (Figure 2.40).

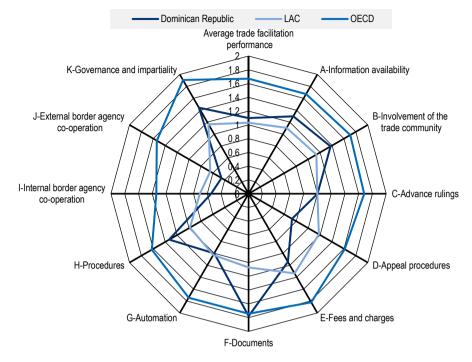


Figure 2.40. Improving trade facilitation measures in the Dominican Republic would boost integration of domestic firms into world markets

Source: Authors' elaboration based on (OECD, 2019[93]).

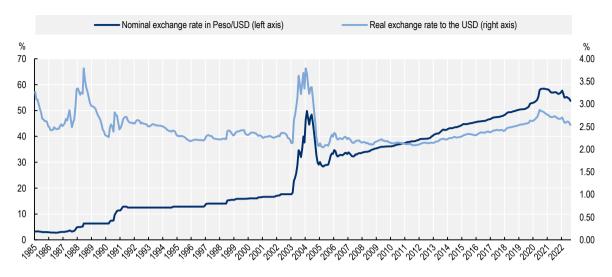
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Partnerships – Financing inclusive development

Macroeconomic stability is key for investment and for sustainable and inclusive growth

Since the 1990s, macroeconomic stability has encouraged a steady inflow of foreign direct investment (FDI) and impressive growth performance for the Dominican economy. The Central Bank successfully stabilised inflation in the 1990s. Due to financial sector reforms, liberalisation of foreign exchange rate transactions, large inflows of FDI, low oil prices, and increasing exports, the exchange rate remained relatively stable until the early 2000s (Figure 2.41).





Note: The real exchange rate to the USD reflects the nominal exchange rate peso/USD adjusted for inflation differentials between United States and the Dominican Republic.

Source: Authors' elaboration based on (Central Bank of the Dominican Republic, 2022[72]).

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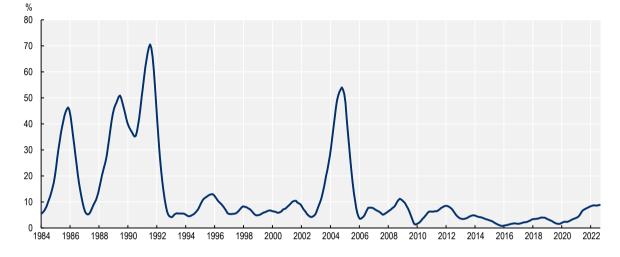
After a severe banking crisis in 2003 – involving the collapse of three major banks, which comprised 26% of the financial sector's assets – capital flight caused currency to sharply depreciate. Private banks were bailed out (with around 20.3% of GDP); the Central Bank took over bad assets and monetised deposits to stop the bank and currency run. To sterilise the sudden increase of the monetary base, the Central Bank issued debt securities at relatively high interest rates. This debt increased twelve-fold until the end of 2003 (to around 12% of GDP) and high-interest rate payments led to a persistent quasi-fiscal deficit that has since complicated the management of monetary and fiscal policy.

Although efforts to recapitalise the Central Bank slowly reduced the quasi-fiscal deficit and debt until 2012, a weakly designed recapitalisation law and poor co-ordination between the treasury and the Central Bank were not able to sufficiently improve the situation. However, there have been improvements in recent years. In 2021, Central Bank deficit stood at 1.3% and debt at 13.6% of GDP. Although the Central Bank has managed to increase the average maturity of its debt, decreasing the risk of debt rollover and sudden increases in the monetary base, the quality of its assets can be improved. Around 34% of Central Bank assets are illiquid payment obligations from the government without interest payments. Approximately 8% are government recapitalisation bonds, which effectively pay below market rates and are difficult to liquidate in financial markets (Central Bank of the Dominican Republic, 2021_[94]). As a weak balance sheet can compromise the effectiveness of monetary policy, efforts to recapitalise the Central Bank should be strengthened by revising the Central Bank recapitalisation law (Swiston et al., 2014_[95]). Moreover, the uncoordinated issuance of public debt by two different actors has detrimental effects on domestic capital market development and is further discussed in the section on capital markets (CECD, 2012_[96]). However, coordination between both institutions has been improved in recent years (Chapter 4).

From 2003 to 2007, several IMF programmes provided fiscal support and helped rebuilding foreign exchange reserves of the Central Bank. The programme was successful in stabilising the macro-economic environment, inflation was significantly reduced and the exchange rate stabilised. From 2005 to 2012, the IMF supported the Central Bank in the transition towards an inflation targeting regime. Moreover, the programme included reforms of the financial sector, such as increasing capital requirements of banks, improving supervision and introducing a legal framework for risk-prevention, which have considerably

improved financial sector stability (IMF, 2018[97]). Ongoing efforts to improve the macro-prudential policy framework and to include the supervision of large non-bank institutions are welcome and should be strengthened.





Source: Authors' elaboration based on (Central Bank of the Dominican Republic, 2022[72]).

Since 2012, the Central Bank has successfully implemented an inflation-targeting regime and inflation has stabilised within the target range of 4% +/- 1%. The COVID-19 pandemic triggered a breakout from this range in February 2021, and inflation peaked at 8.8% in August 2022 (Figure 2.42), primarily driven by external factors like high US inflation, rising fuel and food prices, and supply disruptions (IMF, 2022_[98]). The IMF expects inflation to return to the target range by the end of 2024 (IMF, 2022_[11]). Policy rates remained below 6% until June 2022, when the Central Bank began gradually raising the policy rate up to 8.5% in November 2022 in response to rising inflation. But the institutional framework on monetary policy could be strengthened further. The Central Bank currently oversees national statistics of inflation and national accounts. While beneficial as a short-term solution, this ultimately represents a conflict of interest, as the Central Bank has authority to set the measures that will be used to evaluate its own performance. Discussions on improving statistical capacities in the country (see Box 2.2. in section "Peace and Institutions") could revolve around transferring these responsibilities to the *Oficina National de Estadística* (ONE) with stronger capacities and the necessary funding to attract highly qualified staff.

Unlike other countries with an inflation-targeting regime, the Central Bank of the Dominican Republic is still intervening in foreign exchange markets regularly and is effectively managing a crawling peg. Following the outbreak of COVID-19, the Central Bank successfully defended its currency after a sudden devaluation surge and managed to bring the devaluation down again (Figure 2.41). The IMF recognises the exchange rate's stabilising role and the Central Bank's strengthened reserve position. It assesses the real exchange rate to be broadly in line with fundamentals (IMF, 2022_[98]). In the Dominican economy, the pass-through of currency depreciations on inflation is still high and more than half of consolidated public debt is in foreign currency (Figure 2.43). To strengthen its asset position in case of balance of payment deteriorations, the Central Bank aims to increase its foreign reserves. High interest payments for securities used to sterilise the foreign currency purchases put further pressure on the quasi-fiscal deficit. This increases the need to recapitalise the Central Bank to ensure the effectiveness of monetary policy.

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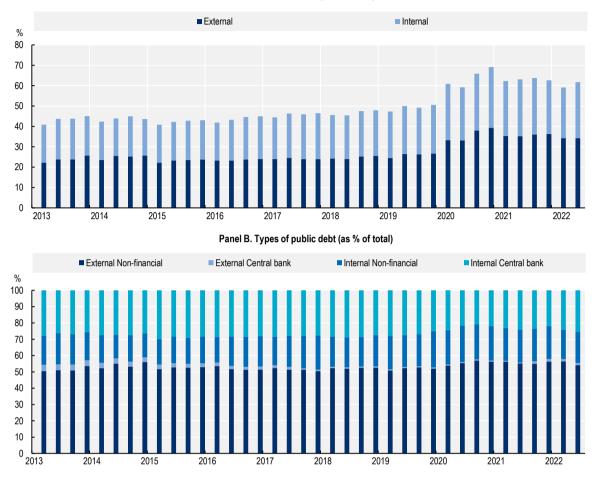


Figure 2.43. The share of public debt in foreign currency is high in the Dominican Republic

Panel A. Public debt (as % of GDP)

Note: The bars represent quarterly data.

Source: Authors' elaboration based on (Central Bank of the Dominican Republic, 2022[72]).

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Since 2011, the current account deficit has steadily reduced (before increasing again following the start of the COVID-19 pandemic) (Figure 2.44). This was mainly due to the real depreciation of the exchange rate, partly driven by the rebuilding of foreign exchange reserves, that has boosted exports. In parallel, the depreciated exchange rate and weaker domestic demand limited imports. Lower oil prices in pre-pandemic years also contributed to the decreased value of imports. At present, the trade balance for goods shows a deficit (-12.3% of GDP in 2021). As tourism receipts are still below pre-pandemic levels (accounting for 6% of GDP), the total balance of goods and services remains low (around -8.5% of GDP). Driven by improvements in the US labour market and uncertainty about future US immigration policy, growing remittances (amounting to 11% of GDP in 2021) have contributed to 5.1% of GDP, which, in total, led to a current account deficit of around -2.8% in 2021. FDI (around 3.3% of GDP) and portfolio investments largely financed this. In sum, this led to a positive balance of payment and net increases in reserves of about 2.5% of GDP in 2021.

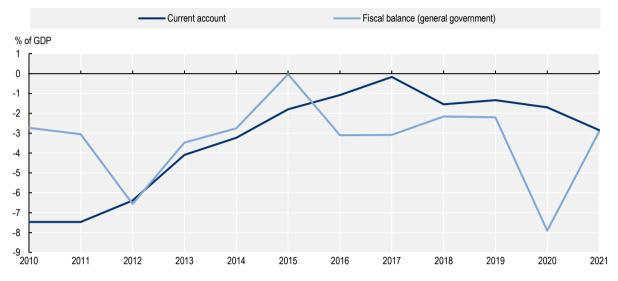


Figure 2.44. The current account deficit has been reduced in the Dominican Republic, but the fiscal deficit remains high though relatively stable

Note: The fiscal balance is the sum of primary balance and interest payments for the general government. It does not include the quasi-fiscal deficit of the Central Bank which has oscillated between -1.5% of GDP in 2010 to -0.9% in 2018.

Source: Authors' calculations based on (IMF, 2022[1]; Central Bank of the Dominican Republic, 2022[72]).

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Risks to external accounts are important. First, a strong dependence on the US economy and the high share of public debt in foreign currency is evident. By far, the United States is the leading export destination of Dominican merchandise and services. The United States also remain the primary source of FDI and portfolio investment inflows and remittance receipts come almost exclusively from Dominicans living there. Thus, a slow-down of the US economy would lead to an increase in the current account deficit and a decrease of capital inflows; the resulting depreciation pressure on the currency could increase doubts about the sustainability of public debt.

Second, dependence on fuel imports for the domestic energy infrastructure makes the current account very sensitive to fluctuations of oil prices and increases social costs in case of a balance of payments crisis.

Third, as discussed in the next section, if the country fails to implement the necessary fiscal consolidation to stabilise public debt, deteriorating investor sentiment and decreasing capital inflows could complicate the financing of the current account deficit.

Finally, the country is highly exposed to the risk of hurricanes and earthquakes, which have large fiscal costs and could strongly affect agricultural output and exports as well as decrease tourism receipts (see section on "Planet").

Fiscal consolidation is necessary to stabilise public debt and free resources to improve public services

Although the primary balance had improved before the pandemic, the fiscal deficit remained high due to the rising burden of interest payments. In particular, the primary balance increased to 0.6% of GDP in 2019, reflecting improved tax collection, before dropping to -4.7% in 2020 and rebounding to 0.2% in 2021 (Figure 2.45).

Despite strong economic growth since 2010, the consolidated public sector debt has risen from 38.8% of GDP in 2010 to an estimated 59.2% in 2022. The COVID-19 pandemic deteriorated the public debt-to-GDP ratio, which reached 70.3% in 2020, almost 20 percentage points higher than in 2019 (53.2%). However, consolidated public sector debt was reduced to a level of 62.1% in 2021, and the ratio should continue to trend downward (IMF, 2022[98]). According to national data, non-financial public sector debt was at 40.4% of GDP in 2019, increased to 56.6% in 2020, and decreased again to 50.4% in 2021 and 46.5% in October 2022 (Dirección General Crédito Público, 2022[99]).

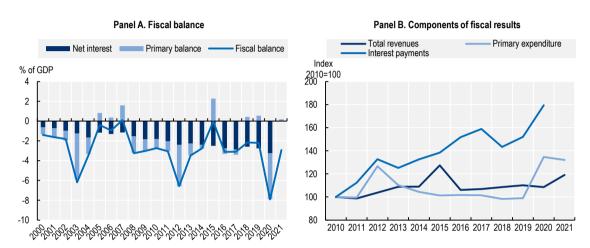


Figure 2.45. The primary deficit has improved in the Dominican Republic until the COVID-19 pandemic, but the burden of interest payments is rising

Note: The figure shows the fiscal results for the general government. It does not include the quasi-fiscal deficit, primary balance or interest payments of the Central Bank. The quasi-fiscal deficit of the Central Bank has oscillated between -1.5% of GDP in 2010 to -0.9% in 2018. In 2021, it stood at -1%. Interest payments of the Central Bank were 1.7% of GDP and the Central Bank's primary balance stood at 0.3% in 2020. Interest payment data are available until 2020. IMF projections were used as 2022 data to calculate the fiscal balance, primary expenditure and total revenues.

Source: Authors' calculations based on (IMF, 2022[1]; World Bank, 2022[2]; IMF, 2022[98]).

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The Dominican Republic has one of the lowest tax revenue collections in the region, with only 12.6% of GDP (Figure 2.46). This is driven by several factors, including a narrow tax base, large tax expenditures (in total around 4.4% of GDP in 2021), and relatively high levels of tax non-compliance (Chapter 4).

Broad scope exists to rationalise and unify the numerous tax exemptions and special tax regimes, and thus broaden the tax base. This would significantly simplify the tax system, reduce the scope for tax evasion and allow lower tax rates (OECD, 2013_[100]). Besides the positive fiscal impact, creating a level playing field for all firms and sectors would improve the allocation of scarce domestic resources and increase competition, innovation and productivity (Chapter 4).

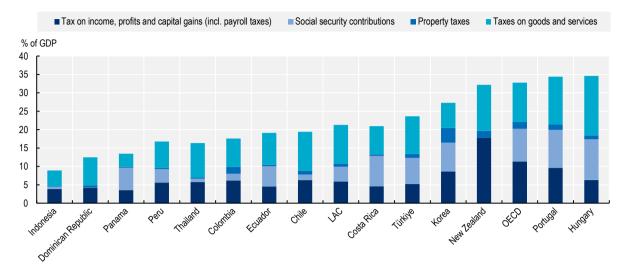


Figure 2.46. Tax revenues are low in the Dominican Republic

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The generous exemptions in special tax regimes in the Dominican Republic have the effect of shifting the tax burden to non-exempt formal domestic firms, for which corporate income tax rates have increased in recent years, in contrast to a worldwide trend of declining rates (Daude, Gutierrez and Melguizo, 2017_[102]). This further reduces incentives to formalise domestic businesses, with detrimental consequences for productivity growth and tax collection.

Scaling back most regressive or poorly targeted exemptions, for instance from VAT, as well as rationalising special economic regimes and fighting high levels of tax non-compliance, have further potential to significantly increase public resources. There is also potential for exploring innovative taxes in emerging sectors, like in those related to the digital and green economy. Given the large increase in mining activity in recent years, authorities could also explore the scope for raising royalties, which are low in international comparison, though efforts have already been undertaken in this direction with renegotiation of certain contracts. As important as increasing public revenues is to improve the quality of public spending to make it more efficient (Chapter 4). Overall, sustainable public finances, together with high quality public infrastructure and education, could help replace tax exemptions as the main tool to attract FDI and to redistribute wealth, while also raising trust in the government and reducing tax evasion and informality (section on "Peace and Institutions").

Deepening capital markets will be essential for financing development

Real interest rates in the Dominican Republic are high and have been increasing since 2010, considerably raising production costs for domestic firms and hampering firm entry and firm growth. Rising inflation, however, has more recently considerably lowered the real interest rate (Figure 2.47). Domestic credit to private sector stands at only 30.5% of GDP, of which the private bond market contributes only about 1.5 percentage points (Figure 2.48). The Dominican Republic does not have a stock market. The main factors explaining shallow capital markets and high interest rates are high public debt; crowding out of private investment; a peculiar institutional context with two public debt issuers; and co-ordination failures (Chapter 4).

Note: Data from 2020, OECD average from 2019. Source: Authors' elaboration based on (OECD et al., 2022[101]).

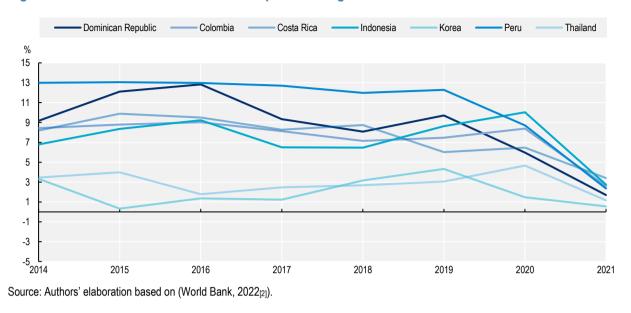


Figure 2.47. Inflation in the Dominican Republic brought down real interest rates

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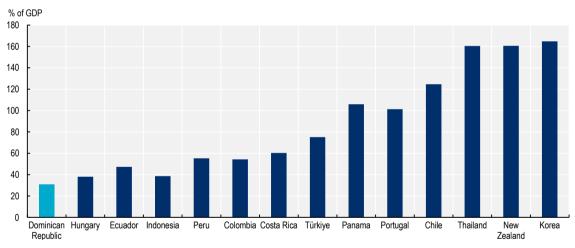


Figure 2.48. Domestic credit to private sector is relatively low in the Dominican Republic

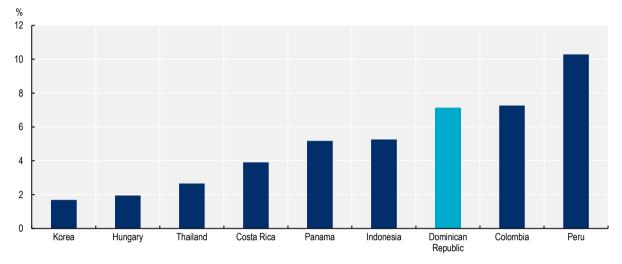
Source: Authors' elaboration based on (World Bank, 2022[2]).

In the Dominican Republic, both the treasury and the Central Bank have been issuing in the past public bonds with similar maturities but with insufficient co-ordination about the issuance date, exact maturity, interest rate, type of securities or placement method (OECD, 2012[96]). In recent years, coordination across both institutions has been strengthened, but there are still potential areas for improvement (Chapter 4).

High financing costs in the Dominican Republic are partly related to the relatively high concentration of the Dominican banking sector, with the four biggest banks dominating more than 80% of the market (DGII, 2018_[85]; World Bank, 2018_[50]). The spread between lending and deposit rates is among the highest in the region (Figure 2.49, Figure 2.50). Although high profitability of the banking sector is an important factor for stability of the financial system, policy action to increase competition in the sector would stimulate banking

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penetration and financial deepening while also reducing financing costs for domestic firms. Improvements in the regulatory framework to reduce administrative burdens and facilitate regulatory compliance would help to stimulate competition and market entry (OECD, 2012[96]). The lack of alternative financial instruments might also be a relevant explanation for high interest rates.





Source: Authors' elaboration based on (World Bank, 2022[2]).

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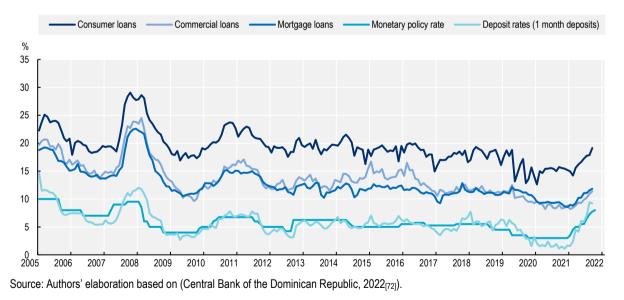


Figure 2.50. Interest rate margins have not decreased in the Dominican Republic

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Peace and institutions – Strengthening governance

The Peace and Institutions pillar of the 2030 Agenda for Sustainable Development encompasses peace, stability and trust, as well as effective governance and the performance of the public sector more broadly.

A strong institutional framework is a key ingredient of inclusive and sustainable development in multiple ways. Effective institutions are needed to create the "rules of the game" that bolster economic growth and inclusion. Likewise, they can provide good quality public services that satisfy citizens' needs, increase their trust, and favour economic development. Finally, they are crucial to promote participation of different actors and levels of government in policy making, supporting a co-ordinated and long-term vision of development.

In the Dominican Republic, public institutions face various challenges that limit their capacity to support inclusive and sustainable development. Indeed, as shown in previous sections of this review, strong economic growth has not translated into sufficient social progress and well-being, and has been based on a model that is not sustainable in the long term. The impacts of the COVID-19 pandemic also highlighted the fundamental role of public services and social protection systems in guaranteeing well-being for all (OECD et al., 2021_[27]). Stronger public institutions are needed, as stated in the National Development Strategy (NDS) 2030.

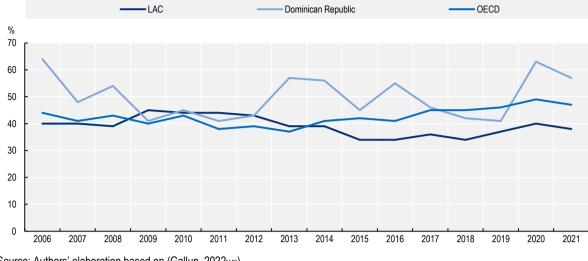
This section explores these challenges in detail. First, it analyses the growing divide between citizens and institutions, as well as the institutional trap facing the Dominican Republic. Trust has been declining and social aspirations are rising, putting pressure on a social contract that is key to deliver greater well-being to all. Second, it analyses some of the main challenges of the country's institutional framework, and the policy efforts, such as adopting digital technologies, needed to move towards more credible, capable, open and innovative public institutions. Third, it examines some of the main barriers to effective public policy making, mainly related to institutional fragmentation and lack of co-ordination (both horizontal and vertical). This encompasses the need to improve strategic thinking and long-term planning, and address the perils of policy capture that deviate policy making from the public interest.

Strengthening trust in institutions is key to renewing the social contract

Despite strong economic growth, trust in public institutions has been volatile and insufficient, though it has improved more recently

The evolution of trust in public institutions in the Dominican Republic over the last two decades has followed a trend apparently disconnected from economic growth dynamics. Confidence in national government has been higher in the initial years of each administration governing the country in the last two decades and has generally fallen rapidly afterwards. Confidence in the national government was particularly low in 2011 (41%), 2015 (45%) and 2019 (41%), but recovered to higher levels in 2020 (63%) and 2021 (57%). The 2021 level of confidence is well above the averages for LAC (38%) and the OECD (47%) (Figure 2.51).

Other indicators also point to an erosion of citizens' trust in institutions, though again with a recovery particularly linked to the management of the impacts of the COVID-19 pandemic. Support for democracy, for instance, fell from a maximum of 73% in 2008 to 60% in 2013, 54% in 2017, and a minimum of 44% in 2018 (Latinobarometro, 2021_[103]). In 2020, it rebounded slightly to 50%, presumably because part of the population perceived and appreciated government efforts put in place to counter the effects of the pandemic.

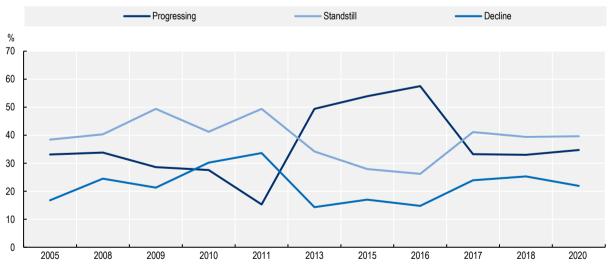




Source: Authors' elaboration based on (Gallup, 2022[15]).

The perception of progress in the Dominican Republic has also deteriorated. After a low point in 2011, more than half of the population believed the country was progressing in the period between 2013 and 2016. Subsequently, a steady drop is evident: in 2020, only 35% believed the country was progressing, while 40% felt it was at a standstill and 22% considered it to be declining (Figure 2.52).

Figure 2.52. Perception of progress in the Dominican Republic



Percentage of the population

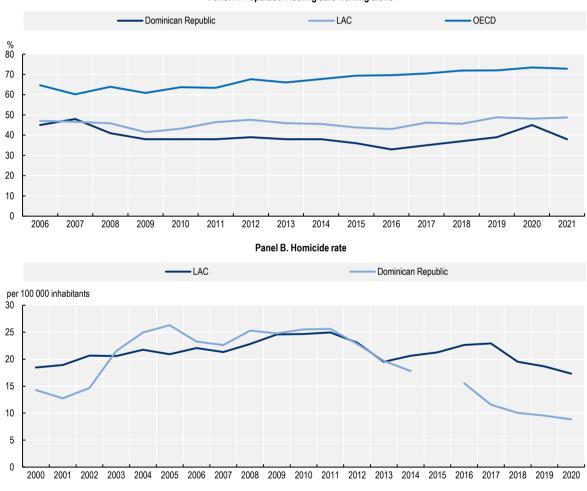
Note: The question posed is: "What is your perception of progress of the country? The country is..."; Data are not available for 2006, 2007, 2012, 2014 and 2019 as the survey was not conducted. Source: Authors' elaboration based on (Latinobarometro, 2021[103]).

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In 2020, the main sources of concern across citizenship were economic issues, mostly related to the general outlook for the economy, the risks of unemployment and poverty, and access to and quality of public services, followed by political issues, mostly corruption and delinquency (Latinobarometro, 2021_[103]). With respect to crime and insecurity, the percentage of population feeling safe walking alone has remained low, from levels of 45% (2006) to 33% (2016), with a recovery to 45% (2020) probably related with the isolation measures, and a drop again to 38% in 2021 (Figure 2.53, Panel A). This contrasts with actual data on intentional homicides: between 2001 and 2005, the homicide rate rose from 12.5 to 25.9 (per 100 000 people); it then fell steadily to 15.2 (2016) and 9 (2020) (Figure 2.53, Panel B). This apparent paradox could be related to a lack of precise information about types of crime other than homicides, improved assistance of emergency services that prevents the death of many victims of attacks, or increased access to media delivering news about crime.

Figure 2.53. Crime and insecurity: Perception and current trends in the Dominican Republic



Panel A. Population feeling safe walking alone

Note: Panel B: no data available for 2015 in the Dominican Republic. Source: Panel A: Authors' elaboration based on (Gallup, 2022_[15]). Panel B: (World Bank, 2022_[2]).

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Multiple factors are potentially driving the existing divide between citizens and public institutions in the Dominican Republic. On the one hand, social demands have increased as various dynamics have

transformed aspirations. These include the expansion of the middle class, a younger and increasingly urbanised population, and greater access to digital technologies – and hence to information (which has made more visible longstanding issues without these necessarily being more acute) (OECD et al., 2020_[6]). The response to the impacts of the COVID-19 pandemic may have also had effects on public opinion and on the need to reinforce public services and social protection (OECD et al., 2021_[27]). On the other hand, while undeniable efforts have been made to strengthen the institutional framework, public institutions still face significant challenges to address structural problems, advance the pandemic recovery, and respond to new, growing demands. Insufficient institutional capacities are a barrier to successful policy implementation. Moreover, corruption and policy capture significantly deviate institutions and policy making from the public interest in order to serve particular interests.

Rising aspirations of the middle class demand a renewed social contract

The expansion of the middle class has been one of the main socio-economic advancements of recent times in the Dominican Republic. Living on USD 13-70 per day (2011 PPP), the consolidated middle class expanded from 27.4% in 2010 to 42.4% in 2019. With COVID-19, it declined to 37.1% in 2020. However, a large and increasing "vulnerable" middle-class, living on USD 5.5-13 per day (2011 PPP), represents 46.9% of the population (World Bank, 2022_[37]).

The vulnerable middle-class lives with a feeling of uncertainty. Defined as individuals living in households with a daily per-capita income between USD 5.5 -13 (PPP 2011), people in this socio-economic group usually have low quality, informal jobs, and are at risk of falling back into poverty if hit by any negative event such as unemployment, an economic shock or illness. This was the case for many in the context of the pandemic, though measures put in place by the government sought precisely to prevent these vulnerable populations from falling into poverty. In 2020 almost half (46.9%) of Dominicans were part of the vulnerable middle class (World Bank, 2022_[37]).

Socio-economic progress in the Dominican Republic has come with greater aspirations and an increased perception of unmet social demands. Expansion of the middle-class involves increased expectations of citizens, including demand for better quality public services. Similarly, an intense process of urbanisation is changing society: as much as 83% of the population was living in urban areas in 2021, relative to 61.7% in 2000 and 73.7% in 2010 (World Bank, $2022_{[2]}$). This creates new demands, new social dynamics and numerous institutional challenges. A younger population is also transforming social expectations. In 2021, population aged 15-29 reached around 2.9 million, representing almost 26% of total population (United Nations, $2021_{[104]}$). This group, which has been born and raised in democracy, comes with new perspectives and demands about living standards.

Higher aspirations and growing levels of dissatisfaction and mistrust have been weakening the social contract in the Dominican Republic, fuelling an "institutional trap". On the one hand, individuals from highand middle-class households usually channel their dissatisfaction with public services by opting out (i.e. moving towards better quality private services they can afford). For instance, enrolment in private secondary schools increases substantially for higher income groups (Figure 2.54). In this sense, they are paying, via their taxes, for the cost of public services that they do not necessarily use and also paying, from their available income, for the cost of private services. On the other hand, individuals from the vulnerable middle class and poor households are also dissatisfied with the quality of public services but cannot afford to opt for private services. This creates a risk of fracture, as it affects the willingness of citizens to engage in a social contract, fuelling an institutional trap.

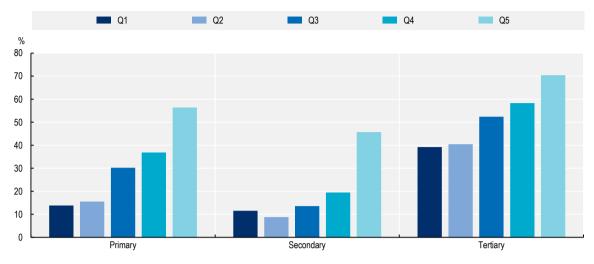


Figure 2.54. Share of students in private schools by income quintile, 2016

Source: Authors' elaboration based on (CEDLAS/World Bank, 2022[60]).

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An institutional trap is at play in the Dominican Republic

Higher aspirations and the unmet demands of society due to lack of institutional capacities create a feeling of disengagement and an institutional trap in the Dominican Republic. As such, "tax morale", or the willingness of citizens to pay taxes, is relatively low. In 2016, 41% of Dominicans justified not paying taxes, if possible (OECD/CAF/ECLAC, 2018_[53]); in 2020, 27.9% declared that they managed to avoid paying some taxes (Latinobarómetro, 2020_[105]).

Low levels of tax morale have negative impacts on the government's capacity to raise taxes (which is already low). In 2020, tax revenues were at 12.6% of GDP, placing the Dominican Republic among the lowest in the LAC region in this indicator, above only Guatemala. The highest historical data-point was 15% in 2007, with a subsequent decreasing pattern of tax revenues to 13.5% in 2019, which shows that, despite the economic shock of the pandemic, the country has not progressed in its capacity to raise taxes in the past years. By contrast, average tax revenues in 2020 were 21.9% of GDP in LAC and 33.5% for the OECD (OECD et al., 2022_[101]).

Raising public resources is vital to finance better public services and to strengthen public institutions. With low levels of trust and tax morale, however, fiscal legitimacy remains weak and the capacity to raise tax revenues is limited. A vicious circle persists in which citizens demand more but are not willing to pay taxes, given their low levels of trust and satisfaction, hence limiting the capacity of states to effectively respond to society's growing demands (Figure 2.55).

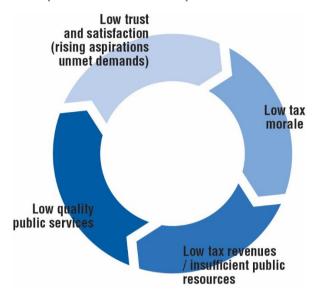


Figure 2.55. The institutional trap in the Dominican Republic

Source: (OECD et al., 2019[3]).

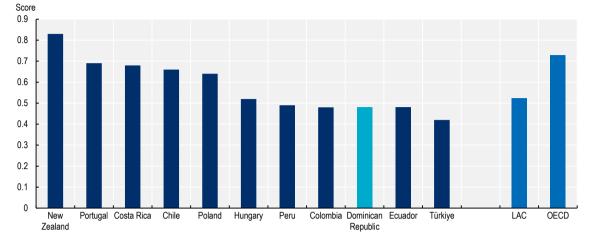
Bringing citizens and institutions closer demands stronger institutions that support inclusive and sustainable development

Stronger institutions are needed to support inclusive and sustainable development and respond to citizen demands in the Dominican Republic. The institutional framework must be strengthened to address the current development traps and underpin the recovery. This section explores some of the main weaknesses of public institutions in the country.

More credible institutions are needed to restore citizens' trust

Compliance with the rule of law is a critical component for economic development and effective and trustworthy states. The rule of law is the capacity of the state to observe and enforce formal rules in an impersonal and systematic manner to government actors and citizens alike (World Bank, 2017_[106]). A state that enforces the law is essential for guaranteeing an environment that enables good governance and economic growth (OECD/CAF/ECLAC, 2018_[53]).

Scope exists for improvement regarding compliance with the rule of law in the Dominican Republic. In 2021, the Dominican Republic scored below LAC and OECD averages on the Rule of Law Index, and was among the lowest of the benchmarking economies (Figure 2.56). Among 126 countries covered by this index, the Dominican Republic ranked 94th. This index includes eight factors, namely: constraints on government powers; absence of corruption; open government; fundamental rights; order and security; regulatory enforcement; civil justice; and criminal justice. The Dominican Republic shows particularly poor performance on constraints on government powers, absence of corruption, regulatory enforcement, and civil and criminal justice.





Source: Authors' elaboration based on (The World Justice Project, 2022[107]).

The capacity of the state to comply with and enforce the rule of law is directly linked to the strength of legal institutions. These institutions must be able to enforce the division of powers among institutions and also prevent them from overstepping their legal mandates. They must also be able to, with legal proceedings, oversee compliance of elected officials and civil servants and to give equal treatment to all citizens. Finally, they must be able to enforce civil and property rights among citizens (OECD/CAF/ECLAC, 2018_[53]).

Trust in the judicial system in the Dominican Republic remains low. In the last decade, only around one in three citizens indicated having trust in the judicial system, down from 41% in 2006 (Figure 2.57). In 2021, trust in the judicial system recovered to 41%, which is above the LAC average (34%) but significantly below the OECD, where on average, half of citizens trust the judicial system.

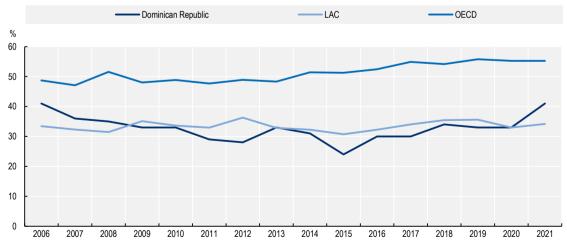


Figure 2.57. Trust in the judicial system in the Dominican Republic

Source: Authors' elaboration based on (Gallup, 2022[15]).

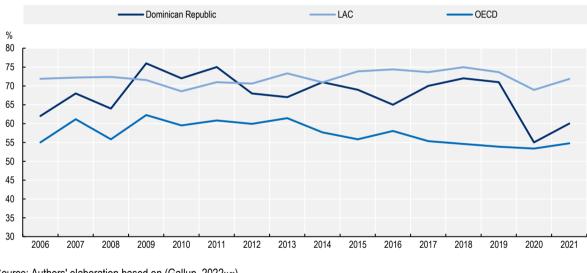
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The perception of corruption in government is high in the Dominican Republic. Despite some recent improvements, in 2021, still 60% of the population believed corruption to be widespread (Figure 2.58). almost on par with perception of corruption 15 years ago (62% in 2006), suggesting little progress in this front. The level is somewhat below the LAC average (72%). Corruption is one of the main sources of concern for Dominicans; in 2021, around 55% of the population thought that corruption had not improved from the previous year (Latinobarometro, 2021[103]). Of 180 countries assessed in the 2021 Corruption Perceptions Index, the Dominican Republic ranked at 128 (Transparency International, 2021[108]). Scandals around the "Odebrecht case" were most likely behind a noticeable rise in the perception of corruption between 2016 and 2019. The Marcha contra la Impunidad or Marcha Verde was a massive demonstration against corruption that took place in various parts of the country in January 2017, revealing a moment of particular social discontent and rejection to impunity.

Corruption is a mechanism by which people or entities use the state and institutions to gain private advantage; as such, it critically undermines trust and the rule of law. As it deviates resources from the public interest, it is also strongly damaging for development. It can also curb competition and a fair functioning of the economy, aggravate social and economic disparities, and limit equal access to public services (among other negative impacts) (OECD/CAF/ECLAC, 2018[53]).





Source: Authors' elaboration based on (Gallup, 2022[15]).

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State capacities must be strengthened to guarantee more effective provision of good guality public services

Institutional capacities are generally weak in the Dominican Republic. This limits the capacity of public institutions to deliver on their functions and restricts the ability to provide good quality public services. The "fiscal muscle" of the state (i.e. public financial resources) is a core element to support stronger institutions and improve public service delivery. However, as mentioned before, tax revenues in the country remain low. While mobilising more domestic resources must be a policy priority, a related imperative is to be able to do more with the same limited resources. Hence, efficiency must become a key element of public governance, particularly in the post-pandemic context where fiscal space has been reduced. Indeed, enhancing public sector performance is a central pillar of the NDS 2030.

The Dominican public administration has been characterised by its limited clarity in mandates and functions, and by a rather complex structure, with high fragmentation. This leads to inefficiencies in the application and co-ordination of public policies, which limits capacity to provide high quality service delivery (Mejía-Ricart, 2002_[109]). Broad scope exists for rationalising the public administration as well as for reducing existing duplications of roles and services. Such reforms would help to create savings, refocus the administration on citizens' needs and promote social investment (OECD, 2019_[110]).

In 2018, the Dominican Republic reinitiated an ambitious public administration reform that sought to strengthen the public governance framework and enhance efficiency and transparency. In 2021, the country approved the *Plan Nacional para la Reforma y Modernización de la Administración Pública*. This Plan seeks to strengthen institutions and their capacities in the design and implementation of public policies, while increasing the efficiency of public expenditure and the quality of public services. More broadly, it aims to enhance trust and bridge the gap between citizens and institutions. A number of elements are key to ensure the success and sustainability of public administration reform, namely its sequencing, guaranteeing the required resources, a more defined sectorial approach, adequate stakeholder participation, and effective and strategic communication. The magnitude of the public administration reform as envisaged by the Dominican Republic requires the existence of effective coordination mechanisms, not only within the Ministry of Public Administration (MAP) as the steering body of the reform but also *vis-à-vis* all actors involved in the reform.

Two other areas are critical to improve the efficiency of public governance and the quality of public service delivery: strengthening the civil service and encouraging administrative simplification. Both offer potential gains in the Dominican Republic.

State capacities are directly shaped by the quality of public servants. Public employees are one of the main assets of public administration; thus, investing in their skills and developing a system for selection, strengthens the pool of human resources in public institutions.

The Dominican Republic is taking bold steps to modernise and professionalise its public administration. Significant improvements relative to the civil service have been made in recent years, but its performance is still insufficient. On average, between 2012-17, the country scored slightly below the LAC average on the Civil Service Development Index, which covers diverse aspects relative to the design and functioning of the public service career (Figure 2.59).

Creating a career of public service has been a major achievement for the Dominican Republic, with Law 41-08 (established in 2008) being a key development to improve public sector capacities. The career of public service is based on merit-based recruitment and employment processes, as well as on performance-oriented human resources practices. Since 2010, the *Sistema de Monitoreo de la Administración Pública* (SISMAP) is a system to monitor progress in these fronts. Significant steps forward have been achieved, though the implementation process has challenges, mainly related to institutional fragmentation, lack of workforce planning, and lack of leadership and management competencies across the public administration. Additionally, as these reforms challenge a culture of political influence and nepotism in public administration, they demand continued strong political support to succeed (OECD, 2015[111]).

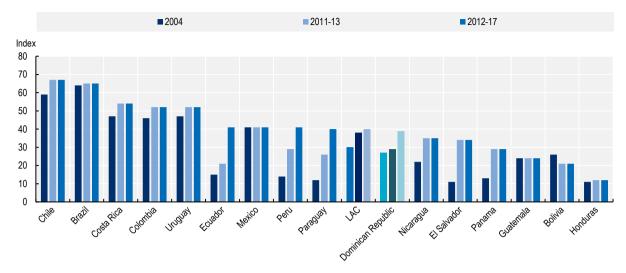


Figure 2.59. Civil Service Development Index

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Note: Data were last updated in July 2020, but the data set covers the time period 2004-17. Source: Authors' elaboration based on (IDB, 2020[112]).

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Administrative simplification is another vital area to improve public governance and public service delivery. A too-complex regulatory framework can hamper access to public services to citizens and businesses, while also creating both inefficiencies and excessive burdens to public authorities and service providers (OECD, 2017^[113]).

To date, the focus of administrative simplification has been placed on businesses, and not so much on building a more efficient, citizen-centred government. The NDS 2030 includes administrative simplification as a priority area. Various initiatives have already been implemented, such as one-stop shops (both digital and physical), centralisation of registries on formalities, a programme on formality simplification, and implementation of citizen service charters (OECD, 2017^[113]).

Box 2.2. Statistical capacity in the Dominican Republic

A growing demand for official statistics is driving the Dominican Republic's current statistical agenda. The country's fast-growing economy, the development of its NDS 2030, and the adoption of the 2030 Agenda for Sustainable Development have challenged the national statistical system. The National Statistics Office (ONE) is the body in charge of co-ordinating the production of the national statistics necessary to monitor and evaluate the NDS 2030.

Looking back many years, Law 5.096 (1959) failed to establish a leadership role for ONE or provide guidelines for its technical, budgetary and operational autonomy. In the 1980s and 1990s, ONE was subject to politicisation, which weakened its position within the national statistical system. In light of this institutional challenge and building on its reputation as the watchdog of macro-economic stability, the Central Bank overtook parts of statistical production, becoming a highly influential actor in national policy making. Since then, the National Bank has been a major player in producing official statistics, including national accounts, labour market indicators and the consumer price index, among others.

Efficient production of official statistics, however, has been historically hindered by lack of clearly set co-ordination instruments of the national statistical system, ONE's dependence on the central

administration of the executive branch, and an on-going implementation process of the 2008 Civil Service Law.

Over the last ten years, however, the statistical capacity of ONE has evolved substantially, especially in terms of human, financial, technological and physical resources. With the assistance of international donors, ONE has successfully run household surveys since 2005, recruited qualified personnel and created the National School of Statistics. ONE has also been successful in defining strategic sectoral plans, holding inter-institutional meetings with entities from the statistical system, and increasing transparency in data dissemination. More broadly, ONE has generally been able to operate with autonomy from the government.

Thanks to continuity and the ability of leadership to enable implementation of a specific strategic vision – and thus, to capture resources from international donors – the weakness of the national statistical system has consistently improved.

Higher requirements for information for monitoring the NDS, the influence of multilateral organisations and international commitments (such as the Millennium Development Goals [MDGs] and Sustainable Development Goals [SDGs]), as well as a more general trend toward strengthening Dominican public administration, have also contributed to capacity building.

State capacities in the Dominican Republic can be strengthened by collaborating with the private sector, particularly for the provision of public goods requiring large investments, such as infrastructure. Public-private partnerships (PPPs) can be an effective way to increase total investments, but require greater regulatory clarity and institutional capacity. Engaging in PPP processes entails defining clear frameworks and ensuring that the government has appropriate capacity to initiate and manage them, and hence demand high levels of public governance and co-ordination (OECD/CAF/ECLAC, 2018_[53]). Efforts are being carried out but the PPP environment still needs improvements. The Infrascope Index, which measures the environment for infrastructure PPPs of 26 LAC countries, ranks the Dominican Republic 10th with an overall score of 57.1. The country shows particularly low scores in: project preparation and sustainability, risk management and contract monitoring, and performance evaluation and impact (The Economist Group, 2022_[114]). Law 47-20 on PPPs (approved in 2020) established a specialised national agency (the General Directorate of Public-Private Partnerships) to develop PPPs and introduce principles of good governance, accountability and transparency.

More open and innovative public institutions can be achieved by embracing the digital transformation

Digital technologies can strongly support public governance in multiple ways. Adoption of digital technologies in governments is broadly understood as "digital government," which is defined in the OECD Recommendation on Digital Government Strategies as "the use of digital technologies, as an integrated part of governments' modernisation strategies, to create public value" (OECD, 2014_[115]).

Digital governance can have numerous beneficial impacts. First, it can help governments be more efficient by redesigning back-office processes. Second, it can support a new type of relationship with citizens by being more transparent, more accountable and more participatory, hence supporting trust and citizen engagement. Third, it can improve co-ordination of government actions across sectors and levels of government, supporting coherence. Finally, it can support innovation and public sector intelligence through the use of newly generated data, which can help to better understand citizens' demands and behaviours and design more effective policies. In a context of limited fiscal resources, digital governance is potentially a cost-effective option.

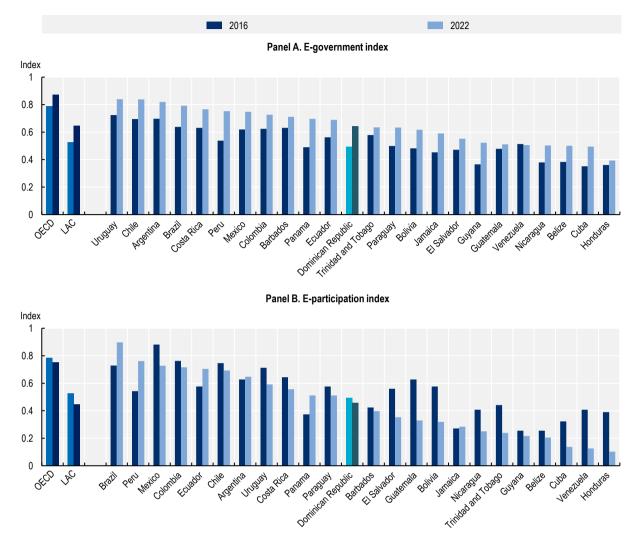


Figure 2.60. UN E-Government and E-Participation indices

Note: The E-Government and E-Participation indices range from 0 to 1, with higher values corresponding to higher performance. Source: Authors' elaboration based on (United Nations, 2016[116]; United Nations, 2022[117]).

The Dominican Republic has taken steps towards digitalisation of public governance, but still lags behind some LAC countries. The UN E-Government index measures development of e-government at the national level to assess the readiness and capacity of national institutions to use information and communication technologies (ICTs) to deliver public services. In 2022, the Dominican Republic scored 0.64, in line with the LAC average (Figure 2.60). The UN E-Participation index focuses on the dimensions of e-information, e-consultation and e-decision making to assess the engagement of citizens in the use of digital government services. In 2022, the Dominican Republic services. In 2022, the Dominican Republic services on the dimensions of e-information, e-consultation and e-decision making to assess the engagement of citizens in the use of digital government services. In 2022, the Dominican Republic scored 0.45, similar to the LAC average (Figure 2.60).

The institutional framework for advancing the digital transformation of government in the Dominican Republic has evolved significantly in recent years. In 2004, the government established the Presidential Office for ICT (OPTIC), with the aim of supporting the use of digital technologies to modernise and transform the public administration and improve the relationship with citizens. In 2008, Law 41-08 created the MAP, providing the legal basis for this institution to take the lead on digital government policy. The

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NDS 2030 also includes the development of e-government as one of its strategic lines. Between 2016 and 2020, *República Digital* represented a cross-cutting governmental initiative including four strategic axes, one of which focused on digital government and moving towards more open and transparent public governance. In 2021, another major step was taken by creating the *Gabinete de Transformación Digital*, in charge of elaborating of a new Digital Agenda 2030, which was approved in 2022. Together with the dialogue on digital transformation initiated in 2021 (*Dialogo de las reformas 2021: Transformacion Digital*), these are strong evidence of the political commitment to drive a digital transformation, with a fundamental axis of the Digital Agenda 2030 being the digital transformation of public institutions.

To tap the potential of digital governance in the Dominican Republic, implementation of existing norms and regulations must be improved, for instance regarding open government. The 2017 OECD Recommendation of the Council on Open Government defines open government as "a culture of governance that promotes the principles of transparency, integrity, accountability and stakeholder participation in support of democracy and inclusive growth" (OECD, 2017_[118]). Countries increasingly acknowledge the role of open government reforms as catalysts for public governance, democracy and inclusive growth (OECD, 2016_[119]). The Dominican Republic joined the global Open Government Partnership as early as 2011. In 2018, the government established the Data Centre of the Dominican State, to make data available for use and re-use by institutions and citizens. Likewise, the Centre for Citizen Attention supports better interaction between citizens and public institutions; it is complemented by *Punto Gob* sites, which provide citizens with different types of highly demanded transactional services in one place.

Development planning and policy co-ordination must be improved to achieve development objectives

Development planning is a political and social process that seeks to co-ordinate different actors, sectors and levels of government for comprehensive actions to achieve development objectives. In the Dominican Republic, the National Development Strategy 2030 represents a successful, collective effort to set a long-term vision. However, some implementation challenges appear to be limiting its potential impact. First, difficulties in reaching consensus on certain strategic areas constrains capacity to advance an ambitious reform agenda. Second, co-ordination across different levels of government is insufficient and territorial organisation must be improved to enhance the impact of development actions at the local level. Finally, challenges linked to the policy-making process limit the capacity to successfully advance development policies. In particular, policy capture exerts a strong influence in these processes and deviates policy making from the public interest.

The National Development Strategy and the "pacts"

The NDS 2030 is built on four strategic axes: a state with efficient and transparent institutions; a cohesive society; a complex, innovative and sustainable economy; and sustainable management of the environment.

The NDS includes within its objectives national "pacts' on three strategic areas: education, electricity and fiscal issues. The pact on education has advanced successfully, after strong citizen mobilisation led to a public commitment to spend at least 4% of GDP on education, annually. Signed in February 2021, the pact on electricity (*Pacto Nacional para la Reforma del Sector Eléctrico en la República Dominicana, 2021-2030*) aims to build an efficient, competitive and sustainable electric system, including a responsible environmental vision. The fiscal pact, however, is still pending. This pact remains of critical importance, particularly in the post-pandemic context in which fiscal space has tightened and vast resources are needed to support an ambitious reform agenda while protecting the most vulnerable and guaranteeing fiscal sustainability (Chapter 4).

International co-operation can play a vital role in supporting domestic capacities to implement development policies and advance the NDS. The Dominican Republic represents a good example of alignment between the NDS and international co-operation. Indeed, the National System of International Co-operation for Development (SINACID) is aligned to the National Planning and Public Investment System, as well as to the State Financial Management System. As of 2016, under the Viceministry of International Co-operation (VIMICI in Spanish), the sectors in which most of the initiatives were concentrated were health, agriculture and fishing, and education, followed by justice, environment, industry, and trade. The main source of co-operation was through multilateral and bilateral funds (OECD et al., 2019_[3]).

Territorial development and co-ordination

Large territorial disparities remain in the Dominican Republic across various dimensions of well-being. For instance, in the macro-region *Sur*, poverty levels reached 28.8% of the population in 2020 and increased to 31.8% in 2021, while in the *Norte o Cibao* they remained stable between 18.3 (2020) and 18.5% (2021) (Ministerio de Economía, Planificación y Desarrollo, 2022_[32]). Likewise, the share of households with access to internet ranges from 44.4% of highly populated and developed provinces such as *Distrito Nacional* and 34.4% of *La Altagracia* to very low levels of connectivity in smaller, less-developed provinces such as 5.4% in *Elías Piña* or 4.9% in *Independencia*. In effect, a difference of 45.8 percentage points exists between regions with higher and lower shares of households with internet (INDOTEL, 2021_[120]).

Regional disparities stress the importance of including a territorial perspective in national development planning, as is done in the NDS 2030. In reality, the Dominican Republic remains a largely centralised country. A high level of territorial atomisation results in low capacities at the subnational level and limited responsibilities, lack of fiscal transparency and poor frameworks for fiscal responsibility at the municipal level. In addition, the system of transfers to local governments is weak (Martínez-Vázquez, et al., 2017_[121]).

In this respect, the modernisation of the subnational public administration must be a key axis of public policy. There have been efforts in this direction like the creation of the *Comisión Presidencial para la Reforma Municipal* (COPREM) in 2015, and the creation of a Fund for Territorial Cohesion for the co-financing of public investment projects of common interest, with a focus on poorer municipalities.

The Law of Land Planning and Use (*Ley de Ordenamiento Territorial y Uso del Suelo*) will be of critical importance to advance this agenda. The text of this law has been a matter of discussion in recent years, and, in October-2022, it was in good track but had not yet been approved.

From planning to action: Improving the policy-making process and avoiding policy capture

Policy capture is presumably high in the Dominican Republic and one of the main barriers to inclusive and sustainable development. Practices of policy capture can significantly undermine the impact of public policies in promoting inclusive and sustainable development. Policy capture is "the process of consistently or repeatedly directing public policy decisions away from the public interest towards the interests of a specific interest group or person" (OECD, 2017_[122]). While the pursuit of the public interest should guide design of public policies, most policies will lead to both winners and losers. Hence, strong incentives exist for certain groups to influence policy decisions in the direction of their interests, such that they can gain advantage or preserve a beneficial situation.

Policy capture is detrimental for development in multiple ways. It can undermine productivity and growth, as it perpetuates the advantageous status of dominating economic powers and preserves existing monopolistic or oligopolistic structures, hence limiting the potential benefits of fair competition. It also creates incentives for economic agents to invest in gaining influential power and in rent-seeking activities, rather than in competing by innovating or developing skills. In turn, policy capture is cause and consequence of inequality, as it preserves the interests of the wealthy and powerful who – precisely because of their wealth and power – can continue to influence policies in their private interest. Policy

capture also leads to misallocation of public resources, which are needed to invest in better public services, and limits the capacity to advance and to overcome existing development traps that demand bold and strong reforms. Policy capture also erodes trust and legitimacy, with large implications for the success of public policies, for social cohesion and for a good functioning of the social contract (OECD/CAF/ECLAC, 2018^[53]; OECD, 2017^[122]).

The perception that powerful groups dominate public policy making has been very high in the Dominican Republic for many years, though with a remarkable decline recently. Since 2008, this perception of concentration of power has been oscillating between 70% and 90%, persistently above the LAC average. In 2018, as much as 85% of Dominicans thought the country was governed for and by the powerful. More recent data (from 2020) show a marked decline to 59.8% (Figure 2.61).

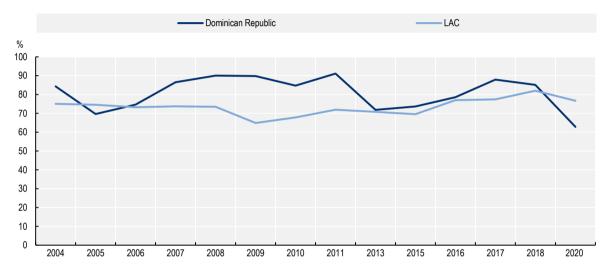


Figure 2.61. Share of the population that believes that the country is governed by the powerful

Source: Authors' elaboration based on (Latinobarometro, 2021[103]).

Policy capture is difficult to measure, but perceptions of its widespread incidence show it impact on inclusive development in the Dominican Republic. Unlike corrupt practices such as bribery (e.g. to obtain a contract), capture is not related to a specific transaction, but is usually characterised as a more stable relationship built up over time through both legal (e.g. lobbying and financial support to political parties or electoral candidates) and illegal instruments and channels. Undue influence can even be achieved without directly involving (and without the knowledge of) public decision makers, for example by manipulating information or establishing close social or emotional ties with influencers (OECD, 2017_[122]).

The existence of broad tax incentives could be somewhat linked to the influence of policy capture (Jovine and Cañete, $2017_{[123]}$). Policy capture in tax incentive schemes in the Dominican Republic takes place through private sector influence from within the institutional framework, not from outside. These tax regimes (free trade zones, border zones, tourism and industrial competitiveness) are administered by governing bodies where there is presence of private sector representatives. This implies that decisions over the continuation or modifications of these tax regimes are not a direct competence of the Ministry of Finance, and that private interests have a capacity to bias and influence decisions in these governing bodies (Daude, et al., $2014_{[91]}$).

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Planet: Conserving nature

As one of the countries most vulnerable to natural hazards, the Dominican Republic continues to be under growing environmental pressure. To ensure a more inclusive and sustainable development path for its future citizens, it will need to translate protection of the environment from the periphery of public action into integrated public policies. The country has enjoyed strong economic growth, but the current development model is not sufficiently inclusive and sustainable in the long term. An economy based on sustainable management of the environment and an appropriate adaptation to climate change is needed, as emphasised in the NDS 2030.

This section identifies four major environmental constraints facing the Dominican Republic. First, protection of the environment is a relatively low priority compared to the support of economic growth. Considering the country's rich natural capital, reinforcing its protection and improving management of natural resources will be essential for the development path. Second, as the country is highly exposed to natural hazards, the vulnerability of housing constructions and lack of urban and territorial planning increases the risk of physical and property damages. Third, the Dominican economy remains highly dependent on fossil fuels, making it vulnerable to economic shocks. Finally, institutional fragilities undermine the coherence of environmental policies and the government capacity to enforce environmental legislation (Table 2.2).

Protection of the country's natural capital is not sufficiently prioritised

The Dominican Republic has rich natural capital and needs to reinforce its protection. Natural capital corresponds to natural assets and their role of providing natural resource inputs and environmental services for economic production. Natural capital is generally considered to comprise natural resource stocks, land and ecosystems (OECD, 2001_[124]).

Biodiversity and natural areas are key assets that need better protection

The Caribbean islands are considered as one of the five areas most relevant for biodiversity in the world (Myers, 2000_[125]). Due to their surface, Hispaniola and Cuba contribute to a greater extent to this diversity. Specific to the Dominican Republic, around 26.2% of its total land and nearly 18% of territorial waters are classified as terrestrial and marine protected areas (World Bank, 2022_[2]), well above the averages for LAC and OECD (Figure 2.62). Based on legislation on biodiversity (mainly *Ley 202-04 de 2004* & *Decree n°571 of 2009*), the Dominican Republic has a national system of protected areas (S*istema Nacional de Areas Protegidas, SINAP*). The system is composed of 147 different protected areas: mostly national parks that cover 12 727 km² of terrestrial area and 48 625 km² of marine area, together accounting for a total of 19.2% of the national territory (UNEP-WCMC, 2022_[126]). Some 90% of the endemic fauna and flora reported by the country is found in the protected areas. The Dominican coastline is particularly important in terms of biodiversity, being home to 450 plant species and 1 159 animal species. Almost 76% of the country's coast is included under the SINAP protection.

Biodiversity faces various threats in the Dominican Republic. Uncontrolled development of several sectors that are essential in the current economic growth strategy of the Dominican Republic tend to jeopardise protection of environment. Rational management of fishing, tourism, urbanisation and forests is needed to ensure economic growth is not detrimental to preserving natural capital.

Marine resources are threatened by constant coastal development and overfishing. The Dominican Republic's marine resources are at risk. Between 70% and 90% of coral reefs have already disappeared (Deutsche Welle, $2020_{[127]}$; USAID, $2013_{[128]}$) due to coral bleaching or water warming, which may be linked to fishing practices. Development of the fishing industry and its productivity were promoted at the expense of conserving marine resources. More sustainable management of these resources could support development of the blue economy⁵ (Patil et al., $2018_{[129]}$).

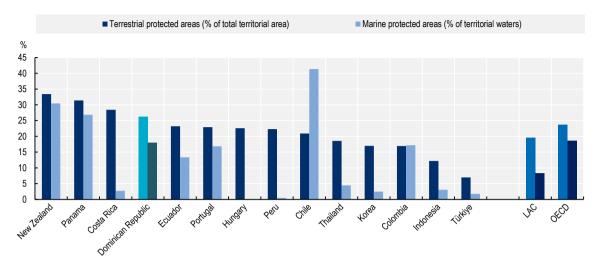


Figure 2.62. The level of terrestrial and marine protected areas in the Dominican Republic is above the LAC average

Note: No data are available for Hungary on marine protected areas (no access to sea). LAC and OECD are simple averages of the countries with available data.

Source: Authors' elaboration based on (World Bank, 2022[2]; UNEP-WCMC, 2022[130]).

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Mass tourism has become a major threat for environmental protection. With around 6.1 million international tourists in 2017 and nearly 6.6 million in 2018 (Ministry of Tourism, $2022_{[131]}$), the Dominican Republic continues to be the favourite touristic destination in the Caribbean. Between 2007 and 2017, the number of international tourists increased by 35%.

In 2019, travel and tourism (T&T) relative contribution to GDP was 15.9%. In 2021, after the COVID-19 shock, the Dominican Republic eased all travel restrictions for vaccinated travellers and had a strong rebound of T&T contributing 11.8% to GDP (WTTO, 2022_[42]). T&T constitutes almost 16.7% of total employment and around 5% in terms of direct employment (see "Prosperity" section in this chapter). Tourism in the Dominican Republic and the Caribbean is dominated by all-inclusive resorts and cruise tourism. Global air connectivity between 2009 and 2019 grew by more than 100% in the Dominican Republic (WTTO, 2022_[42]). During the 2017-18 cruise year, the Dominican Republic had passenger arrivals in excess, around 1.1 million passengers (BREA, 2020_[132]). In recent decades, beaches in the Dominican Republic have experienced accelerated erosion (UNEP/GPA, 2003_[133]), due mainly to human impact (Cambers, 1999_[134]). New mega-resorts projects close to the coastline are likely to threaten the preservation of national parks and their endemic species.

As the number of tourists increases, environmental pressure also rises; as such, developing a sustainable tourism model becomes crucial to economic policy discussion. Some initiatives have been developed: in 2019 UN Environment launched the Roadmap for Low Carbon and Resource Efficient Accommodation in the Dominican Republic. The roadmap sets five targets for the accommodation sector: reduce 25% of greenhouse gas (GHG) emissions by 2030 (from a 2020 baseline); reduce food waste by half; reduce by 25% the use of non-renewable energies; eliminate single-use plastics; and develop a sustainability certification for hotels. The Ministries of Environment and Natural Resources and of Tourism, among other actors, have confirmed their commitment to develop a sustainable and resilient tourism sector, and implementing the roadmap remains on the country's agenda (UN Environment, 2019_[135]).

Environmental vulnerability in the Dominican Republic is exacerbated by rapid urbanisation and the lack of territorial planning. With the urban population growing by 2.4% annually since 1994, the Dominican

Republic has urbanised faster than the LAC region. Legislation (Law No. 305 of 1968) states that constructions are prohibited within the 60-meter maritime-terrestrial zone, but allows exceptions only for the tourism sector and authorisation is provided directly via presidential decree. Nevertheless, many beaches (e.g. Cortecito, Uvero Alto and Punta Cana) have the highest percentage of buildings within the fixed 60-meter shoreline, mainly for tourism purposes (Almanzar et al., 2017_[136]).

While the Dominican Republic was able to control deforestation over the last decades, threats to the protection of existing forests remain. In the 1980s, forests that once covered 70% of the country were drastically reduced due to agricultural expansion and logging. In 2020, total forest cover was estimated as 44.4% of total land area, approximately 2.1 million hectares (FAO, 2022_[137]). Forest area in the Dominican Republic increased by 5.1% between 2000 and 2010 and by 3.4% between 2010 and 2020, compared to declines of -5.7% and -3.0% for South America (Figure 2.63). However, the frequency of forest fires (Figure 2.64) and continuous expansion of agricultural lands due to pressure from agricultural activities could reverse current trends. In 2020, almost half of the country's territory was dedicated to agriculture (50.3%), which is above the averages for LAC (32.8%) and OECD (33.9%) (World Bank, 2022_[2]).

The country has a National Climate Change Plan (*Plan nacional de Adaptación para el Cambio climático*, PNAC-RD) and a National Action Plan for Adaptation to Climate Change (PNCC). The National Council for Climate Change is responsible for formulating, implementing and co-ordinating (across ministries), and enforcing climate change policies and projects under the President. The strategies on climate change cover mitigation and adaptation issues; however, implementation of the strategy faces challenges in territorial articulation and monitoring, its integration across sectors (energy, transports, etc.), and budget alignment to the expected results.

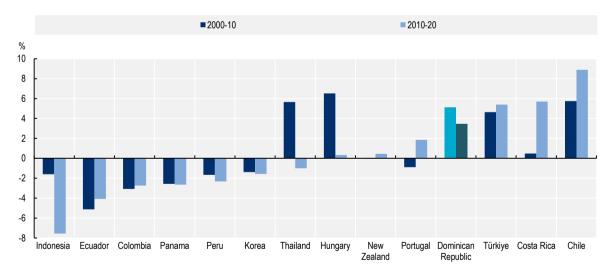


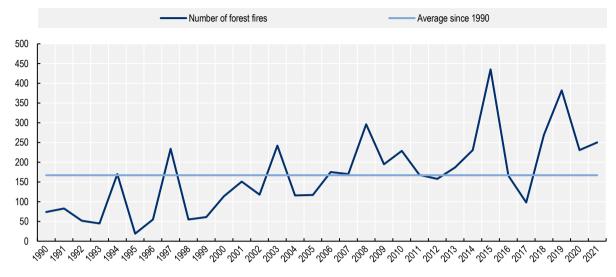
Figure 2.63. The Dominican Republic made significant efforts in reforestation

Percentage change in forest areas in selected benchmarking economies between 2000-10 and 2010-20

Source: Authors' elaboration based on (FAO, 2022[137]).

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Figure 2.64. High frequency of forest fires in the Dominican Republic



Frequency of forest fires in Dominican Republic since 1990

Source: Authors' elaboration based on (Ministry of the Environment (MMARN) and the Office of national statistics (ONE), 2022[138]).

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The current development model puts pressure on the water resource

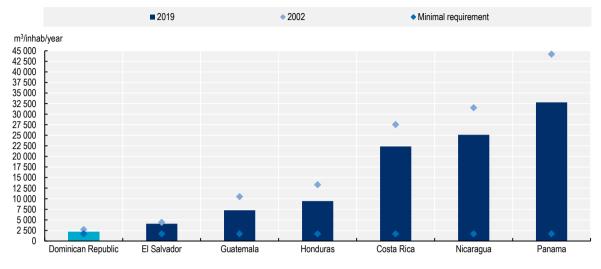
Mining activities, as well as agriculture, can affect negatively the preservation of water, which is already scarce in the Dominican Republic. Mining activities result in environmental liabilities that impact nearby surface water and groundwater. In agriculture, development of one of the world's thirstiest crops -i.e. sugarcane – has led to significant impacts on water resources and biodiversity.

The Dominican Republic is increasingly affected by water scarcity. In contrast to other Central American countries, in 2019, the Dominican Republic had an average water availability per capita of 2 188m³ per year (Figure 2.65); this is close to stress levels at which withdrawals exceed safe levels (1 700m³ per person per year according to UNESCO).⁶ The water-consuming economic sectors, the impact of droughts and floods, and uneven spatial and seasonal water distribution aggravate considerably water scarcity in the country (Serrano, 2015_[139]). In this context, it is important to advance discussions around a Law on Water, and even a Pact on Water (Pacto por el Agua) at the national level.

Agricultural activities continue to have considerable impacts on water use. They are estimated to use 83% of the available water, mostly from superficial sources (World Bank, $2018_{[50]}$) and the remaining 17% from groundwater (FAO, $2022_{[140]}$). Due to the common practice of irrigation by flooding, the efficiency rate for irrigation in agriculture is below 25% (Sanchéz, $2016_{[141]}$). The commercially important export sectors in agriculture – historically built mainly on sugar, coffee and bananas, and secondly on rice, citrus, cocoa and tobacco – continue to prevail. Sugarcane is one of the most water-intensive crops and the Dominican Republic remains one of the main producers in the region (FAO, $2022_{[142]}$).

Figure 2.65. The Dominican Republic is close to the water stress level

Total renewable water resources per capita (m3/inhab./year)



Note: Water stress is defined as when annual water supplies fall below 1 700m³ per person (UNESCO, 2012_[143]). Source: Authors' elaboration based on (FAO, 2022_[144]).

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Mining is a particular concern for the Dominican Republic from a socio-environmental perspective. Due to large foreign direct investment (FDI) in gold and silver mining, the mining sector grew around 21% per year from 2010 to 2021 (see Prosperity section) (Central Bank of the Dominican Republic, 2022[145]). The extractive sector is associated with various environmental impacts - water use and contamination being only one. The largest gold mine is located in Pueblo Viejo, in the north-central region (Sánchez Ramírez province). The Pueblo Viejo's open-pit mining project (operated by Rosario Dominican) had to close in 1999 due to environmental liabilities that impacted nearby surface and groundwater, and the community living there was relocated (Climate Diplomacy, n.d.[146]). Current technologies used to extract gold from low-grade ore in Pueblo Viejo are resource-intensive. The legal framework on mining was improved with the revision of the Mining Law in March 2018 (Ley de Minas 146, initially from 1971) and the abovementioned Ley de Medio Ambiente (Ley 64). However, a lack of consistency is evident in implementation and monitoring of this legislation. The use of surface and groundwater does not seem to be strictly monitored by the authorities, and there are not well-defined sanctions if needed.⁷ Also, enforcement of health and safety norms appears to be weak and environmental impact assessments are not publicly available. In 2019, the Ministries of Finance and Energy and Mines signed an inter-institutional cooperative agreement on the mining sector that aims to unify procedures and regulate the evaluation of requests for mining concessions, the auditing of obligations granted, and other special contracts (Ministerio de Hacienda de la República Dominicana, 2019[147]).

Natural hazards constitute a major challenge for future development of the Dominican Republic

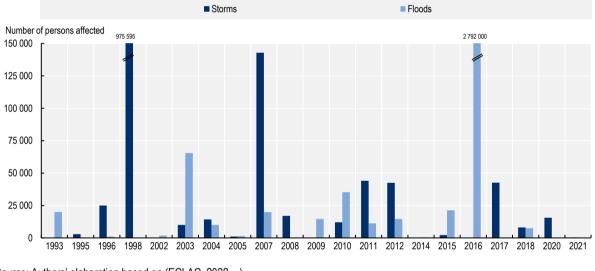
The impact of natural hazards on the economy

The Dominican Republic is highly exposed to natural hazards. When weather-related and geological hazards occur, the consequences and costs for the Dominican society can be considerable. Over the period 2000-19, the Dominican Republic ranked as one of the 50 most vulnerable countries to extreme

weather events worldwide (Germanwatch, 2021_[148]). From 1980 to 2008, some 40 different disasters affected 2.65 million people, almost one-quarter of the entire population. A study from the World Bank and the Ministry of Economy, Planning and Development (MEPyD) estimated the historical economic impact of disasters over 1961–2014 at about 0.7% of GDP per year (World Bank, 2017_[149]).

Due to its geographical location, the Dominican Republic is particularly affected by hurricanes, storms and floods. Between 1990 and 2021, the Dominican Republic was affected by 29 hurricanes and storms and by 25 floods, in which according to estimates 1 411 persons lost their lives (ECLAC, 2022_[33]). In 2004, hurricane Jeanne caused economic losses up to 1.9% of GDP (approximately USD 417 million). Earlier, in 1998, Hurricane Georges also resulted in large economic losses equivalent to 14% of GDP (World Bank, 2017_[149]). The vulnerability of housing constructions and the lack of urban and territorial planning increase both physical and property damage, as shown, for example, by the number of households impacted by natural hazards in 1998, 2007, and 2016 (Figure 2.66).

Figure 2.66. High impact of natural hazards on households in the Dominican Republic



The number of directly affected persons by type of natural hazards in the Dominican Republic, 1993-2021

Source: Authors' elaboration based on (ECLAC, 2022[33]).

StatLink mg https://stat.link/yjqbf6

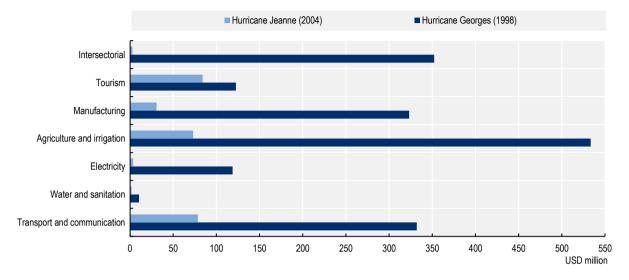
Impact of natural hazards on key economic sectors and infrastructure

Natural hazards have considerable impacts on the Dominican economy and on infrastructure. Agriculture is the economic sector most affected by natural hazards: damages and losses for these hurricanes were approximately USD 533.41 million (Hurricane Georges) and 73.1 million (Hurricane Jeanne). Tourism activities were also affected with losses and damages estimated at USD 122.62 million in 1998 and USD 84.03 million in 2004 (Figure 2.67).

The fiscal impact of widespread damage and losses caused by natural hazards can be sizeable in relation to government budgets (OECD/World Bank, 2019_[150]). The current legal framework for the national system for disaster prevention, mitigation and response was established in *Law 147-02 on Risk Management* from 2002 (*Ley 147-02 sobre Gestión de Riesgos del 22 de septiembre de 2002*). The Dominican Republic is also signatory to the Sendai Framework for Disaster Risk Reduction 2015-2030. Evaluation of the financial

and economic impact of natural disasters is not regular and systematic, and the sectorial analyses are not always centralised.

Figure 2.67. Damages and losses on economic sectors and infrastructure due to hurricanes in the Dominican Republic



Damages and losses in USD million for Hurricane Georges (1998) and Hurricane Jeanne (2004)

Note: The Damage and Losses Assessment (DaLA) methodology is used to capture the closest approximation of damages and losses due to disaster events.

Source: Authors' elaboration using the DaLA methodology based on (ECLAC, 2022[34]; EM-DAT, 2022[151]).

StatLink msp https://stat.link/r7p2gd

The Dominican economy remains highly dependent on fossil fuels

Impact of fossil fuels on the environment

Energy consumption is growing in the Dominican Republic, which still relies on imported fossil fuels for nearly all of its electricity needs. This makes the country particularly vulnerable to fuel price shocks and dependent on imports from other countries for its energy supply. Russia's invasion of Ukraine in early 2022 has highlighted the risks of being energy-dependent on other countries, as is the case of much of Europe (OECD et al., 2022[9]). The Dominican Republic needs to reduce both import dependency and the impacts of fossil fuel combustion on the local environment. In 2019, fossil fuels represented 89% of total energy supply, while renewable energies made up only 11% (Figure 2.68).

The Dominican Republic has set ambitious targets in relation to energy and its impacts. In its Nationally Determined Contribution (NDC) it committed to reduce its emissions by 27% by 2030, in relation to a business-as-usual scenario. It also set the target to reduce per-capita GHG emissions by 25% by 2030 compared to 2010 levels (Ministerio de Economía, Planificación y Desarrollo, 2012_[152]). The National Greenhouse Gas Inventory of 2010 shows energy as the greatest source of emissions (61.9%), followed by agriculture (19.9%), waste (12.9%), and industrial production (5.3%); land-use change and forestry activities are indicated as carbon sinks, absorbing 3.1 MtCO₂ in that year.

The inauguration in February 2020 of the Punta Catalina coal-fired plant by the Dominican Republic's state-owned electric utility (*Corporación Dominicana de Empresas Electricas Estatales*, CDEEE) could

contradict the commitment to decarbonise the economy. The 752-MW coal plant is expected to produce between 5 and 8 Mt CO₂e and 30 tonnes (t) of nitrogen dioxide (NO₂) and sulphur dioxide (SO₂). At present, Punta Catalina is the main electricity generator, producing 25-30% of the country's electricity. It has confronted consistent operational problems and supply chain issues, as well as environmental impacts such as residual ash causing health externalities. Additionally, the government continues to apply large subsidies to the electricity Distribution Companies (EDE's) and USD 266.9 million directly to fuel (U.S Department of State, 2022_[153]).

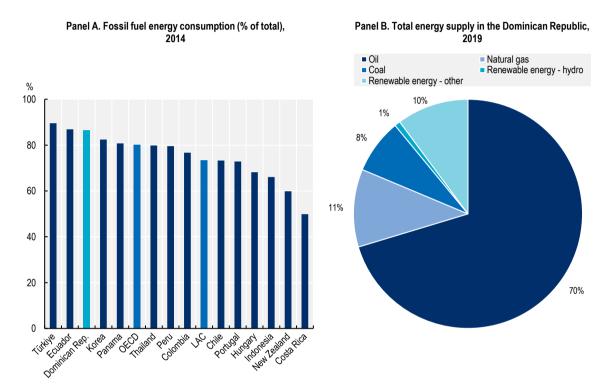


Figure 2.68. Fossil energy consumption is high in the Dominican Republic

Note: Fossil fuel comprises coal, oil, petroleum, and natural gas products. The LAC includes all Latin American countries and Caribbean islands. Total energy supply consists of production + imports – exports – international marine bunkers – international aviation bunkers +/- stock changes. Source: Authors' elaboration based on (OECD/IEA, 2014[154]; IEA/OECD, 2021[26]).

StatLink ms https://stat.link/0t9vq2

The Dominican Republic should ramp up efforts to develop renewables

Naturally endowed with abundant solar and wind resources, the Dominican Republic should ramp up efforts to develop renewables. In 2019, the share of renewables in energy consumption was 14% and the share in total energy supply was 11% (IEA, 2022_[155]). The Dominican Republic could become one of the leading countries in the Caribbean region for renewables (IRENA, CNE, 2016_[156]), but lack of certainty and clarity regarding rules for their deployment constitutes a substantial challenge (CONEP, 2019_[157]). Transforming the electric power sector, predominantly based on hydrocarbons, is essential for boosting the share of renewables. Based on Law 57-07 on Renewable Sources of Energy Incentives from 2007 (Ley 57-07 del 7 de Mayo de 2007), the electricity sector is obliged to increase the share of renewables in the power generation mix to 25% by 2025. High electricity losses in distribution are an additional challenge

for the power system. Institutional weaknesses undermine the coherence, consistency and enforcement of environmental policies

Effective governance and implementation of environmental policies is essential to improve the protection of natural capital and reduce the Dominican Republic's high exposure and vulnerability to climate-related disasters and extreme events. The environmental institutional framework can be improved by strengthening co-ordination between ministries and government authorities as well as between national and sub-national levels. The lack of clearly defined roles and responsibilities, as well as of explicit incorporation of environmental components in other key policy areas (e.g. transport, management of natural resources), are additional institutional challenges in environmental policies.

Institutional challenges in environmental policies at the national level

A meaningful co-ordination mechanism among the various ministries and government agencies that have competences over environmental is essential to advance the green agenda in the Dominican Republic. The Ministry of the Environment and Natural Resources (*Ministerio de Medio Ambiente y de Recursos Naturales*, MARN) was established in 2000 through adoption of the Law on Environment (*Ley de Medio ambiente, n°64 de 18 de Agosto de 2000*). Strengthening dialogue between the Ministry of Environment and other ministries is vital. Roles and responsibilities of each actor involved in defining, planning and implementing energy policy are not always explicitly clarified. Co-ordination between the Ministry of Environment areas, such as ecotourism.

The Dominican Republic's environmental legal and policy framework aligns with an existing system of sanctions in case of violation; its application and consistency, however, are not always sufficiently clarified. Sanctions applied for the "no respect" and violation of the Environmental Law (*Ley ambiental n°64-00, art. 167*), for example, are not clearly formulated or consistently enforced. The lack of regular environmental monitoring in specific sectors (e.g. water) by government authorities can weaken environmental policies.

Institutional challenges in environmental policies at sub-national level

Dialogue about co-ordination of environmental policies between the national and sub-national levels is as relevant as the inter-ministerial co-ordination. Solid waste management can serve as an example due to its centralised control by the executive and its fragmentation among various institutions involved, which include: the Presidency (*Dirección General de Programas Especiales de la Presidencia*, PROPEEP); the Ministry of Environment and Natural Resources; the Ministry of Health; the MEPyD; and the Ministry of Education. In addition, it concerns the federation(s) of municipalities, municipalities and operators. Despite all the actors involved, solid waste management is considered as inadequate across the Dominican Republic and improvised rubbish dumps are common. On average, each Dominican produces 1.2 kg of waste per day. Waste separation is practically non-existent so nearly all waste ends up in one of about 368 open air dumps (Forbes Central America, 2020_[158]; Deutsche Welle, 2018_[159]). The Chamber of Deputies of the Dominican Republic adopted in 2018 a law on waste management (*Ley de residuos solidos de julio 2018*), with the objective to create the "missing" legal framework for the management, reduction and recycling of waste.

Box 2.3. The Dominican Republic is engaged on environmental matters at the multilateral fora

Since the United Nations Conference on Environment and Development (1992, Rio Summit), the Dominican Republic and the LAC region have made progress in strengthening the environmental pillar of sustainable development, including by signing multilateral agreements. The Dominican Republic has since ratified 15 international treaties dealing with protection of the environment and/or climate change (Table 2.2). The COP21 Paris Agreement was ratified by the Congress in March 2017.

Type of multilateral environmental treaty	Date of entering in force	Focus	Date of signature by the Dominicar Republic
Treaty on Plant Genetic Resources	29/06/2004	Conservation and sustainable use of plant genetic resources	02/05/2022
Minamata Convention	16/08/2017	Pollutant release register, environmental education	20/03/2018
Convention on the conservation of Migratory Species of Wild Animals (CMS)	01/11/1983	Biodiversity	01/11/2017
Paris Agreement (Framework Convention on Climate Change)	04/11/2016	Climate change, environmental transparency framework	21/09/2017
Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation to the Convention on Biological Diversity	12/10/2014	Biodiversity	13/11/2014
Stockholm Convention on Persistent Organic Pollutants (POPs)	16/05/2004	Pollutant release register, environmental education	04/05/2007
The Cartagena Protocol n Biosafety to the Convention on Biological Diversity	11/09/2003	Biodiversity, environmental education	20/06/2006
Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade	24/02/2004	Pollutant release register	24/03/2006
Kyoto Protocol (Framework Convention on Climate Change)	16/02/2005	Climate change	12/02/2002
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal	05/05/1992	Certification	10/07/2000
United Nations Framework Convention on Climate Change (UNFCCC)	21/03/1994	Climate change, environmental education, pollutant release register	07/10/1998
United Nations Convention to Combat Desertification in those Countries Experiencing Serious Droughts and/or Desertification (UNCCD)	26/12/1996	Biodiversity, environmental education	26/06/1997
UN Convention on Biological Diversity (CBD)	29/12/1993	Biodiversity, environmental education, indigenous communities, environmental evaluation	25/11/1996
Vienna Convention for the protection of the Ozone Layer	22/09/1988	Climate change, pollutant release register, biodiversity	18/05/1993
Montreal Protocol on Substances that Deplete the Ozone Layer	01/01/1989	Climate change	18/05/1993
Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)	01/07/1975	Biodiversity	17/12/1986

Table 2.2. Ratification of multilateral environmental agreements by the Dominican Republic

Notes

¹ Data for Chile are from 2017, for Peru from 2018, for Panama, Thailand and Türkiye from 2019, and for Ecuador 2021. Korea is not included in the average because no data were available.

² Percentage of a cohort of pupils (or students) enrolled in the first grade of a given level or cycle of education in a given school year who are expected to reach successive grades (UNESCO, 2022_[16]).

³ Adjusted gender parity index for gross enrolment ratio for tertiary education, data from 2017 (latest year available).

⁴ The special regime for domestic industry mainly facilitates custom procedures and provides domestic exporting firms with some investment incentives and VAT refunds for certain inputs. It also offers a 50% tariff reduction for inputs sourced from free economic zones and used for partial-processing and re-export to free economic zones (Daude, et al., 2014[91]).

⁵ Blue economy is defined by the OECD as the sum of economic activities of ocean-based industries, together with the assets, goods and services provided by marine ecosystems (OECD, 2019_[162]).

⁶ Water stress is defined as being when annual water supplies fall below 1 700 700 m³ per person per year (UNESCO, 2012_[161]).

⁷ Based on an interview with representatives from the civil society in June 2019.

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Part II In-depth analysis and recommendations

3 Towards more formal jobs in the Dominican Republic

Despite many years of remarkable socio-economic progress in the Dominican Republic, rates of labour informality have remained persistently high. The predominance of informal employment means that most of the population lacks social protection, which amplified the socio-economic impact of the coronavirus (COVID-19) pandemic. Beyond the immediate effects in the context of the pandemic, informality goes against inclusive and productive development. The Dominican Republic must continue its efforts to place formalisation at the centre of its development strategy for the following reasons: First, formalisation is key to expanding the breadth of the social protection system and reaching the most vulnerable groups. Second, barriers to the formalisation of companies should be reduced, which can have a positive effect on productivity growth, tax collection and increased trade opportunities, and can eventually lead to the creation of more formal job opportunities. Third, investing in skills development and production transformation are key policy areas for generating greater formalisation through gains in productivity as well as through better job prospects for the workforce.

Introduction

The Dominican Republic has recorded remarkable economic growth rates in most years after the 2003-04 economic crisis, but these have not translated into comparable improvements in labour market outcomes. Between 2010 and 2019, the country recorded an average gross domestic product (GDP) growth rate of 5.64%, considerably higher than the average GDP growth rate for Latin America and the Caribbean (LAC) countries (1.23%) and for the Organisation for Economic Co-operation and Development (OECD) member economics (2.1%) (World Bank, 2022_[1]). Despite this period of prosperity, those sectors primarily enabling economic growth did not create sufficiently high-quality jobs, and large numbers of workers remain concentrated in low-quality jobs and sectors with low productivity growth (see Initial Assessment in Part I). While some labour outcomes have progressed, the Dominican Republic's labour market still faces deep structural challenges that have limited the social impact of the economic expansion. Labour market participation, for example, has improved over the last decade, but remains relatively low and with significant gaps across socio-economic groups (gender, age, education level and income) and territories. For instance, female labour participation rates increased from 48.2% to 52.7% between 2014 and 2019, but still remained well below the male participation rates of 75.9% and 77.9%, respectively.¹

The Dominican Republic's labour market continues to face long-standing challenges that were aggravated by the impact of COVID-19. The modest, yet positive, evolution of some labour market outcomes in the last decade was negatively affected by the COVID-19 crisis. The unemployment rate decreased from 8.8% to 6.5% between 2014 and 2019 but increased to 7.1% in 2020. The inactivity rate had slightly improved, decreasing from 38.2% in 2014 to 35.1% in 2019, but it then increased to 40.3% in 2020¹ (Figure 3.1, Panel A). The impact of the COVID-19 crisis on labour market outcomes has also been markedly heterogeneous across socio-economic groups and territories. For example, the unemployment rate rose by 0.5 percentage points in the northern region of the Dominican Republic and by 2.6 percentage points in the eastern region (see Figure 3.1, Panel B). Conversely, it declined by 1.5 percentage points in the Greater Santo Domingo region and by 1.6 percentage points in the southern region, most likely because many people there were not actively seeking employment during the COVID-19 pandemic, hence the increasing rate of inactivity. Although several of these indicators recovered in 2021, they had not yet reached pre-pandemic levels by end-2021.

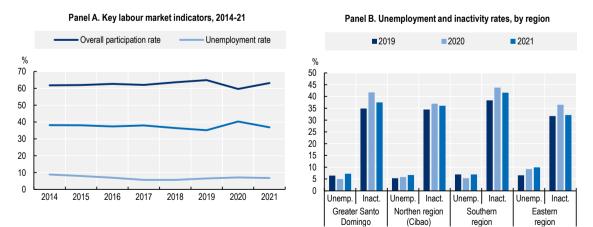


Figure 3.1. The COVID-19 crisis, cushioned by a series of emergency social programmes, had a differentiated impact on labour market outcomes across regions in the Dominican Republic

Note: Panel A: 2014-21 data are from the third quarter of each of the relevant years. This graph uses Q3 data because data from the first and second quarters of 2020 were collected by telephone during the COVID-19 pandemic and not by the usual method of the Encuesta Nacional Continua de Fuerza de Trabajo (ENCFT).

Source: Authors' elaboration based on BCRD (2022[2]).

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Labour informality, which remains a critical and persistent challenge and is the main topic of analysis in this chapter, is high in the Dominican Republic and it amplified – and was amplified by – the effects of the COVID-19 pandemic. Containment measures to curb contagion had significant effects on labour markets worldwide. The government of the Dominican Republic launched several emergency programmes in order to mitigate the effects of the confinement measures (e.g. the Programa de Asistencia al Trabajador Independiente [Pa' Ti programme]). Despite this, the crisis had a greater impact on workers in the informal labour sector, who could not sustain their livelihoods due to lockdown measures. This chapter provides an in-depth analysis of labour informality in the Dominican Republic and proposes strategic areas of action for increasing the country's formal labour force. This chapter is structured in four sections. The first section analyses informality and its negative impacts in terms of lack of social protection coverage from the perspectives of both individuals and households. The second section analyses the barriers that companies face in moving towards formality, which is a necessary step in boosting labour market formalisation, and on the relevance of production transformation to create formal job opportunities. The third section analyses the impact of low productivity levels in preventing greater formalisation rates and focuses on skills development as a critical policy area for improving productivity and formalisation. The final section presents a set of policy recommendations for a labour formalisation strategy.

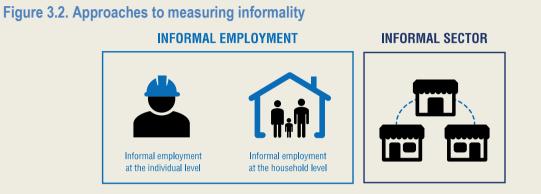
Informality leaves many workers and their households without adequate social protection coverage

Informality is one of the greatest development challenges facing the Dominican Republic. Informal labour is a complex and multidimensional phenomenon and is both a cause and a consequence of low development levels (OECD et al., 2019_[3]). It erodes tax collection, undermines productivity growth and leaves a large share of the workforce vulnerable to shocks due to lack of social protection. Informal work perpetuates low productivity levels, unsophisticated economic structures, a low-skilled labour force, and weak labour market institutions and regulations. All of these factors, however, are also key contributors to informality (Basto-Aguirre, Nieto-Parra and Vázquez-Zamora, 2020_[4]; OECD, 2020_[5]). The choice to operate informally can result from an exclusionary formal labour market or can be a voluntary decision in response to high costs and other burdens of formality (Jütting and De Laiglesia, 2009_[6]). However, informality is also an alternative to unemployment, particularly for low productivity sectors and low-skilled workers. In this way, it plays a critical role in alleviating poverty. The formal sector can grow by: 1) creating more formal jobs, 2) transforming jobs from informal to formal and 3) destroying informal jobs.

This section analyses the phenomenon of informality and its impact on limiting the coverage of the Dominican Republic's social protection system. Informality has many pervasive effects. This section focuses on how widespread informality leaves large segments of the population with no access to social protection, with greater incidence of this being evident among the most vulnerable in society, and examines informality from the individual and household perspectives in order to better understand the vulnerabilities it creates. Indeed, understanding the vulnerabilities of informal workers and their dependents is critical to rethinking social protection and to tackling informality via differentiated policies. Throughout this chapter, the definition of informal employment is based on that used by the OECD and the International Labour Organization (ILO) (OECD, forthcoming_[7]; ILO, 2018_[8]), which considers status in employment and classifies workers according to the labour-based benefits for dependents and the characteristics and sector of the economic unit for independent workers. On the other hand, the definition of the informal sector used in this review is the one proposed by the Central Bank of the Dominican Republic (CBDR), which uses criteria at the company level in order to classify economic units as being part of the formal or informal sector. Both concepts are explained in detail in Box 3.1.

Box 3.1. Defining and measuring informality: A methodological note

What informality is and how it should be measured is a matter of broad discussion. Countries employ a wide range of approaches in order to measure informality. Informality can refer either to *informal employment* or to the *informal sector*.



Source: Authors' elaboration.

i) Informal employment

This report provides its own definition of *informal employment*. The methodology follows the set of criteria described in ILO (2018_[8]) and replicated by OECD/ILO (2019_[9]). Calculations for the Dominican Republic use 2019, 2020 and 2021 microdata of the ENCFT (BCRD, 2022_[2]). The ENCFT provides information on the labour market through household surveys, which gather information on the level of economic activity and other sociodemographic data, such as the characteristics of the population, the household and its members. This approach provides new data for comparing informality measures in the Dominican Republic with standardised data from 13 other LAC countries. These countries are included, together with countries from other regions, in the OECD's *Key Indicators of Informality based on Individuals and their Household* (KIIbIH) database (OECD, forthcoming_[7]). The KIIbIH database uses household surveys in order to provide comparable indicators and harmonised data on *informal employment* and the well-being of informal workers and their dependents. This chapter analyses informality and its relationship with the vulnerability of informal workers and their household members.

Informal employment at the individual level

By using the job as the unit of reference, *informal employment* is determined according to the following criteria:

- In the case of employees, a job is considered informal if it is not subject to national labour legislation, income taxation, contributory social protection or employment benefits.
- In the case of own-account workers and employers, the status of *informal employment* is determined by the informal nature of the activity.
- In the case of family workers, all jobs are classified as *informal employment* (e.g. a family member working in a family business without set remuneration).

Informal employment at the household level

Measuring informality at the household level allows policy makers to monitor workers' vulnerabilities in the informal economy more effectively, as they can assess how such vulnerabilities may be passed on

to dependents and can thus design specific and differentiated policies for households with different compositions. Using this classification for *informal employment*, we can assign *households to three categories of informality* (see Table 3.1): 1) formal households, where all working household members are formally employed; 2) informal households, where all working household members are informally employed; and 3) mixed households, where at least one working household member has a formal job and at least one has an informal job (OECD, forthcoming_[7]).

Table 3.1. Household informality categories

Household informality composition		
Formal	100% of workers employed in formal jobs	
Informal	100% of workers employed in informal jobs	
Mixed	At least one household member is formally employed and one is informally employed	

ii) Employment in the informal sector

This chapter uses the **informal sector** statistics published by the Central Bank of the Dominican Republic (BCRD), together with the National Statistical Office (ONE, for its acronym in Spanish), to illustrate the size of the informal sector and hence its employment levels. Their definition of the informal sector is an adaptation from ILO's definition (ILO, 2013_[10]) and considers the condition of the company in which the main economic activity takes place, as well as their workers' access to social security. In particular, a company is considered part of the informal sector if it does not meet the following conditions: (1) being registered in the National Taxpayers Registry (RNC) and (2) keeping records of business transactions in auditable accounting books. These statistics are calculated using the ENCFT.² It is worth mentioning that the main labour market indicators published by the BCRD are calculated taking into account all persons aged 15 and over. All figures regarding the **informal sector** presented in this chapter follow such official definition unless stated otherwise.

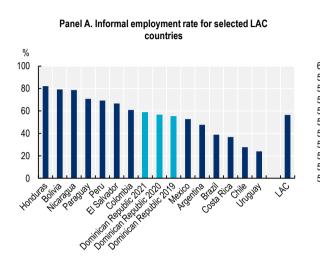
Labour informality is persistently high, particularly affecting the most vulnerable population

Most informal workers are trapped in a vicious cycle of vulnerability and inadequate social protection. Informal workers have no access to adequate levels of social protection (see Box 3.1), although they may have basic coverage in certain areas, such as non-contributory healthcare. Informal labour is also associated with low and/or unstable income. This prevents informal workers from saving and from investing in human capital and moving to higher-productivity jobs or to creating their own formal enterprises, which maintains them as informal – and therefore vulnerable – workers. This generates a vicious cycle, a "vulnerability trap", that affects large segments of the population in the Dominican Republic and in other LAC countries (OECD et al., $2019_{[3]}$). Most of those who work informally are insufficiently protected from the various risks to which they are exposed, including illness or health problems, unsafe working conditions, or less protection of their labour rights, all factors that were aggravated by the COVID-19 crisis (OECD, forthcoming_[7]).

The Dominican Republic's labour market has shown persistently high levels of informality for decades. In addition to the common causes of informality, the Dominican Republic has a series of particular structural conditions that have enabled and boosted the reproduction of this phenomenon in the country, such as birth under-registration, low education attainment (Corbacho, Brito and Osorio Rivas, 2012_[11]) and teenage pregnancy (UNDP, 2017_[12]).

In 2021, the informal employment rate in the Dominican Republic reached 59.0%, slightly above the 2019 rate of 55.3%. This is considerably higher than informal employment rates in Brazil, Costa Rica and Mexico

but below those in the Plurinational State of Bolivia (hereafter: Bolivia), El Salvador, Honduras and Peru. This informal employment rate is similar to the LAC average of 56.5% (Figure 3.3, Panel A). According to ILO data, the informal employment rate has been consistently high in the Dominican Republic, staying above 50% over 2010-20 decade (Figure 3.3, Panel B).



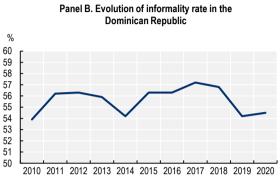


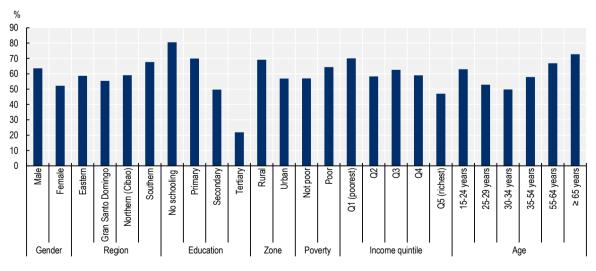
Figure 3.3. The Dominican Republic's labour market shows persistently high levels of informality

Note: The LAC average is the unweighted average of selected LAC countries. The Dominican Republic's estimate is for the third quarters of 2019, 2020 and 2021.

Source: Panel A: Authors' calculations based on the informal employment definition (OECD, forthcoming[7]; ILO, 2018[8]), using 2018 household surveys or the closest available year. For comparability purposes and availability of microdata at the time of calculation, 2019 and 2020 estimates for the Dominican Republic use the ENCFT for the third quarter (BCRD, 2022[2]). Panel B: Authors' calculations using ILO data (ILO, 2021[13]).

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Figure 3.4. Informality increases vulnerabilities for traditionally disadvantaged groups



Informality rate by socio-economic characteristics, 2021

Note: This figure uses the ILO definition of informality (ILO, $2013_{[10]}$). Source: Authors' calculations using (BCRD, $2022_{[2]}$) (ENCFT 2022).

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Labour informality reinforces other vulnerability conditions associated with income, education level, location, age and gender. Informality more frequently affects individuals in the poorest income quintile; those with low levels of education; rural populations, with a higher incidence among people in the northern (Cibao) and southern regions of the Dominican Republic; the younger and older cohorts; and men (Figure 3.4). In 2021, there was a difference of around 23 percentage points between the rates of informality in the poorest income quintile (70.5%) and the wealthiest income quintile (46.97%). Similarly, those with no education have informality rates of around 80.5%, compared with 21.9% among those with a tertiary education. In rural areas, informal employment was 69.1%, which is 12.19 percentage points higher than in urban areas (56.9%). At the same time, informality rates among younger (62.9%) and older workers (72.8%) are higher than the average for the population aged between 25 and 55 years (53.51%). Finally, informality affects more men than women, with informality rates at 63.6% and 52.2%, respectively.

Almost one-half of Dominicans live in completely informal households, with a particular incidence in rural areas and low-income groups

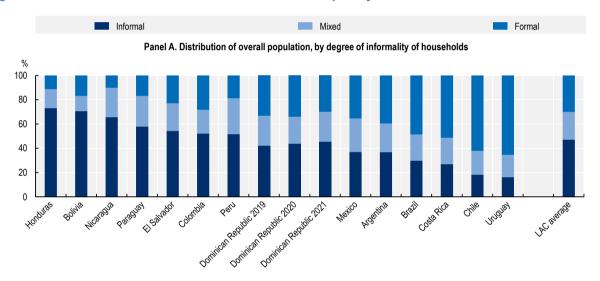
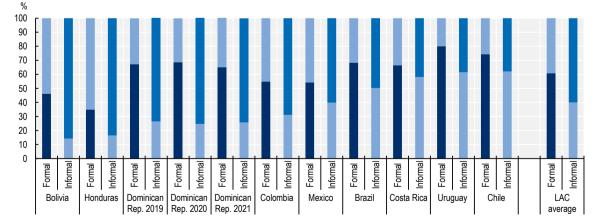


Figure 3.5. Almost one-half of Dominicans live in a completely informal household

Panel B. Distribution of formal and informal workers, by degree of informality of their household



Note: Estimates for selected LAC countries are derived from data for 2018 or the closest available year. The LAC average is the unweighted average of selected LAC countries.

Source: Authors' calculations based on OECD (forthcoming_[7]), using the KIIbIH database. In order to ensure microdata comparability and availability, the Dominican Republic's 2019, 2020 and 2021 estimates use the ENCFT for the third guarter (BCRD, 2022_[2]).

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The incidence of labour informality is largely heterogeneous across Dominican households. This highlights the importance of making a concerted effort to extend social security to the most vulnerable households, particularly those where all workers are informal (i.e. informal households). In this regard, a household-level approach to analysing informality acknowledges that a completely informal household is more vulnerable than a household where at least one worker is formal. A mixed household is less vulnerable than an entirely informal one because the benefits provided by contributory social protection are often extended to the other members of the household (see Box 3.1). An accurate understanding of household composition in terms of informality allows for better targeting and differentiation of social protection policies so that they can address specific needs and mitigate the negative consequences of informality on individuals' and households' well-being (OECD, forthcoming[7]).

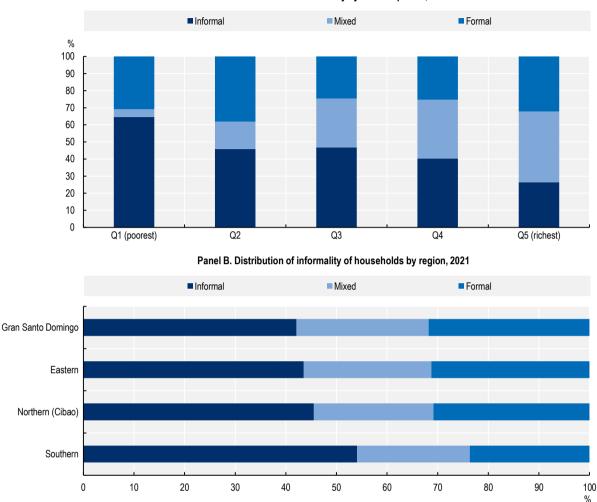
In the Dominican Republic, almost one-half of the population lives in households dependent only on informal employment. In 2021, 45.4% of the population lived in households where all workers were employed in informal jobs. This was more than a three-percentage-point increase from 2019, and placed the share of informal households in the country at a similar level to the LAC average (45%) and significantly above some countries in the LAC region, including Costa Rica (27%) and Mexico (37%). The distribution of individuals across different types of households also indicates a contraction in the proportion of mixed households (from 25% to 24%) and a decrease in the share of completely formal households (from 33% to 30%) in the same period (Figure 3.5, Panel A). This means that only one-third of the Dominican population lives in fully formal households. Moreover, three-quarters of informal workers live in a completely informal household, which excludes them from contributory social security systems (Figure 3.5, Panel B).

Most low-income and rural households depend only on informal employment

Low-income households primarily depend on informal work, leaving them in a vulnerable position due to their lack of contributory social protection. In the Dominican Republic in 2021, 64.6% of people in the poorest income quintile lived in a household that depended only on informal employment, compared with 26.4% of those in the wealthiest income quintile. Similarly, only 4.5% of people in the poorest income quintile live in a mixed household, and 30.1% live in a completely formal household. In contrast, 41.4% and 32.2% of the population in the wealthiest income quintile live in mixed or completely formal households, respectively (Figure 3.6, Panel A). It is worth mentioning that informality is not always the consequence of a condition of vulnerability. In fact, it is sometimes the result of a decision to avoid incurring formal work costs such as paying taxes, social security contributions, among others (e.g. high-income doctors who decide to operate informally). Household informality in the Dominican Republic's wealthiest quintile is a clear illustration of this, with 26.4% of it belonging to an informal household and 41.4% to a mixed household (Figure 3.6, Panel A).

Households in rural areas have significantly higher levels of informality. As much as 56.6% of the population in rural areas lived in a completely informal household in 2021, while 21.6% lived in mixed households and 21.8% lived in formal households. In contrast, 43.0% of individuals in urban areas lived in completely informal households, with 25.2% living in mixed households and 31.8% in formal households in the same year. The formality of households constitutes a critical matter in policy decisions since the coverage of individuals in formal employment who live in mixed households helps to extend social protection to other family members. There are also considerable differences in informal household composition between regions: 54.1% of the total population in the southern region lives in a completely informal households is found in the eastern region (25.2%) and Gran Santo Domingo (26.2%) (Figure 3.6, Panel B).

Figure 3.6. Income levels and geographic location also shape households' degree of informality



Panel A. Household informality by income guintile, 2021

Note: Data for 2021 for the Dominican Republic correspond to the ENCFT for the third quarter. Income quintiles were created using salaried workers' income, independent workers' income from both primary and secondary occupations, and other national and international income as derived from the ENCFT.

Source: Authors' calculations based on the KIIbIH database (OECD, 2021[14]) and the ENCFT 2022 (BCRD, 2022[2]).

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While informality leaves a large share of workers unprotected, the response to the COVID-19 crisis showed ways to strengthen social protection

Low levels of social protection have amplified the negative impact of the COVID-19 crisis, particularly for vulnerable informal workers. Protecting informal workers has become imperative, particularly for those outside traditional social assistance programmes (Basto-Aguirre, Nieto-Parra and Vázquez-Zamora, 2020_[4]; OECD, 2020_[15]). One direct effect of the lack of social protection in the context of the COVID-19 crisis has been an increase in poverty levels. Despite government efforts to support those most affected by the pandemic, monetary poverty increased from 21% in 2019 to 23.4% in 2020, and the extreme poverty rate increased from 2.7% to 3.5% over the same period. In other words, the crisis pushed approximately 268 515 Dominicans into poverty, 93 127 of whom fell into extreme poverty (MEPyD, 2021_[16]). The social

crisis is worse in the eastern region, which is highly dependent on tourism, with the poverty rate rising 6.7 percentage points between 2019 and 2020, from 19.6% to 26.3%.

The share of employment in the informal sector grew with the COVID-19 crisis, which also pushed many workers into inactivity. Employment in the informal sector accounted for 51.3% of total employment in 2020, three percentage points higher than in 2019 under pre-pandemic conditions. Employment in the informal sector continuously increased during 2020, showing the vulnerability of this type of employment to shocks. This has been accompanied by a move of many workers to inactivity, particularly in the formal sector. While the annual share of workers in the informal sector fell by 5.8% in the last quarter of 2020, the share of workers in the formal sector fell by 11%.³ In 2021, employment in the informal sector contracted to 50.9%.

The COVID-19 crisis has underscored the importance of reinforcing social protection in the Dominican Republic. As most informal workers fall outside the coverage of traditional contributory social security mechanisms, they are more dependent on other public social assistance programmes. These are usually non-contributory programmes delivered through cash transfers, solidarity pensions and in-kind transfers. However, social assistance programmes are generally targeted only at poor or particularly vulnerable populations and are delivered under some specific conditions (see Box 3.1). Therefore, a large share of informal workers who are not poor, but who are still vulnerable, find themselves without any safety net and are particularly exposed to adverse shocks, as in the COVID-19 crisis. They do not have social protection associated with employment, nor do they have access to existing social assistance programmes, as they are not eligible (Basto-Aguirre, Nieto-Parra and Vázquez-Zamora, 2020_[4]; OECD, forthcoming_[7]).

Box 3.2. Social assistance in the Dominican Republic

Social targeting through the Unified System of Beneficiaries

The Unified System of Beneficiaries (Sistema Único de Benificiarios - SIUBEN) is the main instrument used to target the social policies in the Dominican Republic. SIUBEN is responsible for identifying, characterising, registering and prioritising families living in poverty in order to inform social policies, mainly social assistance programmes. SIUBEN is responsible for calculating the Multidimensional Poverty Index of the Dominican Republic (MPI-DR) and the Quality of Life Index (Índice de Calidad de Vida; ICV). These measures are used to determine the eligibility of an area, household or individual for government social programmes.

Social assistance includes both conditional and unconditional programmes

Before the COVID-19 crisis, Progresando con Solidaridad was the primary social policy for poverty reduction in the Dominican Republic. This programme was also the main channel of social assistance from the government of the Dominican Republic. Cash transfers from several social assistance programmes were delivered through the Solidaridad card, which was given to low-income families identified by SIUBEN. Progresando con Solidaridad included three conditional programmes. The first was the Comer es Primero (PCP) programme, a cash transfer programme for households living in poverty. It also included the Incentivo a la Asistencia Escolar (ILAE) and Bono Escolar Estudiando Progreso (BEEP) programmes. These programmes aimed to incentivise education through cash transfers paid to households living in poverty with family members aged between 5 and 21 years who were attending school.

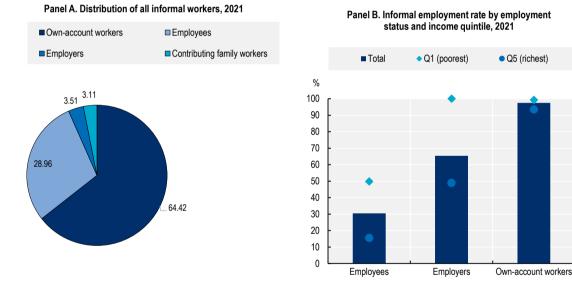
The government's unconditional programmes included Programa Protección a la Vejez en Pobreza Extrema (PROVEE), Incentivo a la Educación Superior (IES), Programa de Incentivo a la Policía Preventiva (PIPP), and Programa Incentivo Alistados Armada República Dominicana (PIAARD).

PROVEE is a cash transfer for those elderly people who are in extreme poverty. The IES is a cash payment to support low-income students who are enrolled in higher education. The PIPP and PIAARD are cash transfers to help police officers and military personnel buy food and supplies. There are also specific programmes to help households pay for electricity, kitchen gas, and natural gas (i.e. Bonoluz, Bonogás Hogar, and Bonogás Chofer).

The Progresando con Solidaridad programme was transformed into the new Supérate programme in June 2021 with a renewed strategy to fight poverty. Once fully implemented, Supérate will have several components with which to achieve its objectives in the areas of educational inclusion (Aprende and Avanza); health, food security and emergency support (Aliméntate, Micronutrientes, Bono Navideño, Bono Familia Acompañada and Bono de Emergencia); economic inclusion (Empléate and Emprende); housing (Familia Feliz, Bonoluz and Bonogas); and support for women (Cuidados and Supérate Mujer), among others. According to their objectives, each of the programme's components will determine certain eligibility criteria to assign periodic transfers to beneficiary families through the Supérate card. Beneficiary families should be registered in SIUBEN in order to be part of the programme.

Source: Decree 377 of 2021 (PDR, 2021[17]) and Presidency of the Dominican Republic (PDR, 2021[18]).

Figure 3.7. Informal employment predominantly affects own-account workers and presents substantial disparities for employees across income quintiles



Note: Household income was calculated by aggregating the ENCFT variables "ingreso_asalariado", "ingreso_independientes", "ingreso_asalariado_secun", "ingreso_independientes_secun", "otros_ingresos_nac_a" and "otros_ingresos_ext" at the household level. For comparability purposes and availability of microdata, 2019, 2020 and 2021 estimates for the Dominican Republic use the ENCFT for the third quarter.

Source: Authors' elaboration based on ENCFT 2022 (BCRD, 2022[2]).

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The COVID-19 emergency policy to protect households was initially based on expanding traditional social assistance programmes and gradually evolved to reach as many informal workers as possible. During the beginning of the crisis, the policy response to COVID-19 used existing mechanisms to reach the most vulnerable. However, these mechanisms soon showed that a large share of informal workers were left

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outside the scope of both the non-contributory and the formal contributory systems, and thus had no support during the crisis. This is why the Dominican Republic, like many other countries in the LAC region, enacted additional emergency programmes and new mechanisms in order to reach informal workers without any type of social protection (see Box 3.3).

In the Dominican Republic, own-account workers face the highest informal employment rate and are particularly vulnerable, being outside the reach of both contributory and non-contributory regimes. Of all informal workers, 65% are own-account, 29% are employees, 3.5% are employers and 3.1% are contributing family workers (Figure 3.7, Panel A). More than 90% of own-account workers held informal employment in 2021; similarly, more than one-half of employers and almost one-third of salaried employees were informal workers. These figures are even more disparate between the wealthiest and the poorest social strata. In the poorest household income quintile, the informality rate reaches 71% and affects employers (100% informal), own-account workers (99.3% informal) and employees (49.8% informal) (Figure 3.7, Panel B). By contrast, in the wealthiest income quintile, the overall informality rate is 47% and mainly affects own-account workers, which are 93.5% informal; employees are 15.5% informal and employers are 48.9% informal (Figure 3.7, Panel B).

Box 3.3. The COVID-19 policy response in the Dominican Republic

The Quédate en casa and Pa' Ti programmes supported households during the crisis

The Quédate en casa programme was created to support lower-income informal workers and families in vulnerable conditions. Initially, it covered 811 000 families by increasing their subsidies through the conditional cash transfer (CCT) programme Solidaridad from DOP 1 500 to DOP 5 000 (Dominican pesos) monthly. After a few months, the government identified another 690 000 families, categorised as poor or vulnerable by SIUBEN, who were also targeted to receive the Quédate en casa temporary economic support. In addition, for households where the primary income earner was particularly vulnerable to COVID-19, an additional amount of DOP 2 000 was transferred, resulting in more than 350 000 households receiving a total transfer of DOP 7 000. Beneficiaries of these programmes primarily included informal workers.

The Pa' Ti programme supported freelance business workers. A monthly transitional amount of DOP 5 000 was transferred to freelance workers' bank accounts. Beneficiaries were identified through a database of freelancers who had loans with the formal financial system.

The FASE programme and other emergency support measures for enterprises and formal workers

The Employee Solidarity Assistance Fund (Fondo de Asistencia Solidaria al Empleado; FASE) programme supported enterprises to retain formal jobs. During the height of the COVID-19 crisis, the government of the Dominican Republic created a Guarantee and Financing Fund to benefit micro- and small-sized enterprises through an agreement with the Central Bank of the Dominican Republic (BCRD), the Superintendency of Banks and the Association of Commercial Banks of the Dominican Republic.

The FASE programme had two stages. FASE 1 paid contributions to workers whose employers: 1) were contributing to the Social Security Treasury (Tesorería de la Seguridad Social; TSS) on behalf of workers before the pandemic began, and 2) had closed their operations because of reduced economic activity due to the social distancing measures implemented because of COVID-19. Under these conditions, FASE 1 paid up to 70% of the salaries for those formal workers that had to stop working, up to a maximum of DOP 8 500. Afterwards, FASE 2 paid contributions to enterprises that had continued their operations during the crisis in order to subsidise the salaries paid to formal workers, up to a maximum of DOP 5 000 per worker.

In addition, the government created a special fund to pay the Christmas bonus to all suspended workers who were currently, or who had been, enrolled in the FASE 1 cash transfer programme. The fund paid more than DOP 2.3 billion to recipients, and payments were distributed in the first 15 days of December 2020 to 1 million families in the Dominican Republic.

In terms of tax support, the annual income tax payment that certain companies were required to make in April 2020 was divided into four payments. The Directorate General of Internal Taxes (Dirección General de Impuestos Internos; DGII) temporarily exempted the hotel/tourism sector from advance income tax payments. Emergency measures were granted in order to make advance income tax payments more flexible for the entire productive sector, allowing these to be paid in three instalments immediately after the emergency period was over.

The BCRD also implemented measures to adapt the monetary policy framework

The BCRD implemented a series of measures that increased the flow of resources to households and businesses and encouraged lower interest rates to address the COVID-19 crisis. These measures provided liquidity (in both local and foreign currencies) to financial intermediaries in order to address the effects of the crisis on the economy and the population. The approved measures included: 1) increasing liquidity for financial intermediaries; 2) increasing the financial resources released in order to channel new loans to the different productive sectors and households; 3) increasing foreign currency liquidity for financial intermediaries; 4) reducing the reserve requirement coefficient in local currency for savings and credit banks and credit corporations; 5) offering greater liquidity in foreign currencies in order to channel new loans to productive sectors, especially tourism and exports; 6) reducing the monetary policy interest rate, the overnight deposit interest rate, the overnight repo rate and the repo rate up to 90 days; and 7) implementing a special regulatory treatment.

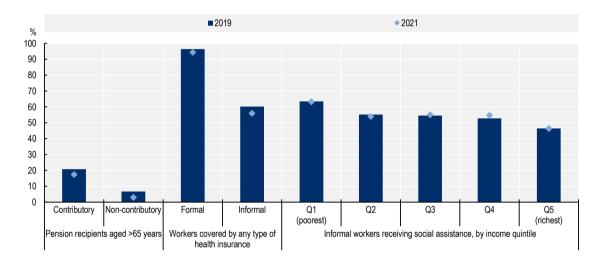
Source: BCRD (2020[19]).

Before the COVID-19 pandemic hit the Dominican Republic, 18.6% of Dominicans did not have access to any type of social protection. While 93.3% of formal workers had access to contributory healthcare in 2019, only 60.18% of informal workers had access to any kind of healthcare scheme, most through subsidised public healthcare (Figure 3.8).⁴ Similarly, among the poorest quintile of the population, 36.5% of informal workers did not live in households covered by traditional social assistance programmes in 2019. That figure remains high for the second- and third-income quintiles, at around 45%, meaning that a significant share of households live in poverty or economic vulnerability without coverage. The long-term effects of widespread informality also affect living conditions for the elderly, who end their productive life without any income substitution. In 2019, only 20.7% of those aged over 65 years received a contributory pension, and 6.7% received a solidarity pension. The latter figure decreased to 4.3% in 2020.

The COVID-19 crisis has increased awareness of the weaknesses in the social protection system and can represent an opportunity to advance system reforms. The current social protection system in the Dominican Republic was created by Law 87-01 in 2001. This established a contributory regime, through which the government provides coverage for formal employees, as well as a subsidised regime to cover independent workers with earnings below the minimum wage or in vulnerable economic conditions. Finally, a mixed regime (Régimen Contributivo Subsidiado) was created to cover independent workers with higher earnings, although this system has not yet been implemented. The subsidised scheme grew significantly during the COVID-19 crisis. Between December 2019 and December 2021, 2 035 071 additional people joined the subsidised regime of the National Health Insurance (Seguro Nacional de Salud; SeNaSa).

One key issue for debate in a future reform is how to expand the reach of the subsidised regime to all poor and economically vulnerable households. An adequate expansion of this non-contributory social security requires improved identification of the targeted population, as well as improvement in the frequency of updates of the public registry used to classify households' eligibility for social programmes and SIUBEN, and in its interoperability with other public registries. Similarly, the mixed regime outlined in Law 87-01, which would have targeted own-account workers who are not eligible for the subsidised regime, was never put in place. This should be a matter for debate in the reform of the social protection system, as such a measure could strengthen coverage. However, it has to be considered that a voluntary affiliation mechanism could end up leading to the avoidance of contributions of some workers with payment capacity, thus undermining the system's financial sustainability in the presence of adverse selection problems. In addition, a mixed system could be costly in terms of administration and collection due to the labour informality of a large part of the target population (Pellerano and Féliz-Matos, 2018_[20]).

Figure 3.8 Low pre-pandemic levels of social protection aggravated the impact of the COVID-19 crisis



Key indicators for social protection across different categories, as a share of the population

Note: Social assistance includes cash transfers, solidarity pensions and other types of transfers reported in the third quarter of the ENCFT 2019. Source: Authors' calculations based on (BCRD, 2022_[2]).

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Women and youth still face greater barriers to entering the formal sector

Dominican women still face significant barriers to participating and thriving in the Dominican labour market compared with their male peers, limiting their autonomy and increasing their economic vulnerability. The underrepresentation of women in the labour market has remained rather stagnant. Female participation rate in the labour market has remained 27 percentage points lower than male participation rate, on average, since 2014. While in 2015 the global participation rate for men was 76.3%, that for women was 48.1%. More than half a decade later, little progress was made in closing the gender gap. In 2021, the global participation rate for men was 75.7%, while for women it was 51.2% (see Figure 3.9, Panel A). Similarly, in terms of unemployment, women also face more difficulty in finding a job. While in 2021 women had an average unemployment rate of 12.1%, that of men was 3.9%. Overall, in terms of women's economic participation and opportunity, the Dominican Republic is ranked 101st out of 156 countries according to the 2021 World Economic Forum's *Global Gender Gap* Index,⁵ with a score of 0.65 (see Figure 3.9, Panel B). This means that Dominican women are 35% less likely to have equal economic participation and opportunities than Dominican men (WEF, 2021_[21]).

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Despite some recent efforts to strengthen the economic autonomy and empowerment of women, there are still institutional barriers that reinforce gender inequalities in the labour market. On the basis established by the Labour Code in 1992, there are several institutional efforts aimed at closing the gender gaps in the labour market, such as the updates on the Regulation on the Maternity and Breastfeeding Allowance (CNSS, 2017_[22]) and the adherence to ILO's Convention on the Protection of Maternity in 2014 (CDRD, 2014_[23]; ILO, 2000_[24]). However, there are still certain norms that hinder progress towards gender equality. For instance, although the current legislation establishes a period of maternity leave of twelve weeks for women, paternity leave is limited to just two days (CDRD, 1992_[25]). There is no provision in the law mandating equal remuneration and no restrictions on employers asking about family status during interviews or hiring processes (OECD, 2019_[26]). More recently, the MTRD has made important efforts to regulate the domestic work sector – made up of 92% women workers who earn 57% less than the average of those employed in the country (Cañete Alonso and Cuello, 2022_[27]; MTRD, 2022_[28]). The Resolution 551-08 (CNSS, 2022_[29]) established a fixed and subsidised contribution to social security for domestic workers, regardless of their salary. Under this new pilot scheme, the employer assumes 66.5% of the contribution, 3.3% is paid by the worker, and 30.2% by the State.

Beyond labour legislation, Dominican women face complex structural barriers that make the playing field unlevelled compared to men. Notably, the national government has not been able to consolidate a comprehensive reproductive health care policy, from sex education in school to lifelong provision of contraception, and the body autonomy of women remains very limited. Consequently, teenage pregnancy remains a common problem. In 2020, there were 90.58 births per 1 000 women between 15 and 19 years old, compared to the averages of the LAC region with 60.26 and OECD countries with just 20.84 (World Bank, 2022[1]). High rates of adolescent pregnancy are a crucial factor that limits the opportunities of Dominican women to thrive in the formal labour market. In fact, 50% of women that had children during their adolescence work in the informal labour market versus 27% of other older mothers (UNDP, 2017[12]). Gender gaps should also be approached and addressed with an intersectional lens, since certain ethnic, socio-economic, geographical and migratory conditions can considerably increase the barriers and hinder the opportunities in the labour market. In terms of gender pay gap, the country scored 0.55 in wage equality for similar work in 2021, which means that women are 45% less likely to receive an equal wage for similar work than men (WEF, 2021[21]).

The vulnerability of women during the pandemic was much higher given the nature of their participation in the labour market, which deepened the negative impact on them. Women lost more jobs (7.5%) compared with men (4.9%), with greater job loss in the informal sector (8.4% versus 3.9% respectively). The over-representation of women in the sectors most affected by the crisis (such as retail and wholesale, the hospitality industry, and other services) contributed to the deterioration of their labour market outcomes (OECD et al., 2020_[30]). Ninety percent of women in the Dominican Republic worked in these sectors before the pandemic, while the LAC average was about 80% (Gutiérrez et al., 2020_[31]). All of these factors combined to contribute to the rate of female poverty increasing to 118 women for every 100 men in the Dominican Republic (ONERD, 2021_[32]). The significant increase in the underutilisation of the female labour force since 2020 could create difficulties in job reintegration in the future.

Women also faced an extra unpaid work burden due to confinement measures and the closure of schools. Before the COVID-19 crisis, women accounted for 77% of the care workload in the average household, working 31.2 hours per week in care and household duties, while men contributed 33% of the time spent on these duties, equivalent to 9.6 hours (VPRD, 2019_[33]). Lockdowns imposed an extra burden of care work on women, affecting their availability to work or search for a job, as well as the working hours they were willing to offer for paid work. In 2020, 41% of women in the Dominican Republic reported an increase in care work as the main reason that they remained inactive or stopped their job search, compared with 25% of men (ONERD, 2021_[32]). The disproportionate impact of the pandemic on women's labour outcomes may permanently affect gender equality in the Dominican Republic.

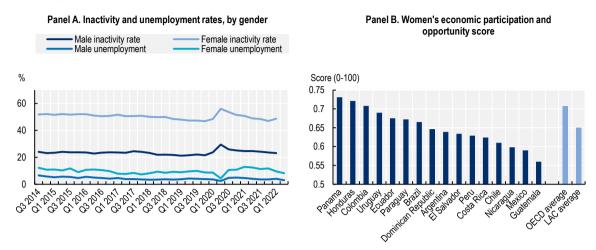


Figure 3.9. Women face greater barriers for thriving in the labour market, which limits their autonomy and increases their economic vulnerability

Note: Panel B: The Global Gender Gap Index benchmarks the current state and evolution of gender parity across four key dimensions (Economic Participation and Opportunity, Educational Attainment, Health and Survival, and Political Empowerment). Source: Panel A: Authors' elaboration based on BCRD (2022_[2]). Panel B: Authors' elaboration based on WEF (2021_[21]).

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Dominican youth also face higher rates of unemployment and inferior job quality. The youth participation rate in the labour market increased from 36% in 2009 to 45% in 2018; however, it remained 19 percentage points lower than total labour force participation in 2018. The youth unemployment rate was 10 percentage points higher than the general unemployment rate before the pandemic, and unemployed people aged between 15 and 24 years faced more prolonged periods of unemployment (6.2 months) than the duration of unemployment for the active population aged between 25 and 64 years (5.1 months) (CEDLAS and WB, 2020_[34]). The informality rate for people aged between 15 and 24 years stood at 60%, 3 percentage points higher than for the general population. Moreover, the Dominican Republic has been experiencing a contraction in the youth-employed population since mid-2018.

The crisis has deepened the need for policies to tackle the vulnerabilities of youth employment. The Dominican Republic has made different efforts in order to improve the transition from school to formal employment and to strengthen education and training among young people. In 2020, the Social Cabinet of the President's Office launched the Oportunidad 14-24 programme, which aims to reintegrate vulnerable adolescents and young people aged 14-24 years, who are at great risk of social vulnerability (due to factors such as lack of employment, peer pressure and social insecurity), into productive and educational activities. The Oportunidad 14-24 programme provides training and education courses for young Dominicans, especially those who have dropped out of school. In addition, it offers the possibility of doing internships with professional organisations and provides support for entrepreneurship, including financial aid. Because of the COVID-19 pandemic, the employment rate for those aged between 15 and 24 years fell by 16% in Q4 2020, a significantly greater reduction than the 6% decline in employment for the general population in the same period. More recently, however, youth employment has recovered, with an increase of 1.5% between Q3 2019 and Q3 2021. This increase translates into approximately 10 000 additional youth being employed (i.e. those aged 15-24 years). However, the crisis disproportionately affected young people, not only through job losses but also through suspended education and training programmes, posing significant barriers to finding a first job (ILO, 2020[35]). For this reason, the government launched the Empléate and Emprende programmes in 2021, as part of the Supérate programme. These new programmes connect Supérate beneficiary families with a series of complementary services that include technical and vocational training, labour intermediation, advice for the development of formal productive

enterprises, financial and technological coaching, and family agriculture support (PDR, 2021_[18]). Preventing the adverse effects of COVID-19 from becoming permanent among the youth population will be critical to supporting the country's long-term recovery.

Challenges and opportunities to move from analysis to action

Building a universal social protection system that protects the most vulnerable workers and households brings a challenge for a country's public finances. The high level of informality hinders the collection of social security contributions from informal workers and leaves them outside the protection scope of the system. Faced with these restrictions, making the operation of the system more efficient and improving the targeting and allocation of scarce resources is fundamental. First, to move towards universal coverage, the country must reach fundamental agreements on social protection and go through several structural reforms to materialise such agreements.

The OECD Development Centre team met in Santo Domingo with several government officials and other specialised actors from the social security sector to discuss the country's main challenges in this area and possible strategies to solve them. They shared their visions around the main challenges and opportunities. Table 3.2 shows the results of the discussions and summarises key policy recommendations.

Policy recommendation	Challenges and opportunities for implementation
1.1. Strengthen social protection systems, and	I build on the lessons learned during the COVID-19 pandemic:
Improve interoperability across different existing registries, integrating all social protection information systems and strengthening the role of SIUBEN in order to reach vulnerable, informal populations, and exploiting the potential of digital technologies.	The central role that SIUBEN currently plays is an opportunity to implement this strategy. However, achieving such a connection between systems, modifying the labour code, and modifying the law of the social protection system are considerable challenges. Achieving interoperability between basic registries first could be more strategic. An overly ambitious integration could leave certain institutions out. It is essential to define the primary and secondary actors in the system, depending on their levels of responsibility, to be involved in such interoperability. In addition, it is crucial to have fair justifications for the information required by the institutions.
Enhance a co-ordinated conditionality associated with social protection programmes, in order to make them a catalyst for better educational, economic and social inclusion.	The biggest challenge of this recommendation is the modification of the labour code and the law of the social protection system. One opportunity could be to centralise the co-ordination of the strategy in a single institution.
Adopt the household lens in order to better understand its composition (i.e. informal, mixed, or formal), and thus better identify the right mix of interventions and develop integrated policy packages for each type of household.	Adopting a more granular lens at the household level is an opportunity to include other aspects of the life cycle, gender and geography. A new lens could also create social inclusion surveys by type of household, in addition to taking into account households' distribution by quintiles and other structural factors.
1.2. Make social protection contribution	ons more flexible in order to include informal workers:
Progress towards a system that allows more flexibility for workers to contribute to the social protection system, particularly for those who face difficulties in making regular contributions through traditional channels (e.g. those earning less than the minimum wage, working through digital platforms or working in part-time jobs). This is particularly relevant for own-account workers (e.g. a flat rate for their contributions).	The current situation brings a window of opportunity because various sectors are advocating for changes in social security for the first time since the system was created 20 years ago. However, one of the great challenges is the reluctance of the sectors. Also, extending protection to independent workers, without sufficient contributions, can become a problem due to the additional burden for the State. There are two alternatives: implementing a single subsidized-contributory system or implementing a contributory system and a subsidised system with an independent-workers approach. In any case, simplifying and standardising the labour legislation is crucial to encourage a higher level of formalisation that increases the number of contributing workers.
1.3. Progress towards a universa	I and more sustainable social protection system
In the short to medium term, efforts should be made to extend coverage to categories of the population not covered by social protection and across all regions of the Dominican Republic.	Identifying and reaching those missing sectors not yet covered is an important challenge. Strengthening the existing universal protection schemes and extending them to all sectors may be an opportunity.
In the longer term, the Dominican Republic should move toward a universal social protection system that is sustainable.	One opportunity of the current situation is that there are ongoing discussions about a possible modification of the 1992 labour code. The implementation of a

Table 3.2. Consolidate a robust and sustainable social protection system in order to protect informal workers and their household members

Technical and political discussion is required in order to assess the convenience of developing a system where coverage depends less on individuals' employment status and where general taxes, instead of workers' contributions, gain relevance as a source of financing social protection systems. universal social protection system must go hand in hand with a comprehensive tax reform. Other key structural aspects to change include the improvement of the civil registry of people and the regularisation of immigrants that allows them to channel their contributions to the social security system. Also, the universalisation of social protection must include new figures such as passive labour market policies. However, a great challenge would be negotiating with some parties whose economic interests would be affected.

Note: Based on the meeting held on 23 June 2022, to discuss the draft analysis and policy recommendations with officials from the Ministry of Labour, the Ministry of Economy, Planning and Development (MEPyD), the Central Bank, the National Statistics Office (ONE), the Association of Industries (AIRD), CIEF Consulting/IFISD and the European Union. Source: Authors' elaboration.

There are structural barriers to the formalisation of companies and to the creation of more formal jobs

In addition to mitigating the pervasive impact of informality, which limits social protection and increases social vulnerability, it is crucial to understand the underlying causes of this phenomenon. The causes of informality are diverse and vary across countries, time periods and segments of the informal economy. There are several institutional, behavioural, and structural factors that can determine whether an enterprise or a worker decides to operate formally or not (OECD/ILO, 2019[9]), including the Dominican Republic's production structure. Belonging to a sector with low productivity and widespread informality may hinder a company's transition to formality or its decision to hire workers formally. Likewise, a company's size is closely related to its capacity to deal with the extra burdens that operating formally entails. But beyond these factors, there is a portion of companies that may have the capacity to operate formally (Jütting and De Laiglesia, 2009[6]). The procedural and economic burdens of operating formally include the administrative and tax processes (the bureaucratic burden), the tax costs of operating formally (the tax burden), non-wage-related labour costs, and minimum wage regulations. The bureaucratic burden, for example, often involves cumbersome procedures and, therefore, higher operational costs.

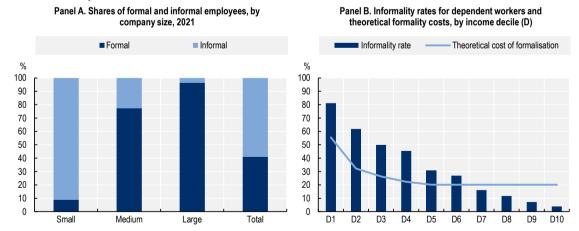


Figure 3.10. Informal work mainly affects small businesses and low-income employees in the Dominican Republic

Note: Panel A: Small enterprises have fewer than5 employees, medium-sized enterprises have between 6 and 20 employees, and large enterprises have more than 20 employees. Panel B: Blue bars represent informality rates by labour income decile for workers aged 15-64 years in 2013. The theoretical costs of becoming formal (black line) is expressed as the proportion of dependent workers' wages that workers would pay in social security contributions in order to become or remain formal.²

Source: Panel A: Authors' calculations based on the KIIbIH database and the ENCFT 2022 (BCRD, 2022[2]). Panel B: Authors' elaboration based on OECD/IDB/CIAT (2016[36]).

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Formalisation remains unattractive or unaffordable for many Dominican companies, especially the smaller ones. Informality is a problem that is commonly concentrated among micro-, small- and medium-sized enterprises (MSMEs). In the Dominican Republic, 91.0% of small enterprises' employees and 22.8% of medium-sized enterprises' employees are informally employed. In contrast, only 3.7% of employees in large enterprises are informally employed (see Figure 3.10, Panel A). MSMEs dominate the Dominican productive landscape. They represent approximately 94.6% of all businesses in the Dominican Republic (MICM, 2020_[37]), contribute around 38.6% of GDP (UNDP and MICM, 2020_[38]) and generate more than 51.4% of total employment (MICM, 2020_[37]). On average, 68.2% of MSMEs are created as microenterprises, 29.3% are created as small enterprises, and only 2.5% are created as medium-sized enterprises (FondoMicro, 2014_[39]).

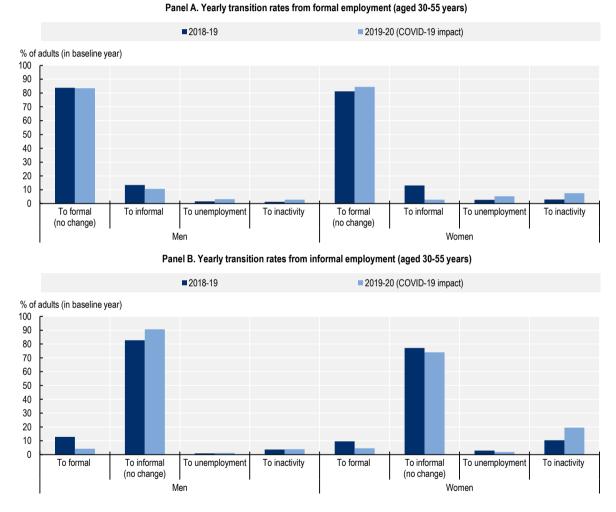


Figure 3.11. Transitions from formality and from informality (aged 30-55 years) by gender



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The cost of hiring formally is high for low-income workers in the Dominican Republic relative to their income. Among workers in the poorest income decile, formalisation would represent an additional cost of almost 60% of the workers' income. From the fifth income decile onwards, formalisation represents a burden of 20% of the workers' income⁶ (see Figure 3.10, Panel B) (OECD/IDB/CIAT, 2016_[36]). Although

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moving towards formality would undoubtedly bring significant benefits for informal workers in terms of social protection coverage (healthcare, pension, unemployment), and for society as a whole in terms of productivity, growth, social security and tax revenues, the theoretical costs of formalisation remain too high for low-income workers relative to their income.

Barriers to formalisation are reflected in a segmented labour market, where transitions between informality and formality are relatively scarce, particularly for women. Between 2018 and 2019, 13.4% of men and 13.1% of women aged 30-55 years transitioned from formality to informality, but more than 80.0% of men and women retained their same labour status. Similarly, 12.8% of male informal workers transitioned from informal to formal employment between 2018 and 2019, while only 9.6% of informal female workers transitioned to formal employment. Between 2019 and 2020, during the COVID-19 pandemic, the rate of transitions from informal to formal employment dropped significantly, to 4.2% among men and 4.5% among women; 19.5% of female informal workers transitioned to inactivity and 1.91% transitioned to unemployment during the crisis, while these figures were only 3.9% and 1.24%, respectively, among male informal workers (see Figure 3.11).

Streamlining companies' administrative and tax procedures has helped reduce disincentives to firm formalisation

Administrative obligations associated with formality can be a strong incentive for companies to remain informal. These bureaucratic burdens include rigid labour market regulations, cumbersome processes and high costs of operation (CNC and IDB, $2019_{[40]}$). The labour market in the Dominican Republic is governed by the 1992 Labour Code (CDRD, $1992_{[25]}$). The Labour Code regulates all matters related to the definition of the labour contract, its modalities, and the official and private regulation of the conditions of different types of labour contracts. In addition, it regulates the procedures for enforcing the law by both administrative authorities and the courts. The Code establishes the Ministry of Labour and the courts as responsible for enforcing the law and its regulations.

The Dominican Republic has made efforts to reduce the bureaucratic burden of setting up a formal business, becoming much more competitive than the LAC average. Setting up a formal company in the Dominican Republic requires seven procedures that take approximately 16.5 days (World Bank, 2020_[41]). The average time required to set up a business in LAC countries is 28.8 days, while in high-income OECD member countries, it is only 9.2 days (see Figure 3.12, Panel A). The formalisation process includes: 1) verifying the availability of the company name, via the National Office for Industrial Property (Oficina Nacional de la Propiedad Industrial; ONAPI); 2) purchasing the company name via ONAPI; 3) paying the incorporation tax (via the DGII); 4) registering the company with the Chamber of Commerce; 5) obtaining a taxpayer identification number from the National Taxpayers Register (Registro Nacional de Contribuyentes; RNC) and applying for tax receipts (via the DGII); 6) registering employees with the Ministry of Labour; and 7) registering employees with the TSS (World Bank, 2020_[41]).

The government created the Formalízate website as a one-stop shop in order to streamline bureaucratic formalisation procedures and to encourage businesses to formalise. The Ministry of Industry, Commerce and MSMEs (MICM) created the Formalízate website in 2015, through Decree 182-15 (MICM, 2015_[42]). This has generated significant savings, in terms of both time and money, for enterprises dealing with all the necessary procedures for formalising employment. In order to operate this service, the MICM is in charge of co-ordinating several institutions throughout the formalisation process, including the Ministry of Labour, ONAPI, the DGII, the Chamber of Commerce, and the TSS.

Even though Dominican enterprises face a reduced number of procedures for paying taxes compared with LAC countries and OECD member countries, they still spend too much time complying with such procedures. In total, Dominican enterprises must comply with seven tax payment procedures, including payments for corporate income tax; value added tax (VAT); employee social security contributions (health, pension and National Institute of Technical and Vocational Training (Instituto Nacional de Formación

Técnico Profesional; INFOTEP); and taxes for vehicles, fuel and electronic transfers. In LAC, the average number of tax payment procedures per enterprise is 28.2, while it is 10.3 among high-income OECD member countries. Companies spend an average of approximately 317 hours per year on all tasks linked to paying taxes, which is in line with the LAC average of 317.1 hours per year. In contrast, companies in high-income OECD member countries spend half that time per year paying taxes, on average, at 158.8 hours per year (see Figure 3.12, Panel B (World Bank, 2020_[41])).

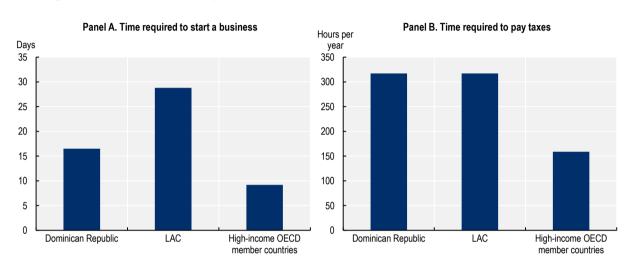


Figure 3.12. The bureaucratic burden of setting up a business and complying with tax obligations is still higher in the Dominican Republic than in OECD member countries

Note: Panel A: Time required to complete each procedure (calendar days) does not include time spent gathering information; each procedure starts on a separate day (two procedures cannot start on the same day); procedures fully completed online are recorded as half-days; a procedure is considered completed once the final document is received; and no prior contact with officials is accounted for. Panel B: Time required to comply with three major taxes (hours per year) includes collecting information and computing tax payable; preparing separate tax accounting books; completing the tax return and filing with agencies; and arranging payment or withholding. Source: Authors' elaboration based on World Bank (2020_[41]).

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The tax burden associated with formal status can be high for some MSMEs

The Dominican Republic's tax structure has a relatively high dependence on indirect taxes. In 2020, 61% of the government's revenue came from taxes on goods and services, followed by 16% from corporate taxes on income, profits, and capital gains, and 10% from taxes on individuals on income, profits, and capital gains (OECD et al., 2021_[43]). In terms of direct taxation, as the country's tax base for personal income tax continues to be quite limited, corporate taxes are highly relevant. In addition, despite the economic growth that certain highly productive sectors have generated, the Dominican treasury does not receive revenues from sectors such as the Free Trade Zones, which are exempt from taxation.

Nonetheless, the tax wedge in the Dominican Republic is below the LAC regional average. The tax wedge is calculated by expressing the sum of personal income taxes, all compulsory social security contributions paid by employees and employers, and payroll taxes minus cash benefits as a percentage of the total labour cost. In the Dominican Republic, the average tax wedge is around 19.2%, while the average tax wedge in LAC countries is around 21.7%. Argentina has the highest tax wedge, at 34.6% of labour costs. Brazil, Colombia and Uruguay also have tax wedge figures of 30% or more. Honduras has the lowest tax wedge, at 10% of labour costs. When broken down by income deciles, the Dominican Republic's tax wedge is 1.2% for the three poorest income deciles, 19.2% for deciles four through nine, and 25.6% for the richest

(tenth) decile. This shows that only decile ten has an additional burden on account of personal income tax (OECD/IDB/CIAT, 2016[36]).

Small enterprises face more difficulty in coping with the corporate tax burden than larger companies do. In the Dominican Republic, small formal enterprises more frequently express that their biggest obstacle to operating formally is the tax rate of 12.5%, compared with the 8.1% rate for medium-sized enterprises and 11.3% for large enterprises (World Bank, 2016_[44]). The fact that small enterprises struggle to cope with the country's tax burden becomes particularly problematic in a productive landscape heavily dominated by MSMEs, which are the most affected by formal work barriers.

Although the Dominican Republic has implemented simplified tax regimes for small taxpayers, tax rates are not differentiated for MSMEs or newly formalised enterprises. In 2009, the Dominican Republic implemented three special policies for small taxpayers that included a simplified procedure for taxation based on purchases, taxation based on income, and taxation on the transfers of industrialised goods and services (CDRD, 2008_[45]). These simplified procedures replaced the regular procedures for corporate income tax (Impuesto sobre la Renta; ISR) and tax on the transfer of industrialised goods and services (Impuesto sobre Transferencia de Bienes Industrializados y Servicios; ITBIS) (Salazar-Xirinachs and Chacaltana, 2018_[46]). In 2019, the country implemented the Simplified Taxation Regime (Régimen Simplificado Tributarion - SRT) with new benefits, such as flexibility in the payment of the ISR, exemption from specific procedures, exemption from payment of tax on assets, simplification of payments, and the implementation of simplified forms for the payment of the ISR and the ITBIS (CDRD, 2019_[47]). However, these measures do not include special tax rates exclusively designed for MSMEs to further incentivise formalisation in the Dominican Republic (e.g. providing tax exemptions during the first years of operation).

The tax burden on businesses in the Dominican Republic is similar to the LAC average, but greater than that of OECD member countries. In the Dominican Republic, a company has to pay approximately 48.8% of its profits in taxes and contributions. The highest burdens are due to a corporate income tax rate of 29.1% and social security contributions to pensions (15.6%), healthcare (0.4%) and the INFOTEP (1.5%). In line with the total tax burden in the Dominican Republic, companies in LAC countries pay, on average, 47% of their profits in taxes and contributions. In contrast, companies in high-income OECD member countries pay 39.9% of their profits in taxes and contributions (World Bank, 2020_[41]). VAT, although not paid by companies, generates an annual burden of approximately 163 hours per year for compliance, while corporate income tax and pension contributions generate a burden of 74 hours and 80 hours per year for compliance, respectively (World Bank, 2020_[41]).

The weak tax morale in the Dominican Republic not only undermines corporate revenue collection, but also makes it difficult to move towards a tax system that relies more on personal wealth and income rather than on companies. Taxing companies can, in turn, have an impact on formal employment. Formal businesses surveyed in the Dominican Republic report corruption as their biggest obstacle, with 14.0% of small businesses, 31.0% of medium-sized businesses and 16.1% of large businesses reporting this (World Bank, 2016_[44]).⁷ This reflects markedly weak tax morale among the country's entrepreneurs, who, distrusting institutions because of the level of corruption, find little incentive to pay taxes (OECD, 2019_[48]). According to the Latinobarómetro survey, only 43% of Dominicans believe that not paying taxes is not justified (Latinobarómetro, 2016_[49]) and 27.5% of Dominicans have heard about someone who managed to avoid paying taxes entirely (Latinobarómetro, 2020_[50]).

Non-wage labour costs can represent a barrier to formalisation, particularly for small employers

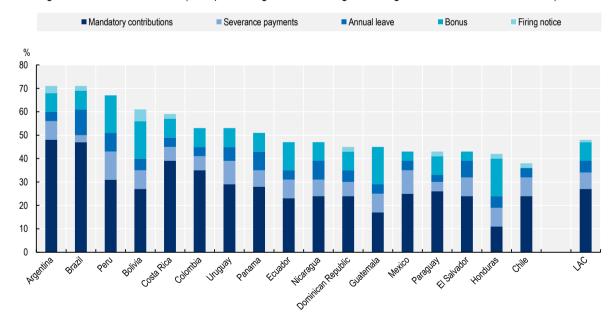
Annual non-wage labour costs were established in the Dominican Republic through four fundamental labour laws. In 1980, Law 116/80 created INFOTEP and introduced a 1% fee on workers' annual wages in order to finance it. In 1992, Law 16/92 established the current Labour Code and set the current rates of several non-wage labour costs: 1) the annual leave contributions, which amount to 4.9% of the annual

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wage (14 days) for the first 5 years of employment and 6.3% (18 days) afterwards; 2) the severance contributions, ranging from 4.55% during the first year of employment to 160.9% after 20 years; 3) the Easter royalty, amounting to 8.33% of the annual wage; 4) the company's profit bonus, ranging from 15.7% during the first three years of operation to 21% from the fourth year onwards; and 5) the pre-notice fee, which increases from 2.5% between months 3 and 6, to 4.9% between months 6 and 12, to 9.8% after the first year. Then, in 2007, Law 87/07, which created the Dominican Social Security System, introduced a contribution of 1.3% of workers' annual wages for occupational risk insurance. Finally, Law 188/07, which amended Law 87/07, changed wage charges for pension contributions (7.1%) and family health insurance (6.7% during the first year of employment, 7.0% for the second year, and 7.1% from the third year onwards) (see Table 3.3) (Collado Di Franco, 2018_[51]).

Effective non-wage labour costs in the Dominican Republic are below the average across LAC countries. As a percentage of the average net wages of formal salaried workers in the Dominican Republic, hiring a formal worker entails 24% of wages going towards mandatory contributions, 8% going towards bonuses, 5% going towards annual leave, 6% going towards severance pay and 2% going towards firing notice, for a total of 45% (Alaimo et al., 2017_[52]). In LAC, among the countries with the highest non-wage labour burdens, Argentina, Brazil, Peru and Bolivia top the list. The average for the LAC region is 49.5% of the average net wages of formal salaried workers, which is distributed as follows: 27.3% for mandatory contributions, 13.8% for salaried costs (8.4% for bonuses and 5.4% for annual leave) and 8.4% for job security provisions (7.3% for severance pay and 1.1% for firing notice). Among OECD member countries in the LAC region, Chile and Mexico are below the region's average at 38% and 44%, respectively. Chile is the country with the lowest non-wage labour costs in the whole LAC region. While Chile has no bonus fee, Mexico and Colombia have no firing notice charges (see Figure 3.13).

Figure 3.13. The Dominican Republic has total non-wage labour costs slightly below the LAC average



Non-wage cost of salaried labour (as a percentage of the average net wages of formal salaried workers)

Note: Includes the additional cost of wages paid by workers and employers according to the definition included in the relevant country's labour law. It is referred to as the average formal wage in the country.

Source: Alaimo et al. (2017[52]), Measuring the Cost of Salaried Labour in Latin America and the Caribbean.

While most non-wage labour costs are relatively stable over time, those in case of dismissal increase drastically after the first year of employment, potentially exerting a disincentive for employers to hire formally. In the first year of employment, the total burden of a formal employee for the employer amounts to 45.04% of the employee's annual salary and 54.48% in case of dismissal. By the fifth year of employment, non-wage labour costs in case of dismissal have almost doubled, amounting to 98.61%. This increase is mainly due to the rise in the burden of severance pay, the increase in the company's profit share (bonus), and pre-notice payments. After 20 years of employment, the non-wage labour costs of a formal employee in case of dismissal amount to 222.75% of the employee's annual salary for the enterprise (see Table 3.3).

Minimum wage regulations have many sector- and size-related variants that often lead to confusion in their application

The 1992 Labour Code created the National Wages Committee to set minimum wage rates for workers in all economic sectors, as well as to define how these wages are to be paid. The Committee establishes thresholds for 15 sectors of the Dominican economy, including agriculture, retail and manufacturing. The rates may be established at the national, regional, provincial, or municipal level, for the Distrito Nacional (National District), or exclusively for a given enterprise (Art. 455 of the Labour Code (CDRD, 1992_[25])). The Committee reports to the Ministry of Labour. It has four members: two appointed by the executive branch and two representing employers and workers, while the Executive appoints the director-general. The National Wages Committee has set 16 sectoral categories of minimum wages ⁸ (ILO, 2013_[53]), which entail more than 600 rates for their subcategories because the minimum wages can vary by the task within occupational categories. For instance, the construction sector alone has more than 500 minimum wage rates. The large number of minimum wages creates widespread confusion among Dominican employers and workers, hindering proper compliance with current legislation.

Table 3.3. Companies face rising non-wage labour costs to employ a worker formally

Contribution	1st year	5th year	10th year	15th year	After 20th year
Pension plan	7.10%	7.10%	7.10%	7.10%	7.10%
Family health insurance	6.67%	7.09%	7.09%	7.09%	7.09%
Occupational risk insurance	1.30%	1.30%	1.30%	1.30%	1.30%
INFOTEP	1.00%	1.00%	1.00%	1.00%	1.00%
Easter royalty	8.33%	8.33%	8.33%	8.33%	8.33%
Holidays	4.90%	6.29%	6.29%	6.29%	6.29%
Non-wage labour costs (excluding bonus)	29.30%	31.12%	31.12%	31.12%	31.12%
Participation in company profits (bonus)	15.74%	20.98%	20.98%	20.98%	20.98%
Non-wage labour costs (including bonus)	45.04%	52.10%	52.10%	52.10%	52.10%
Severance pay (cesantías)	4.55%	36.72%	80.43%	120.65%	160.86%
Pre-notice	4.90%	9.79%	9.79%	9.79%	9.79%
Maximum non-wage labour costs (in case of severance)	54.48%	98.61%	142.32%	182.54%	222.75%

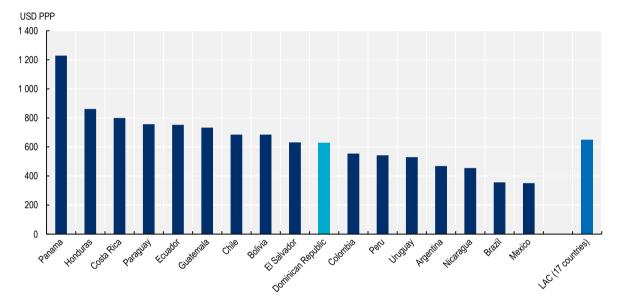
Annual non-wage labour costs of employing one person (percentage of the annual salary)

Note: Calculations, made by Collado Di Franco (2018[51]), are based on days paid according to the law, based on a working year consisting of 285.96 days.

Source: Collado Di Franco (2018_[51]), based on Laws 16/92, 188/80, 87/01 and 188/07. Law 16/92 approved the Labour Code, establishing holiday pay, severance pay, the Easter royalty, bonus pay, and pre-notice pay. Law 188/80 created the INFOTEP, thus introducing the INFOTEP fee. Law 87/01 created the Dominican Social Security System, introducing occupational risk insurance. Law 188/07 amended Law 87/01 and introduced the current pension and family health insurance contributions.

On average, the real minimum wage in the Dominican Republic is in line with the average for the LAC region. In 2020, the nominal minimum wage was around DOP 13 400 in the Dominican Republic, which is equivalent to about USD 627 (United States dollars) PPP, considering the purchasing power of the Dominican peso. The average minimum wage across the LAC region⁹ was USD 628 PPP in the same year (Figure 3.14) (Durán and Kremerman, 2020_[54]).

Figure 3.14. The real minimum wage in the Dominican Republic is in line with the LAC regional average



Minimum wages in comparable USD PPP

Note: 2020 minimum wages in comparable USD PPP. The minimum salary in the Dominican Republic in USD PPP was calculated using a reference minimum salary of DOP 13 400 in 2020.

Source: Durán and Kremerman (2020_[54]), using International Monetary Fund (IMF) data and official minimum wages. Their calculations were made using the PPP factor of the IMF's World Economic Outlook.

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More recently, the National Wages Committee changed the criteria used to set the minimum wage. Traditionally, collective wage bargaining was determined at the national and sectoral level rather than at the enterprise level in the Dominican Republic. During the 2021-22 minimum wage discussion, the National Wages Committee introduced two new variables to set a differentiated minimum wage: enterprises' sales before taxes and the number of employees (MTRD, 2021_[55]). These two variables replace the previous criterion based on the company's assets. Also, this resolution added a new category for micro-enterprises, which have up to 10 workers and sales before taxes of DOP 8 million per year. In this way, the four categories were assigned to a differentiated minimum wage, ranging from DOP 11 900 for micro-enterprises to DOP 21 000 for large enterprises as of 1 January 2022.¹⁰ On average, the non-sectorised minimum wage increased by 24% between 2021 and 2022.

The Dominican Republic completed the process of agreeing on the 2021-24 National Employment Plan and now faces the challenge of fully implementing it. The government made great efforts to agree on public policy guidelines for employment in the medium term in a tripartite construction process. This plan aims at revitalising the labour market, creating new formal jobs, narrowing the gender gap in the labour market, and strengthening the skills of the workforce, among others. The current challenge is to ensure its implementation, co-ordinating all the relevant actors and ensuring sufficient budget for the fulfilment of its goals (see Box 3.4).

Box 3.4. The 2021-24 National Employment Plan

National Employment Plans have been conceived as a key tool for prospecting and co-ordinating public policies aimed at addressing the challenges of the labour market. The first National Employment Plan was created in 2013 to define key labour market policy strategies in line with the principles and axes of the 2010-2030 National Development Strategy.¹¹ In 2021, the government of Luis Abinader undertook the task of agreeing on a new National Employment Plan.

As in other labour matters, a National Employment Plan (PLANE) is the output of a tripartite construction process. Therefore, the national government, headed by the Ministry of Labour, the Ministry of Economy, Planning and Development, and the Ministry of Industry and Commerce, the trade union confederations, and the employers' organisations from different productive sectors were represented in its consultation and elaboration phases. Its elaboration relied on a technical team (PLANE Technical Committee) and a consultative space (the recently reactivated National Employment Commission (MTRD, 2021_[56]). These participatory spaces included representatives from the academic sector, community organisations and international co-operation agencies, such as the European Union, EUROSocial+ (EUROsociAL+, 2021_[57]), AECID, and ProEtp2.

The 2021-2024 PLANE aims at both making the labour market more dynamic and catalysing a more inclusive path by establishing a series of major objectives and strategic action lines (MTRD and CONAEMPLEO, forthcoming_[58]). Its main objectives include: fostering the creation of 600 000 new formal jobs by 2024; reducing the unemployment rate to below 15%; closing the gender gap by increasing the employment rate of women to more than 55%; strengthening soft and hard skills; and promoting labour market insertion and reducing labour informality to 50%. The 2021-24 PLANE defines six national-level strategic action lines: (1) prospective employment and future work spaces, (2) incentives to sectors that generate formal employment, (3) strengthening of technical-professional training, (4) promotion of employability and decent and dignified work, (5) training for entrepreneurship and reduction of informal work, and (6) governance of the PLANE.

The 2021-2024 PLANE also establishes a series of specific objectives at sectoral and territorial level. At the sectoral level, the plan establishes policy objectives for twelve economic sectors: tourism and hospitality; trade and banking; construction; manufacturing; MSMEs and cooperatives; agriculture; housekeeping and domestic labour; energy and water; transport and storage; communications; mining; and public sector. At the territorial level, it establishes policy objectives for nine geographic regions: Cibao Norte; Cibao Sur; Occidental; Oriental; Sureste; Higuamo; Suroeste; Valdesia; and Enriquillo. Finally, the PLANE identifies two cross-cutting key elements to ensure success in the implementation of the plan: (1) the results monitoring and evaluation system and (2) the plan's governance and financing. The Monitoring and Evaluation System establishes a set of ten progress indicators, priority actors and baseline values. It also sets out the budgets in each of the strategic axes and those responsible for implementation.

Note: The PLANE draft was approved in April 2022 and is currently in the publication process (CONAEMPLEO, 2022[59]). Source: Dominican Republic's National Employment Plan 2021-2024 (MTRD and CONAEMPLEO, forthcoming[58]).

While some highly productive sectors can afford the costs of formality, other less productive sectors are unable or unwilling to afford the transition to formality

Most formal jobs in the Dominican Republic are concentrated in some sectors with high labour productivity. Highly productive sectors include the financial intermediation and insurance sector (73.8% formal), the health and social care sector (90% formal), and electricity and water (87% formal). In contrast, sectors with

a higher share of informal labour tend to be those with lower levels of productivity. These include the agriculture and livestock sector, with a formality rate of 10.5%, and the wholesale and retail sector, with a formality rate of 28.7% in 2021 (see Figure 3.15, Panel B). Other sectors, such as construction, hotels, bars and restaurants, and transport and communications, also have high levels of informality despite being relatively more productive. In short, the Dominican Republic shows significant disparities in terms of productivity and job formality across productive sectors. This highlights the importance of productivity growth and production transformation strategies as key catalysts for greater formalisation.

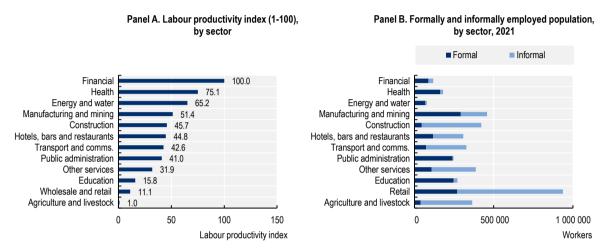


Figure 3.15. Most formal jobs are created in economic sectors with high labour productivity

Note: The health sector includes social assistance; the public administration sector includes defence; and the financial sector includes financial intermediation and insurance. Energy includes electricity and gas. Panel B: Employed population aged 15 years and over. Source: Panel A: Authors' elaboration based on CNC and IDB (2019_[40]). Panel B: Authors' elaboration based on BCRD (2022_[2]).

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Free Trade Zones have been a key pillar of the Dominican Republic's growth strategy, but they have also contributed to a dual economy, with highly productive sectors co-existing with lower productivity sectors. Free Trade Zones were created in the 1960s with the aim of creating jobs and developing local industry. Initially, these zones focused mainly on labour-intensive manufacturing, especially footwear and textiles. Since their creation, Free Trade Zones have diversified from export-oriented manufacturing to export-oriented services, such as business processing offices. This reorientation has also led to a reduction in local demand for suppliers. At the same time, Free Trade Zones have become less relevant for generating employment in recent years. Whereas in the 1990s they accounted for around 7% of total domestic employment, in the early 2020s they account for around 4%. Free Trade Zones have not yet become catalysts of local development to the degree expected and, on average, local sourcing has been reduced over time (OECD/UNCTAD/ECLAC, 2020_[60]). Creating linkages between the activities in these areas and the local economy is one of the potential areas for action to encourage formalisation and local economic development.

The potential of small and medium-sized enterprises to drive the country's economic growth has remained stagnant. MSMEs in the Dominican Republic are much less export oriented than their peers in OECD member countries. While MSMEs in OECD member countries account for 40% of total exports, in the Dominican Republic they only account for 23% of domestic exports (OECD/UNCTAD/ECLAC, 2020_[60]). The large majority of microenterprises in the Dominican Republic are concentrated in less dynamic, less export-oriented sectors.

Although the Dominican Republic has consolidated progress in diversifying its trade structure in recent decades, it still lacks a diverse and innovative productive base. A more diverse productive base would allow the economy to build resilience to external shocks, such as the COVID-19 crisis. As the OECD, United Nations Conference on Trade and Development (UNCTAD), and Economic Commission for Latin America and the Caribbean (ECLAC) report *Production Transformation Policy Review of the Dominican Republic: Preserving Growth, Achieving Resilience* (OECD/UNCTAD/ECLAC, 2020_[60]) highlights, the Dominican Republic has to focus efforts on progressing the upgrading processes and on improving the sophistication of local products, processes and enterprises. To this end, investments in innovation, branding and intellectual property, as well as the incorporation of new technologies, are key. In addition, worker training and institutional capacity building in the public and private sectors will be essential.

Challenges and opportunities to move from analysis to action

The Dominican Republic faces the challenge of strengthening its productive apparatus to increase formal employment and achieve a better quality of life for Dominicans. The promotion of productivity, and especially that of small and medium-sized companies, will have to overcome some important institutional barriers and a legal framework that currently does not reflect the rapid changes that technological change has brought to the labour market. The government faces the challenge of negotiating new social agreements and implementing innovative measures that allow productivity to flourish but at the same time care about maintaining the quality of life and well-being of Dominican workers.

The OECD Development Centre team met in Santo Domingo with several government officials and other specialised actors from the labour sector to discuss the country's main challenges in this area and possible strategies to solve them. They shared their visions around the main challenges and opportunities. Table 3.4 shows the results of the discussions and summarises key policy recommendations.

Policy recommendation	Challenges and opportunities for implementation		
2.1. Provide favourable condition	s for formalisation, particularly among MSMEs		
Encourage formalisation among MSMEs by providing them with special support and tax benefits. Incentives could be given to newly incorporated companies (e.g. by providing tax exemptions during the first years of operation).	The next round of identification in 2022 brings an opportunity to better understand MSMEs and their needs. Creating guides on formalisation for MSMEs could contribute to socialise with them the benefits of operating formally. Some examples for implementation are sectoral incentives, lower taxes for MSMEs, or the elimination of certain taxes (for example, the advance tax ("Anticipo") that was suspended during the pandemic).		
Continue efforts to simplify the taxation and regulatory administration of businesses, streamline bureaucratic procedures during formalisation and encourage more businesses to formalise. The Formalízate website should be strengthened and expanded in order to reach a larger number of companies and sectors.	Understanding better the incentives of Dominican companies to remain informal is key to designing formalisation strategies. The current <i>Formalizate</i> strategy needs further promotion among informal businesses. In addition, the digitisation of various processes could help facilitate this transit of informal companies. Finally, the creation of a single digital window beyond <i>Formalizate</i> for the transition to formalisation can contribute to this purpose.		
Promote innovative mechanisms to foster the growth of small and medium-sized companies, such as business acceleration programmes, smart funds, and support in maintaining fiscal commitments. *	Inter-institutional co-ordination with DGII to advise companies in filling out tax documents		
Expand the types of investment funding available (beyond loans) with an emphasis on independent workers. Linking quantity and cost to training indicators. *	Co-ordinate a strategy involving the government (DGII's incentives), capital markets (e.g. crowdfunding, seed and angel capital), and regulators (SIB, SIMV, SIPSN). Adapting the regulatory framework to incorporate these new institutional and retail figures		
2.2. Address main institutional barriers to the form	nalisation of workers and consider a reform of the Labour Code		
Rethink the minimum-wage-setting process in order to strike a better balance between a more simplified system that favours its	Reducing the number of minimum wages is crucial to facilitating companies' compliance with labour laws.		

Table 3.4. Rethink the current institutional and policy framework to remove or alleviate existing barriers to formalisation

application by employers and a sufficient number of minimum wages that accounts for differences across sectors and firms.			
Begin a process of reflection and technical discussion on the impact of severance payment on the levels of informality, in order to balance protection of the employee against flexibility in the labour market, resulting in greater levels of formalisation.	It would be useful to have technical studies on the impact of this proposal. There is a great opportunity around the creation of unemployment insurance in the Dominican Republic. The challenge lies in the necessary tripartite discussion for its creation, between employers, workers, and the government.		
Appoint a team that works to align the conditions and stakeholders required for the effective implementation of the new National Employment Plan *	Once the new National Employment Plan has been published, the current challenge lies in its socialisation, communication strategy and, especially, its implementation.		
Frame these discussions within a broader tripartite debate at the national level about the possibility of reforming the current Labour Code, considering the inputs from the new National Employment Plan.†	The long-term tripartite discussion for the reform of the Labour Code should also include key discussions on the regularisation of migrants and the strengthening of the civil registry in the country.		
The COVID-19 pandemic has accelerated several megatrends, including digitalisation and its impact on the labour market. Whether within the framework of a new Labour Code, or independently, it is necessary to introduce a regulatory framework for digital platforms.*	There are challenges to unlocking the full benefits of digitisation, such as training teachers in new technologies.		
2.3. Strengthen policies to boos	st the creation of formal jobs in the economy		
Align employment generation policies with industrial and production policies, strengthening connections between special economic zones and the local economy in order to promote greater formalisation.	There is an opportunity in the generation of data from employment programs that can be taken advantage of. In addition, the creation of inter-institutional teams for joint work can contribute to this objective.		
Create sector-specific strategies to promote formalisation in sectors where this is particularly low.	Advancing on the discussions around undocumented people (migrants and those lacking civil registration) would bring opportunities to advance in this regard. The implementation of sectoral studies can also contribute to decision making in this regard. Tripartite dialogue is perhaps the biggest challenge.		

Note: Based on the meeting held on 23 June 2022, to discuss the draft analysis and policy recommendations with officials from the Ministry of Labour, the Ministry of Economy, Planning and Development (MEPyD), the Central Bank, the National Statistics Office (ONE), the Association of Industries (AIRD), CIEF Consulting/IFISD and the European Union. Recommendations marked with an asterisk (*) were introduced by workshop participants. Recommendations marked with a dagger (†) incorporate modifications suggested by workshop participants. Source: Authors' elaboration.

Skills development is crucial to increasing labour productivity and promoting formal employment

Skills development can be a critical factor in greater formalisation. Skills can facilitate employability by providing workers with more opportunities to access formal jobs, which usually demand higher-level skills. Similarly, skills can increase productivity. At the individual level, this involves workers adding sufficient value to their roles to outweigh the costs of formality, hence making the choice of formalisation a viable option for employers. At the aggregate level, greater productivity and a wider pool of skills are more conducive to innovation, entrepreneurship, and productive transformation, which can lead to the expansion of sectors that create formal job opportunities, which in turn can attract a more skilled workforce. The available pool of skills in the Dominican Republic is still relatively limited, as suggested by low levels of educational attainment, particularly among lower-income groups. Despite progress in expanding education across the population, a significant share of the population still has no or low levels of education, even among high-income groups (Figure 3.16).

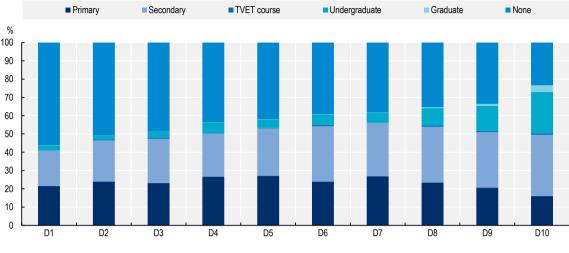


Figure 3.16. Primary, secondary, and tertiary educational attainment remains limited in most income deciles in the Dominican Republic

Note: Highest grade attained. Data are from Q3 2019. Source: Authors' elaboration based on BCRD (2022[2]).

Learning outcomes among Dominicans remain low by international standards. As much as 79% of 15-yearold Dominican students fail to reach level 2 proficiency in reading, mathematics and science in the Programme for International Student Assessment (PISA) test, which is described as the minimum level of proficiency that all children should acquire by the end of secondary education. This places the country below all other LAC countries participating in the PISA test, and well below the OECD average (Figure 3.17). Mathematics is where Dominican students perform the worst, with 69.3% not reaching level 1 proficiency and 21.3% barely reaching level 1 proficiency in 2018 (OECD, $2018_{[61]}$). Quantitative skills in particular are essential for the development of technical skills that would contribute to boosting labour productivity in the country. However, all three of these basic skills are essential for building more complex skills in the workforce.

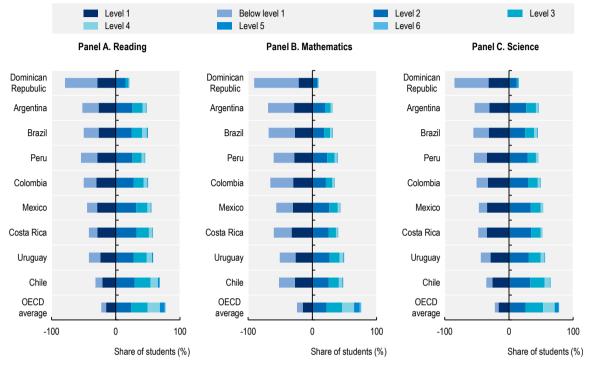
Upgrading the labour force's skills must be a non-deferrable aspect of the overall strategy to promote greater formalisation in the Dominican Republic. In the Dominican Republic, 29.1% of manufacturing companies identify an inadequately educated workforce as a major constraint, which represents a greater proportion than the manufacturing companies in the LAC as a whole (26.3%) and in OECD member countries (21.2%) (World Bank, 2016_[44]). In fact, sectors with low education levels have shown a markedly downward trend in their labour productivity since 2014 (Figure 3.18, Panel A). These sectors include utilities, manufacturing, construction, and transport and communications. Other sectors have also seen a slight downward trend, such as the education sector and the wholesale and retail sector. One thing all these sectors (except for the education sector) have in common is an average number of years of schooling that falls short of completion of secondary education (i.e. ten years). The least productive of these sectors and the sector with the lowest average years of schooling is the agricultural sector, with an average of only 5.8 years of schooling (Figure 3.18, Panel B).

Three skills-related policy areas are highlighted in this section: 1) technical and vocational education and training (TVET), which has proved to have a positive impact on increasing productivity and formalisation; 2) the importance of developing mechanisms to better match the supply of and demand for skills; and 3) the transition from the education system to the labour markets, which is a key foundational step for achieving greater formalisation in the Dominican Republic.

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Figure 3.17. The Dominican Republic must improve training in basic skills, which are essential to building more specialised skills in the workforce

Percentage of students in selected LAC countries at each level of proficiency in reading, mathematics and science on PISA tests, 2018



Note: Reading and science data for Argentina are from the paper-based version of the PISA test; mathematics data for Argentina, and all other countries' data, come from the computer-based version of the PISA test. Source: Authors' elaboration based on PISA database (OECD, 2018_[61]).

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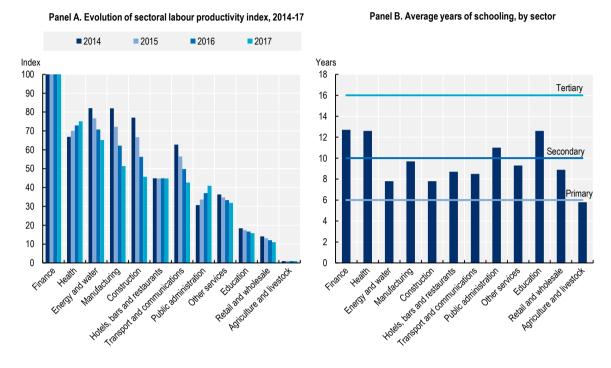


Figure 3.18. Sectors with a downward trend in labour productivity are primarily those with an average number of years of education that falls short of completion of secondary school

Note: Panel A: The health sector includes social assistance; the public administration sector includes defence; and the finance sector includes financial intermediation and insurance. Panel B: According to Law 66/97, primary education lasts six years, secondary education lasts four more years, and tertiary education lasts six more years (CDRD, 1997_[62]).

Source: National Competitiveness Council (Consejo Nacional de Competitividad; CNC) and Inter-American Development Bank (IDB) (CNC and IDB, 2019[40]), using data from the Central Bank (BCRD, 2022[2]; 2021[63]).

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TVET can play a critical role in increasing productivity, formalisation and social inclusion

TVET can bring diverse socio-economic benefits. TVET is crucial to developing a skilled labour force that has a range of mid-level trade, technical, professional and management skills alongside high-level skills associated with university education (OECD, 2014[64]). TVET can also contribute to social cohesion and equity, as it offers an alternative to young people who have dropped out of school, providing them with specific job skills to increase their employability. In this sense, high-quality vocational education pathways, particularly in upper secondary education, can help those who have become disaffected with academic education to re-engage with the educational system. In several LAC countries, TVET programmes are also specifically targeted at students from poor households. TVET offers more attractive training for people who prefer more practical education, as well as for older workers seeking to improve specific vocational skills. TVET can be helpful for boosting training without abandoning work or for individuals who wish to return to the labour market after a period of absence (Quintini and Manfredi, 2009[65]). Tertiary TVET programmes can provide those with no appetite for academic education with practical skills that respond to the job market's needs (OECD/CAF/ECLAC, 2016[66]). Moreover, TVET has also been demonstrated to play a role in closing gender gaps. In the Dominican Republic, women have benefitted considerably from TVET, since more than 60% of TVET secondary students are women (OECD/CAF/ECLAC, 2016[66]; UNESCO, 2021[67]).

TVET can play an essential role in moving towards a more formal labour market. TVET programmes have demonstrated that they can have a significant long-term impact on formalising work among young people

(Ibarraran et al., 2015_[68]). Training programmes work particularly well in more dynamic local contexts, where there is actual demand for the skills provided (Ibarraran et al., 2015_[68]). However, evidence has shown that the long-term impact of job training programmes is different between men and women. While men have a better start to their careers in the formal labour market, women do not seem to have increased their participation in the formal sector. For youth in urban contexts, both men and women see a long-term increase in their earnings.

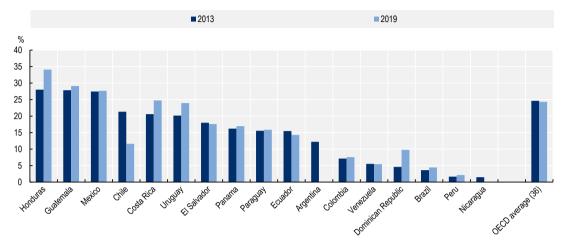
In the Dominican Republic, TVET provision takes place at three different levels: secondary (pre-higher) education, post-secondary (higher) education and the INFOTEP. The Ministry of Education of the Dominican Republic (Ministerio de Educación de la República Dominicana; MINERD) is responsible for secondary (pre-higher) education, which provides academic or technical secondary education and is governed by Law 66/97 on General Education (CDRD, 1997_[62]). The Ministry of Higher Education, Science and Technology is responsible for higher (post-secondary) education and is governed by Law 139/01 on Higher Education, Science and Technology (CDRD, 2001_[69]). Finally, the INFOTEP is responsible for providing technical and vocational training and is governed by Law 116/80 (CDRD, 1980_[70]). The essential difference between technical and vocational education provided at the pre-higher and higher education levels and that provided by INFOTEP is that the former proposes to develop cognitive, socio-affective and technical skills simultaneously, whereas the latter concentrates on the development of the technical skills (Amargós, 2016_[71]). The Ministry of Labour also takes part indirectly in the provision of TVET through its participation in the INFOTEP Board of Directors. Finally, the Ministry of Youth occasionally opens calls for training programmes for young people, such as CAPACITEC to encourage entrepreneurship or Punto Tecnológico to provide scientific and technological training through the Casas de la Juventud.

Strengthening the coverage and quality of secondary and post-secondary TVET is key to building skills in the workforce

Secondary education is the first tier of TVET. Secondary education serves a school population aged between 12 and 18 years and is composed of two cycles. The first, lower secondary, lasts three years and is common to all students. The second cycle, upper secondary, also lasts three years and offers three streams: academic, technical-vocational, and artistic (Amargós, 2016_[71]). All streams have a common core of 40% of the academic curriculum, while the remaining 60% in the technical stream offers technology and workshop practice subjects. In addition, it includes training for the promotion of entrepreneurial practices and computer science. Graduates from the technical, academic or artistic streams in secondary education can continue education at university.

Secondary education TVET is still limited in the Dominican Republic. Despite a growing trend since 2013, only 9.8% of secondary school students in the Dominican Republic were enrolled in TVET programmes in 2019 (Figure 3.19). This figure is well below the averages for the LAC region and for OECD member countries (UNESCO, 2021_[67]).

Figure 3.19. While the number of secondary school students in the Dominican Republic enrolled in TVET programmes has grown since 2013, it remains well below LAC and OECD member country averages



Students in secondary education enrolled in TVET programmes (as a percentage of total secondary students)

Note: Data for 2013 were used, except for Nicaragua (2010), Panama (2011), Paraguay (2012) and Honduras (2014). Data for 2019 were used, except for Brazil, Chile, Ecuador, El Salvador, Mexico and Uruguay (2018), Venezuela (2017), and Panama and Paraguay (2016). OECD average includes all members (36) except the United States and Costa Rica.

Source: Authors' elaboration based on UNESCO (2021[67]) and DiNIECE, Ministry of Education of Argentina (2013).

StatLink ms https://stat.link/Ocfypr

The development of post-secondary technical education is relatively recent in the Dominican Republic. Higher technical education requires a secondary school diploma and is aimed at preparing technicians for work in specific occupational areas over the course of approximately two years. The programmes offer "higher technician" titles in a given area (e.g. mechanics, informatics, tourism or gastronomy). The Ministry of Higher Education, Science and Technology has only approved nine training institutions nationwide. The statistics on enrolled students in the nine institutions authorised to offer higher technical education are not available (Amargós, 2016_[71]), making strategic planning difficult.

INFOTEP's technical and vocational training offers flexible learning modalities for developing specific technical skills in a wide variety of domains. INFOTEP's curricular offering includes three types of education and training plans: technical courses (ranging from 30 to 250 hours), technical careers (ranging from 400 to 1 600 hours) and the training of technical masters (minimum of 1 400 hours). The content is generally organised in modules, and training is provided through on-site practice in workshops. INFOTEP awards a certificate of professional competence to those who complete each module, and a diploma to those who complete all the modules in a programme (Amargós, 2016[71]).

The supply of TVET programmes is fragmented and would benefit from more co-ordination and strategic guidance in order to better respond to current and future demands for skills

Strategic planning of the TVET system in the Dominican Republic could be improved, while co-ordination across its three existing providers could be strengthened. The three leading TVET providers (MINERD, MESCyT and INFOTEP) have defined their regulations independently, and have different governing laws and autonomous budgets. Therefore, all education and training programmes have different structures, without clear equivalences or complementarities across systems. On the employees' side, this institutional framework can make it difficult to set clear education and training objectives and pathways, as the various

systems tend to overlap. Fragmentation also hinders matching TVET programmes with companies' demand for skills. In order to effectively improve the TVET system, it is essential to differentiate between the qualitative and quantitative demand for skills.

The recent creation and ongoing implementation of the National Qualifications Framework (NQF) is a significant step towards aligning TVET with general secondary and tertiary education. Qualification frameworks, which classify qualifications into levels based on learning outcomes, standardise qualifications in order to facilitate the evaluation and comparison of skills across educational systems. In the LAC region, various countries are developing co-ordination mechanisms between TVET and general education programmes, including Chile, Colombia, Costa Rica, Ecuador and Nicaragua (OECD/CAF/ECLAC, 2016_[66]).

In addition to co-ordinating between TVET and other programmes, NQFs facilitate the identification of the professional qualifications that are demanded in the national productive sector. By creating a modular catalogue of TVET programmes, an NQF facilitates the identification of the types of training offered and the specific qualifications or skills that are required. In the Dominican Republic, once the drafted NQF is approved by law, it will be a challenge to ensure continuity during its implementation. To this end, all educational and training institutions will have to update their educational training offerings in line with the guidelines defined by the NQF (see Box 3.5).

Box 3.5. The National Qualifications Framework: An ongoing multi-stakeholder effort

The Support Programme for Professional Technical Education and Training in the Dominican Republic (Programa de Apoyo a la Educación y Formación Técnico Profesional en la República Dominicana; ProEtp2) co-operation project, financed by the European Union and the Spanish Agency for International Development Co-operation, created a national commission to design and implement an NQF. This inter-institutional initiative, co-ordinated by the Ministry of the Presidency, involved all relevant actors in TVET, including the MINERD; the Ministry of Higher Education, Science and Technology; the Ministry of Labour; and the Ministry of Economy, Planning and Development. The national commission led to the formation of a technical committee that drafted the NQF. The Ministry of Labour, for example, has provided valuable inputs to build the framework by extracting data from two key tools: the Labour Registration System (SIRLA) and the Digital Employment Board. Their data provide key insights about the skills that employers are demanding and those that the workforce is offering. Congress partially approved the bill containing the NQF in August 2019.

The NQF aims to narrow the gap between the supply and demand for skills in the Dominican Republic. Achieving this would transform how the relationship between jobs and education is understood and would focus on the Dominican Republic's specific skills needs. The bill sent to Congress included reference to the National Catalogue for Qualifications, which defines eight educational levels aligned with the European Qualifications Framework. It identifies three types of skills: basic skills (e.g. digital, agricultural, mining, and information and communications technology), specific skills and transferrable skills. The bill also included a section on the recognition of non-certified skills (i.e. workers who acquired skills through experience and have no certification of them).

A complete catalogue of qualifications available will provide valuable inputs for the strategic co-ordination of the supply of technical and professional education and training programmes in the country. Therefore, it will be a crucial tool for decision making aimed at closing the gap between supply and demand for skills in the labour market, and for efforts to anticipate future trends in this area.

Source: PROETP2 (2021[72]) and Aribizu Echávarri (2015[73]).

A better match between the demand and supply of skills is critical for employability and job formalisation

The Dominican Republic has scarce information on both the supply of skills and the private sector's demand for skills. The ENCFT and the National Multipurpose Household Survey (Encuesta Nacional de Hogares de Propósitos Múltiples; ENHOGAR) surveys provide valuable information on the main labour indicators, categorised by educational level and schooling. However, they do not include key questions such as the type of job-specific training a worker has received, or their years of experience in the job (Amargós, 2016_[71]).

INFOTEP has researched the mismatch between the supply of and demand for skilled labour in several regions of the Dominican Republic. Since 2010, INFOTEP has produced a number of ad hoc studies in order to assess companies' needs and the demand for technical skills in certain areas (INFOTEP, 2018[74]). These studies have shown that companies do indeed require workers with some level of training, and that around 80% of workers are willing to receive technical training (INFOTEP, 2019[75]). INFOTEP's studies also provide evidence of the mismatch between workers' demands for training and companies' demand for skilled workers. On the one hand, the courses most demanded by workers are related to technical skills, such as computer skills, basic accountancy, mechanics and electrical services, and English. On the other hand, the skills most demanded by companies in 2020 were client service, teamwork, sales and conflict management. There is also wide heterogeneity across regions. While enterprises in the southern region require English and computer skills, those in the Greater Santo Domingo region require basic accountancy skills, mechanical skills, and computer skills (INFOTEP, 2020₁₇₆₁). In addition, the Ministry of Economy, Planning and Development (Ministerio de Economía, Planificación y Desarrollo; MEPyD) has published a series of development plans for the provinces and regions, in which it analyses the skills needs identified in those areas (MEPyD, 2017[77]). Despite these efforts, a regionally fragmented approach hampers the comparability of data and therefore prevents the development of a complete picture of skills supply and demand across the country. A unified and systematic approach with nationwide coverage could contribute more usefully to the design of a national skills policy, also supporting the country's TVET strategy beyond INFOTEP's institutional catalogue.

Investing in better resources and methods for analysing the supply of and demand for skills can contribute to more effective education and training policies. Currently, the Dominican Republic does not have instruments that allow it to estimate the demand for skills in the labour market. Some of the potential methods for identifying the demand for skills (which are widely used in the LAC region and OECD member countries) include enterprise surveys, job vacancy and online vacancy analyses, administrative data analysis, employment and household surveys, and hybrid initiatives (OECD, 20161781).¹² On the supply side, the Dominican Republic has used PISA tests since 2015, which constitute a key tool for identifying the supply of skills in the country. PISA testing focuses on the core school subjects of science, reading and mathematics. In this regard, the most common methods for the identification of skill supply (i.e. education and training) include student skills analyses, graduate surveys, working conditions surveys and adult skills analyses (see Table 3.5). The Dominican Republic uses quantitative and qualitative tools for anticipating the future demand for skills. On the quantitative side, the MEPyD developed an econometric model in 2016 for the projection of labour demand during the period 2015-30, with the support of Cambridge Econometrics (2016_[79]). This model makes a forecast based on the comparison of the demand for skills (based on a macroeconomic forecast of employment) with the supply of skills (based on population trends and skill patterns) (Gontero and Albornoz, 2019[80]). On the qualitative side, the MINERD and the Spanish Agency for International Development Co-operation carried out prospective studies on a variety of productive sectors in 2016, including health (MINERD, 2016[81]), safety and environment (MINERD, 2016[82]), and construction and mining (MINERD, 2016[83]).

Table 3.5. The Dominican Republic has limited sources of information on the supply and demand of skills, and limited methods for anticipating the future demand for skills

	Identification (current)							Auticia atica (fatura)			
	Demand				Supply				Anticipation (future)		
Country	Enterprise surveys	Job vacancy and online vacancy analysis	Administrative data	Employment and household surveys	Hybrid initiatives	Student skills assessment	Graduate surveys	Surveys of working conditions	Adult skills assessment	Quantitative methods	Qualitative methods
Argentina	Х					Х					Х
Brazil											
Chile											
Colombia											
Costa Rica											
Dominican Republic											
Ecuador											
Guatemala											
Honduras											
Mexico											
Panama											
Paraguay	Х										
Peru											
Uruguay											

Methods used in the LAC region for skills identification and anticipation

Source: Gontero and Albornoz (2019[80]), based on OECD (2016[78]).

Facilitating the transition from education to employment not only reduces the burden on companies but also supports young people in getting started on their career path

Apprenticeships are a strategic way of easing the transition from school to work. Apprenticeships have recently become popular throughout the LAC region as a means of stimulating skills acquisition and promoting the smooth transition from school to formal employment. In addition, apprenticeships strengthen the role of enterprises, and the private sector in general, in training the labour force, contributing to the formal recognition of qualifications in the labour market (OECD/CAF/ECLAC, 2016_[66]). In the coming years, the education sector needs to scale up its partnerships with the private sector. This will benefit increasing numbers of graduates, ease the transition from school to work, and reduce the time graduates spend looking for jobs. Work placement programmes also play a key role in getting young people into the formal labour market (ILO, 2016_[64]).

Between 2002 and 2017, the Ministry of Labour ran the Juventud y Empleo programme as part of its active employment policies. Programme participants were young people living in poverty, unemployment, underemployment or inactivity, who are outside the formal education system and who have not completed secondary education. They received theoretical and practical job training in the classroom and their first work experience comes through internships with private companies. The programme also paid DOP 70 for each day of class attendance. Experimental impact evaluations have identified evidence of the positive and statistically significant effects of these measures on the quality of formal employment, with just some exceptions. Also, the programme also positively affected job formality for men (see Table 3.6).

Also, empirical evidence suggests that training and job placement programmes targeting women can help them join the labour market, having achieved higher educational attainment, in order to achieve equality with their male peers. It is often harder for women to enter the labour market, and to remain there, than it is for their male peers. Experimental evidence found that female participants of the Dominican Republic's Juventud y Empleo programme benefited more than male participants in terms of employment and wages (see Table 3.6). Moreover, women had substantially higher levels of soft skills and better labour market outcomes than men three years after programme completion (OECD/CAF/ECLAC, 2016[66]).

Authors	Observation	Evaluation	Employment effect		Formality effect		Earnings effect	
Authors	period	method	Women	Men	Women	Men	Women	Men
Acevedo et al. (2017[85])	12-18 months	Experimental	(+)	(-)			(+)	()
	42-48 months	Experimental	()	()	()	(-)	()	()
Ibarrarán et al. (2015[68])	6 years	Experimental	()	()	()	(+)	()	(+)
Ibarrarán et al. (2014[86])	18-24 months	Experimental	()	()	()	(+)	(+)	()
Card et al. (2011[87])	10-14 months and 22-24 months	Experimental	()	()	(+)	(+)	(+)	(+)

Table 3.6. Available evidence on the impact of the Juventud y Empleo youth training programme

Note: (+) Positive, robust and significant results; () neutral or non-significant results; (-) negative, robust and significant results. Source: OECD/ECLAC/CAF (2016[66]).

The Juventud y Empleo programme, now discontinued, was implemented in three different phases between 2002 and 2014. The first phase was implemented between 2002 and 2006, the second phase between 2006 and 2010, and the third phase was carried out between 2012 and 2014, as part of the IDB's Support Programme for the National Employment System (PASNE). During this last phase, *Juventud y Empleo* programme was financed under a loan contract signed with the IDB and implemented by the MTRD in alliance with the INFOTEP (Executive Branch of the Dominican Republic, 2012_[88]). Since then, other programmes to support youth employment have been put in place, though of a smaller scale.

Challenges and opportunities to move from analysis to action

Having a more competitive workforce that, in turn, boosts the productivity of the productive apparatus, requires investing in the education and training of workers at all levels. The strengthening of education is a common goal of any country. In the Dominican Republic, specifically, the strengthening of technical education and training for professional life is a key objective. The investment must be strategic and respond to the demand for skills that companies currently have, and especially, anticipate future demand, taking into account technological change. To move towards change, it is necessary to strengthen the mechanisms and co-ordination strategy of the educational ecosystem, currently fragmented and uncoordinated.

The OECD Development Centre team met in Santo Domingo with several government officials and other specialised actors from the education sector to discuss the country's main challenges in this area and possible strategies to solve them. They shared their visions around the main challenges and opportunities. Table 3.7 shows the results of the discussions and summarises key policy recommendations.

Table 3.7. Invest more effectively in the workforce, focusing particularly on skills and youth, in order to increase labour productivity and improve employability in the formal sector

Policy recommendation	Challenges and opportunities for implementation
3.1. Strengthen connections between the education and training syste the transition to	
Strengthen TVET by investing in better and more modern infrastructure, teacher training and tools for identifying labour market needs.	Some of the biggest obstacles to implementing this recommendation include societal challenges like teen pregnancy and overcrowded school classrooms.
	Separating basic and secondary education from tertiary education. Improving the overall quality of basic and secondary education but investing on Technical and University Secondary education based on the needs of the economy (skills demand).
Ensure the continuity of the efforts to implement the NQF beyond political cycles, as this will be a key instrument in facilitating the identification of professional qualifications demanded by the labour market.	The next step and the biggest challenge currently is the approval of the preliminary bill in the Congress
Harmonise the fragmented TVET system.	A policy table could be created around TVET in the country, considering the national survey of INFOTEP qualifications
Encourage partnerships between the private and educational sectors, expanding programmes that combine classroom teaching with practical training and other active labour market services, and strengthening transition programmes from school to the workplace for young people.	Currently, there is a programme for youth employability and first employment in the Ministry of Labour. Partnerships with tertiary education, especially universities, are crucial. However, other sectors such as NGOs, cooperatives, associations, among others, can be considered. The great challenge lies in communicating it effectively.
Put in place regular skills supply and demand data collection systems. More and better data on the profiles and skills demanded by the labour market, as well as on the shortage in the supply of in-demand skills, are needed in order to develop educational programmes that are more responsive to the needs of the changing economy. Involving the productive sector and exploiting the benefits of digital transformation are key to building such information systems and bridging the skills gap.	The challenge lies in identifying the actors and communicating it effectively. The INFOTEP Technical-Professional Observatory can contribute with key inputs.
Create formal entrepreneurship programmes in the last year of high school to increase the possibility of starting a formal work activity upon leaving school. *	Students who do not finish basic education most likely end up in the informal sector

Note: Based on the meeting held on 23 June 2022, to discuss the draft analysis and policy recommendations with officials from the Ministry of Labour, the Ministry of Economy, Planning and Development (MEPyD), the Central Bank, the National Statistics Office (ONE), the Association of Industries (AIRD), CIEF Consulting/IFISD and the European Union. Recommendations marked with an asterisk (*) were introduced by workshop participants.

Source: Authors' elaboration.

Policy recommendations

Box 3.6. Policy recommendations

1. Policy objective 1: Consolidate a robust and sustainable social protection system in order to protect informal workers and their household members

1.1. Strengthen social protection systems and build on the lessons learned during the COVID-19 pandemic:

- Improve interoperability across different existing registries, integrating all social protection information systems and strengthening the role of SIUBEN in order to reach vulnerable, informal populations, and exploiting the potential of digital technologies.
- Enhance the conditionality associated with social protection in order to make it a catalyst for better educational, economic and social inclusion.
- Adopt the household lens in order to better understand household composition, and thus better identify the right mix of interventions and develop integrated policy packages for each type of household.

1.2. Make social protection contributions more flexible in order to include informal workers:

Progress towards a system that allows more flexibility for workers to contribute to the social
protection system, particularly for those who face difficulties in making regular contributions
through traditional channels (e.g. those earning less than the minimum wage, working through
digital platforms, or working in part-time jobs). This is particularly relevant for own-account
workers (e.g. a flat rate for their contributions).

1.3. Progress towards a universal and more sustainable social protection system:

- In the short to medium term, efforts should be made to extend coverage to categories of the population not covered by social protection and across all regions of the Dominican Republic.
- In the longer term, the Dominican Republic should move towards a universal social protection system. Technical and political discussion is required in order to assess the convenience of developing a system where coverage depends less on individuals' employment status, and where general taxes, instead of workers' contributions, gain relevance as a source of financing social protection systems.

2. Policy objective 2: Rethink the current institutional and policy framework to remove or alleviate existing barriers to formalisation

2.1. Provide favourable conditions for formalisation, particularly among MSMEs:

- Encourage formalisation among MSMEs by providing them with special support and tax benefits. Incentives could be given to newly incorporated companies (e.g. by providing tax exemptions during the first years of operation).
- Continue efforts to simplify the taxation and regulatory administration of businesses, streamline bureaucratic procedures during formalisation and encourage more businesses to formalise. The Formalízate website should be strengthened and expanded in order to reach a larger number of companies and sectors.

- Promote innovative mechanisms to foster the growth of small and medium-sized companies, such as business acceleration programmes, smart funds, and support in maintaining fiscal commitments.
- Expand the types of investment funding available (beyond loans) with an emphasis on independent workers. Linking quantity and cost to training indicators.

2.2. Address main institutional barriers to the formalisation of workers and consider a reform of the Labour Code:

- Rethink the minimum-wage-setting process in order to strike a better balance between a more simplified system that favours its application by employers and a sufficient number of minimum wages that accounts for differences across sectors and firms.
- Begin a process of reflection and technical discussion on the impact of severance payment on the levels, in order to balance protection of the employee against flexibility in the labour market, resulting in greater levels of formalisation.
- Appoint a team that works to align the conditions and stakeholders required for the effective implementation of the new National Employment Plan.
- Frame these discussions within a broader tripartite debate at the national level about the possibility of reforming the current Labour Code, considering the inputs from the new National Employment Plan.
- Introduce a regulatory framework for digital platforms, whether within a new Labour Code or independently.

2.3. Strengthen policies to boost the creation of formal jobs in the economy:

- Align employment generation policies with industrial and production policies, strengthening connections between special economic zones and the local economy in order to promote greater formalisation.
- Create sector-specific strategies to promote formalisation in sectors where this is particularly low.

3. Policy objective 3: Invest more effectively in the workforce, focusing particularly on skills and youth, in order to increase labour productivity and improve employability in the formal sector

3.1. Strengthen connections between the education and training system and the demand for skills in the economy in order to facilitate the transition to formality:

- Strengthen TVET by investing in better and more modern infrastructure, teacher training and tools for identifying labour market needs.
- Ensure the continuity of the efforts to implement the NQF beyond political cycles, as this will be a key instrument in facilitating the identification of professional qualifications demanded by the labour market.
- Harmonise the fragmented TVET system.
- Encourage partnerships between the private and educational sectors, expanding programmes that combine classroom teaching with practical training and other active labour market services, and strengthening transition programmes from school to the workplace for young people.
- Put in place regular skills supply and demand data collection systems. More and better data on the profiles and skills demanded by the labour market, as well as on the shortage in the supply of in-demand skills, are needed in order to develop educational programmes that are more responsive to the needs of the changing economy. Involving the productive sector and exploiting

the benefits of digital transformation are key to building such information systems and bridging the skills gap.

- Create formal entrepreneurship programmes in the last year of high school to increase the possibility of starting a formal work activity upon leaving school.
- 4. Policy objective 4: Develop a broad, holistic strategy for formalisation
 - Embark on a broad-based discussion on a holistic strategy for formalisation in order to integrate formalisation efforts across different policy areas and levels of government.

Notes

¹ All these figures are for the third quarter (Q3) of 2014, 2019 and 2020 based on Central Bank (BCRD, 2022_[2]) data. This report uses these quarters due to the difficulties the Central Bank faced in collecting data during the strict confinement due to the COVID-19 pandemic. In the first quarter of 2020, there was regular data collection. As of the second quarter of 2020, the data was collected through telephone calls and the sample was no longer rotated (i.e. panel data). In other words, the households that responded in the first quarter of 2020 were the same until the fourth quarter of 2020. Traditionally, the household survey rotates 20% of the sample between quarters. From the third quarter of 2020, the surveys began to be mixed through both face-to-face and telephone interviews. The Central Bank conducted an assessment to check if the mixed modality of data collection was biasing the data, and no bias was found in the statistics. As of the first quarter of 2021, the surveys are once again wholly face-to-face, and the sample begins to rotate again.

² Before 2016, the Central Banked calculated the informal sector statistics using the ENFT. The definition of the informal sector was different, since it accounted for all salaried employees who work in establishments with less than five employees, in addition to self-employed workers and employers who belong to the following occupational groups: farmers and ranchers, operators and drivers, artisans and operators, merchants and vendors and unskilled workers. In addition, domestic service and unpaid workers were included (BCDR, 2022_[89]). After this, the Central Bank started using the ENCFT.

³ Data are from Q4 2020.

⁴ These coverage figures were calculated using the Labour Force Survey (BCRD, 2022_[2]) and may differ from coverage data from administrative records.

⁵ This index benchmarks the evolution of gender-based gaps among four key dimensions: economic participation and opportunity, educational attainment, health and survival, and Political Empowerment.

⁶ Panel B in Figure 3.10 identifies the informality rates among dependent workers over the whole of the income distribution scale and makes corresponding estimates of the theoretical costs of becoming formally employed. It shows the rates of informality (blue bars) by income decile, drawing on data from household income surveys. The analysis identifies the approximate location of the minimum wage in each country with a white bar. The figure also shows estimates of the theoretical costs of becoming formal (blue line) expressed as the proportion of their wages that workers would pay in social security contributions in order to become or remain formal. This measure can be taken as a lower bound, given that formalisation generally entails other monetary and non-monetary costs stemming from various pieces of legislation. For workers earning the minimum wage or more, this cost is defined as the amount of employee SSCs payable on their wages. However, many workers are excluded from social security programmes because their earnings are below the minimum wage, which commonly acts as a lower income threshold for these schemes. For these workers, the cost of becoming formal is the amount of SSCs payable at the minimum wage or at the lower earnings threshold, if that is different. As a result, the larger the shortfall between a worker's income and the established minimum threshold/wage, the higher the theoretical cost of formalisation that this individual faces. These costs are expressed as a percentage of the workers' actual wages in Panel B of Figure 1.9 (OECD/IDB/CIAT, 2016[36]).

⁷ Data from the World Bank Enterprise Survey only for the sectors of manufacturing (all sub-sectors); construction; motor vehicle sales and repair; wholesale; retail; hotels and restaurants; storage, transportation, and communications; and IT. It only includes formal (registered) firms with ≥5 employees and a minimum of 1% private ownership. Small enterprises have 5-19 employees, medium-sized enterprises have 20-99 employees, and large enterprises have ≥100 employees.

⁸ There are 16 sectoral categories for the minimum wage: non-sectorised private sector; Footwear sector, handbags, packages, straps, belts and other; Sugar industry; Construction sector and related (Man-Hour); Rod holders; Painters; Electricians; Plumbers; Carpenters; Heavy machines in the construction sector; Heavy machines in the agricultural sector; Non-profit institutions; Industrial Free Zones; Free Zones in depressed areas; Hotel sector; and NGOs providing health services.

⁹ Including 17 countries: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru and Uruguay.

¹⁰ The other three categories under this regulation include small enterprises (from 11 to 50 employees and DOP 8 to 54 million), medium-sized enterprises (from 51 to 150 employees and 54 to DOP 202 million DOP), and large enterprises (more than 150 employees and above DOP 205 million).

¹¹ The 2013 National Employment Plan aimed at structuring the labour market policy making around the principles and axes of the National Development Strategy. First, it assigned central roles to the Ministry of Labour, the Ministry of Industry and Trade, and the Ministry of Planning, Economy and Development. Second, it maintained the tradition of the participation of the productive sectors, the main employers' associations or entrepreneurs. Although it does not clearly define whether its role is that of a negotiator, among equals, with the government or merely a consultative body. Third, it incorporated the National Employment Commission, with the functions of "approving the National Employment Policy" and "following up on the monitoring and execution of the plan".

¹² The Ministry of Labour has the Empléate Ya app and the official employment website. The Ministry of Youth has similar initiatives, such as Insértate and Banco de Empleo. However, the Dominican Republic currently lacks robust analyses of the aggregate demand for skills based on the data generated by these platforms.

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4 Financing for development in the Dominican Republic: Towards a more inclusive, resilient and sustainable model

> To finance a development model that is inclusive, sustainable and resilient the Dominican Republic needs to mobilise further public and private resources. On the public side, further tax revenues that reduce inequalities can be levied by rethinking the tax structure, rationalising tax exemptions, and fighting tax evasion. Similarly, there is space to improve the quality of public spending, to ensure its efficiency and increase its impact. Regarding the private sector, strengthening the role of the financial system is crucial to mobilise the necessary resources for development. Actions include further developing the banking system, strengthening the public debt market, and deepening the private debt market. The chapter first examines public finance, analysing revenue and expenditure and exploring potential areas for improvement. It then analyses the financial system and ways to improve private sector finance and further develop capital markets. Finally, the chapter presents the main conclusions and offers policy recommendations, arguing that advancing towards a more robust "financing for development" model will necessitate agreement on a comprehensive fiscal pact.

Introduction

The aftermath of the COVID-19 crisis and the complicated external context have highlighted pre-pandemic structural challenges in the Dominican Republic such as low mobilisation of resources for development. The country needs to mobilise more resources in order to finance an inclusive, sustainable and resilient development model, Nevertheless, the country is currently in the difficult position of shouldering the costs of managing the crisis, external shocks and financing the recovery, and, more broadly, puts the "Financing for Development" model under stress.

In this context, this chapter seeks to explore where the Dominican Republic stands in its capacity to build a "Financing for Development" model that is inclusive, sustainable and resilient. The chapter aims to examine and address the per-pandemic structural challenges that the Dominican Republic faced to mobilise the necessary public and private resources. To this end, Chapter 4 is organised into three main sections. The first examines public finance, analysing revenue and expenditure and exploring potential areas for improvement that could increase the country's fiscal capacity. The second section focuses on the financial system and on how to improve private sector finance, as well as on the potential for further developing capital markets. The final section of this chapter presents the main conclusions and offers a number of policy recommendations, arguing that advancing towards a more robust "financing for development" model will necessitate agreement on a new and comprehensive fiscal pact.

Public finance in the Dominican Republic

As in other countries in Latin America and the Caribbean (LAC), the COVID-19 pandemic pushed the Dominican Republic's government to take urgent action in response to the crisis. Various emergency programmes were put in place to support households, businesses and workers, including the Employee Solidarity Assistance Fund (Fondo de Asistencia Solidaria al Empleado; FASE), which covered up to 70% of salaries for employees whose contracts had been suspended due to COVID-19 pandemic lockdowns, and which also supported small and medium-sized enterprises (SMEs) that continued to operate with the same staff. Other programmes targeted more vulnerable populations with specific cash transfers, such as the Programa de Asistencia al Trabajador Independiente (Pa' Ti programme) for independent workers, or the Quédate en Casa (Stay at home) programme for households with at least one member who was particularly vulnerable to COVID-19 (Cejudo, Michel and de los Cobos, 2020[1]). These actions involved a high fiscal cost, and social spending rose by 57.3% in 2020 compared with 2019 (Ministerio de Hacienda, 2022(21). Between April and June 2020, the cost of these measures represented 1.1% of gross domestic product (GDP) (Ministerio de Hacienda, 2021[3]). As in the rest of the LAC region, tax reliefs were used in the Dominican Republic to mitigate the economic impacts of the crisis, mainly in the form of tax deferrals. These were applied to both direct (personal income tax) and indirect (goods and services) taxation and, in some cases, were applied to specific sectors, such as tourism (OECD et al., 2022_{[41}), where, for example, the deadline for filing and paying income tax (and the "simplified tax regime") was extended and those who owed additional taxes had the option of paying in four interest-free instalments. Overall, tax measures coupled with the economic slowdown decreased tax revenues in the Dominican Republic by around 7% (or 1% of GDP) in 2020, while the average fall in tax revenue in LAC in 2020 was 4% (Figure 4.1) (OECD et al., 2022[4])

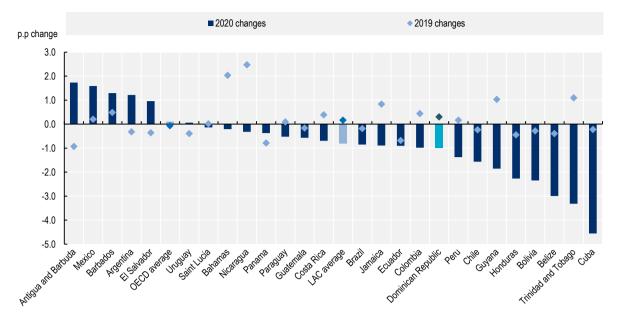


Figure 4.1. Evolution of tax receipts in LAC, year-on-year real variation in percentage, 2020

Note: The LAC average represents the unweighted average of 26 LAC countries included in this publication and excludes Venezuela due to data availability issues. The OECD average represents the unweighted average of the 38 OECD member countries. Chile, Colombia, Costa Rica and Mexico are also part of the OECD (38). Source: (OECD et al., 2022[4]).

StatLink ms https://stat.link/ifol80

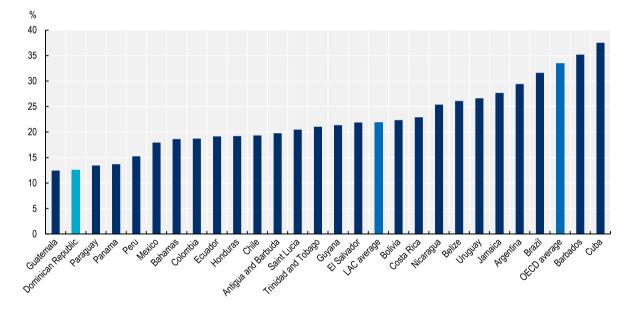
The COVID-19 pandemic hit at a time when fiscal space in the Dominican Republic was traditionally tight, mainly due to particularly low levels of tax revenues and generally higher expenditures. In this context, the short-term requirements for responding to the crisis, combined with the lower levels of tax collection associated with reduced economic activities, pushed fiscal deficit of the central government to 6.6% of GDP in 2020, compared with the 0.7% average during the years following the 2008 financial crisis (ECLAC, 2021_[5]; BCRD, 2022_[6]). Similarly, the medium-term costs of the post-COVID-19 recovery, and the reforms needed to overcome long-standing structural challenges, will demand stronger mobilisation of public finance.

Tax revenues can be strengthened through a combination of measures, including rethinking the tax structure, rationalising tax exemptions and fighting tax evasion

Increasing tax revenues is a key policy objective for the Dominican Republic, but achieving this goal presents numerous structural challenges and complex choices. A variety of policy options can lead to greater tax revenues; identifying these and finding the right balance of measures will be crucial for success and for maintaining the taxation system as a catalyst for equality and economic growth. This section analyses the structure of the taxation system in the Dominican Republic and identifies potential areas for policy action that should be at the centre of the debate for fiscal reform and a broader fiscal pact. In particular, it is argued that the main areas of action should revolve around the following: 1) rethinking the tax structure; 2) rationalising tax expenditures; and 3) fighting tax evasion and avoidance.

Tax revenues are low in the Dominican Republic compared with the LAC and OECD averages, and are insufficient to finance the post-COVID-19 recovery

There is space for increasing tax revenues in the Dominican Republic, which represented 12.6% of GDP in 2020. This is the second-lowest tax-to-GDP ratio in the LAC, only just above that of Guatemala (12.4%) and just below those of Paraguay (13.4%) and Panama (13.7%) (OECD et al., 2022_[4]). These figures are particularly low when compared with the tax-to-GDP ratios in countries such as Brazil (31.6%) and Uruguay (26.6%), and to some Central America and Caribbean countries such as Trinidad and Tobago (21.1%) and Costa Rica (22.9%). Tax revenues in the Dominican Republic are low in comparison with the LAC average of 21.9% and the OECD average of 33.6% (Figure 4.2). Furthermore, tax revenues in the Dominican Republic have remained relatively constant during the last decade: they had increased before the pandemic in 2019 by slightly more than one percentage point since 2010, when the tax-to-GDP ratio stood at 12.4% (OECD et al., 2022_[4]). This is similar to the LAC tax-to-GDP ratio average over the same period. Moreover, in the Dominican Republic tax revenues as a percentage of GDP remain at a lower level than before the 2008 international financial crisis.





Source: (OECD et al., 2022[4]; OECD, 2022[7]).

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The Dominican Republic's tax structure shows some imbalances that suggest potential areas for readjustment in order to increase tax revenues, expand the tax base and build a more efficient and equitable tax system

Indirect taxes are the main source of tax revenues, although their efficiency could be improved in order to increase tax collection

The tax structure in the Dominican Republic is particularly reliant on the indirect taxes that are levied on goods and services (Figure 4.3). They account for almost two-thirds (60.7%) of total tax revenues, representing 7.6% of GDP in 2020. This is well above the average share that indirect taxes contribute towards total tax revenues in LAC (48.4% of total tax revenues) and among OECD member countries

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(32.1% of total tax revenues), although revenues from indirect taxes account for a higher proportion of GDP both in LAC (10.5% of GDP) and in OECD member countries (10.6% of GDP) than they do in the Dominican Republic.

The main source of indirect taxes is value added tax (VAT), known in the Dominican Republic as the tax on the transfer of industrialised goods and services (Impuesto sobre Transferencia de Bienes Industrializados y Servicios; ITBIS), which accounts for more than one-half of total revenue from indirect taxes. The VAT rate in the Dominican Republic is set at 18%, the fifth-highest in the LAC region along with Peru (also 18%) and behind Argentina, Chile, Colombia and Uruguay. In the Dominican Republic VAT accounts for 34.7% of total tax revenues, above the LAC average of 31.0% (Figure 4.3, Panel A). However, tax revenues from VAT represent 4.4% of GDP in the Dominican Republic, below the LAC average of 5.7% (Figure 4.3, Panel B). The proportion of tax revenues collected from the ITBIS has increased steeply since the 1990s, when it represented 15.1% of total tax revenues, and from 2000, when it represented 20.5%. From 2010 onwards, this has remained stable at around 34% of total tax revenues (OECD et al., 2022[4]).

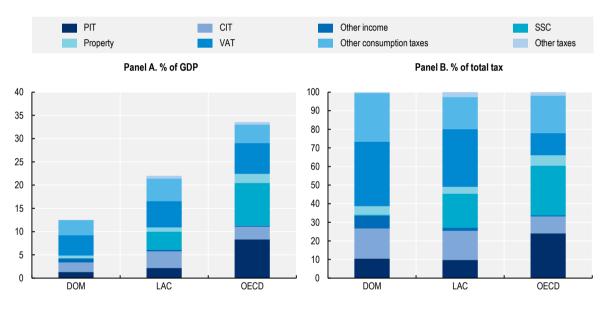


Figure 4.3. Tax structure in the Dominican Republic, LAC and OECD member countries, 2020

VAT is generally perceived as a tax with large collection potential; it can therefore be an important source of revenue to finance the COVID-19 pandemic recovery as well as more general longer-term development (OECD, 2021_[8]). Particularly in contexts of high informality, where the tax base is reduced, VAT could help increase revenues from the informal sector as it taxes some of the goods and services that informal businesses purchase. It can also act as an incentive for informal companies that do business with formal companies, and that wish to request VAT recovery, to formalise (OECD, 2017_[9]).

Significant scope exists to strengthen VAT functioning and design in order to improve its revenue-raising capacity in the Dominican Republic. In fact, despite the high share of total tax revenues collected through the ITBIS, there are a number of inefficiencies in the collection of this tax. In fact, the VAT Revenue Ratio (VRR) in the Dominican Republic is low relative to that in other LAC countries. The VRR measures the difference between the VAT revenue that has actually been collected and what theoretically could have been raised if the VAT were applied at the standard rate to the entire potential tax base, as in a "complete"

Source: (OECD et al., 2022[4]).and (OECD, 2022[7])

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VAT regime under full compliance. The VRR in the Dominican Republic is one of the lowest in LAC, at 0.35, well below the LAC and OECD averages of 0.56, and the average in the Caribbean sub-region of 0.71 (OECD et al., 2021_[10]) (Figure 4.4).

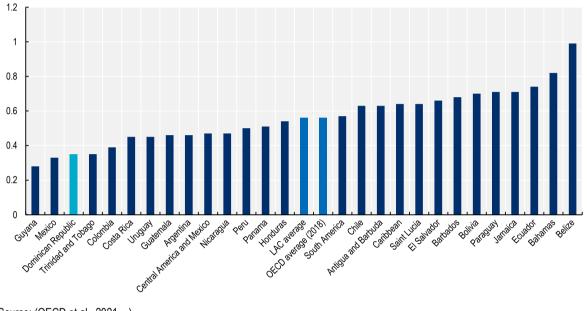


Figure 4.4. VAT Revenue Ratio (VRR) in LAC countries and OECD

Low efficiency in VAT collection is caused by a variety of factors, including tax evasion, tax exemptions and weaknesses in tax administrations (Schlotterbeck, 2017_[11]). VAT evasion is one critical factor that accounts for low VRR levels in the Dominican Republic, reaching a level of 43.8% in 2017 (Ministerio de Hacienda, 2018_[12]). VAT evasion in the Dominican Republic is one of the highest in the LAC region, well above the LAC average of 30.1% (see the section on Fighting Tax Evasion). Similarly, ITBIS exemptions are used, with numerous specific goods and services being exempted from the ITBIS; this could partly explain the low VAT efficiency (see section on Rationalising Tax Expenditures). Exempted goods include educational materials, medicines, health services, financial services, utilities, non-conventional or renewable energy equipment, and the supply of inland transportation services of individuals and cargo. Exempted services include education, cultural services and electricity (KPMG, 2022_[13]).

In order to improve ITBIS efficiency and increase tax revenues from this source, one option is to rethink existing exemptions and reduced rates. This option should be explored with caution, as many of those exemptions are intended to favour access to basic goods and services for the general population. However, these exemptions can be regressive in certain cases, as some of these goods and services are consumed in larger proportions by wealthier socio-economic groups. Similarly, in contexts of high informality, ITBIS exemptions may only have limited success in supporting low-income families, as these citizens buy some of their basic goods from the informal sector, and hence do not pay the ITBIS. This implies that keeping a uniform ITBIS rate for all formal consumption could actually be progressive, as it will mostly be paid by those who can afford it (Bachas, Gadenne and Jensen, 2020[14]). If a reduction of ITBIS exemptions is complemented by targeting social spending towards lower-income groups, it could result in higher ITBIS revenues (and overall fiscal revenues) without affecting people who are really in need.

Source: (OECD et al., 2021[10]).

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Improving compliance is another relevant option for increasing ITBIS revenue, particularly through the use of digital tools. Two important areas of action will be expanding the use of electronic invoicing (e-CF) (introduced in the Dominican Republic in early 2019) and advancing towards making it compulsory, and strengthening the implementation of the destination principle (O'Reilly, 2018[15]). One increasingly relevant challenge is linked to the growing importance of e-commerce in the modern economy. This is particularly true in LAC, which is one of the fastest growing e-commerce regions in the world, particularly as a result of the COVID-19 pandemic. This expansion poses significant challenges to VAT collection, as the growth in online sales of services and digital products is not subject to effective provisions under traditional VAT rules. Similarly, there is an increased volume of imported low-value goods from online sales on which VAT is not collected effectively via traditional customs procedures (OECD/WBG/CIAT/IDB, 2021[16]).

VAT must adapt and modernise in line with an ever-evolving digital economy (Pineda and Gonzalez de Frutos, 2021_[17]). Achieving correct and fair taxation of the digital economy could provide additional revenues, but faces key challenges in terms of VAT. The OECD's *VAT Digital Toolkit for Latin America and the Caribbean* is useful in this context. By its very nature, the digital economy is constantly evolving and innovating with new forms of doing business and buying products and services, meaning that current legislation can easily fall behind. Similarly, and in particular in the case of VAT, providers are not always located in the same country where the product or service is consumed (and where the VAT is collected), complicating the taxation of the sale. Therefore, innovative solutions are needed for better collection of VAT, as outlined in the *OECD/G20 Base Erosion and Profit Shifting Project Explanatory Statement* (OECD, 2015_[18]). There are two key options: first, reduce or eliminate VAT exemptions on imports of low-value goods. These exemptions were designed to avoid an overload of customs but are no longer a problem thanks to the development of technology. Second, apply the OECD's vendor model, which consists of the supplier ("vendor") of these goods, or the digital platform or another intermediary that intervenes in the supply, being liable for collecting the VAT and remitting it to the jurisdiction of taxation (OECD/WBG/CIAT/IDB, 2021_[16]).

Alternative and innovative policies should also be kept in mind as possible means of raising further revenues from VAT. For example, personalised VAT is a policy that has been used by other LAC countries to compensate low-income taxpayers and reduce the regressive nature of VAT. As a means of reducing these inefficiencies and encouraging formalisation, countries such as Argentina, Bolivia, Colombia, Ecuador and Uruguay have introduced personalised VAT, which consists of refunding VAT paid to targeted population groups. This refund can be total or partial and can be structured as a refund or as compensation (Barreix et al., $2022_{[19]}$). Simulations suggest that the incidence of VAT would be proportional to the level of income. In the case of the Dominican Republic, the use of personalised VAT in 2018 would have resulted in the lowest income decile contributing 0.05% of GDP instead of 0.10%, while the highest income decile would have contributed 0.97% of GDP instead of 0.64%. In terms of successful implementation of personalised VAT, the Dominican Republic's access to digital technologies and information, and expanded use of the e-CF, is essential (Barreix et al., $2022_{[19]}$).

Excise taxes represent the second-largest source of indirect taxes in the Dominican Republic, although their importance has diminished in the last decades. Excise taxes are commonly used to raise revenues and to discourage the consumption of specific products and services. The Dominican Republic levies two types of excise taxes: the Impuesto Selectivo al Consumo (which is a selective consumption tax,ISC), and a selective tax that depends on the value of the product. These taxes levy revenues on specific products or services, such as tobacco products, hydrocarbons, alcohol, telecommunication services and wire transfers. In 2020, taxes on specific goods and services accounted for 23.9% of total taxes (or 3.0% of GDP), higher than the LAC average of 15.9% in terms of total taxes, but below it in terms of share of GDP revenue (3.5% of GDP). The role of taxes on specific goods and services has considerably diminished in the Dominican Republic: in 1990 they accounted for more than one-half of total revenue. More than 50% of these revenues come from taxes on fuels and petroleum derivatives, while about 35% is derived from alcohol and tobacco (OECD et al., 2022[4]). In the case of fuel, there is space to increase revenues, as the

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fuel excise tax rates in the Dominican Republic are below the OECD average; for example, its tax rate on gasoline is USD 1.45 (United States dollars) per gallon, considerably below the OECD average of USD 2.24 per gallon (World Bank, 2021_[20]).

Revenues from personal income taxes are limited due to a narrow tax base and the impact of widespread informality

Taxes on income and profits accounted for almost one-third (33.7%) of total tax revenues in 2020 in the Dominican Republic, higher than the LAC average (26.9%) and slightly lower than the OECD average (33.1%, registered in 2020) (OECD et al., $2022_{[4]}$). Of these revenues from taxes on income and profits in the Dominican Republic, 30.5% corresponded to personal income tax (PIT) and 47.1% to corporate income tax (CIT), these being the two main sources of direct taxation.

Revenues from PIT are relatively low by international standards, suggesting a potential area for improving tax collection. Since 2000, PIT in the Dominican Republic has remained below 11% of total tax revenues, increasing slightly from 8.5% in 2000 to 10.5% in 2020. This is less than half the average share of tax revenues from PIT in OECD member countries (24.1%) and is similar to the average share of PIT revenues in LAC (9.7%) (Figure 4.3, Panel A). PIT revenues represented 1.3% of GDP in the Dominican Republic in 2020, well below the averages in LAC (2.2%) and in OECD member countries (8.3%) (OECD et al., 2022_[4])(Figure 4.3, Panel B).

Several factors limit PIT revenues in the Dominican Republic. These include a small tax base, a high concentration of income earners at low income levels, and high levels of informality and tax evasion.

Expanding the PIT tax base represents a challenge for various reasons. While lowering the minimum taxable personal income threshold could be a possibility, the viability and desirability of this option should be carefully analysed in a country where 57% of the workforce is informally employed (see Chapter 3), most of which have relatively low levels of income. In this respect, making sure that specific groups pay taxes, for instance those who are in informal but still earn relatively high levels of income will be vital. In fact, the estimated rate of PIT non-compliance was 57.1% in 2017, which represents around 1.7% of GDP (Ministerio de Hacienda, 2018_[12]). Utilising new technologies (e.g. large-scale automated data) to cross-check PIT with information from online vendors could help reduce tax evasion (World Bank, 2021_[20]).

Rationalising tax exemptions, deductions or credits could also increase the tax base and PIT revenues. The existence of generous exemptions, deductions or tax credits also limits the tax base. These include exemptions on travel allowances, Christmas bonuses, deductions on education, contributions to social security, and for those who contribute to the Solidarity Fund for Cultural Patronage (World Bank, 2021_[20]).

Innovative PIT policies could be a useful tool for increasing formalisation and expanding the tax base, and hence tax revenues. For instance, negative income tax (NIT) or the Earned Income Tax Credit (EITC) are good examples of innovative tools that could generate fewer distortions or disincentives to formalisation than traditional tools. For individuals who are unemployed or informally employed, NIT guarantees revenue from a traditional cash transfer. The main advantage to this is that someone who is employed in the formal sector will continue to receive government aid, plus their salary. The benefits only fade gradually as wages begin to increase and the worker stops receiving support and begins to pay income tax. This type of programme guarantees that wages are higher in the formal sector, and is much more affordable than universal basic income, as it is targeted at a specific population and not at all individuals (Pessino et al., 2021_[21]).

CIT is a main source of tax revenue, but this can impose a high burden on some domestic firms outside Free Trade Zones

CIT is one of the main sources of tax revenues collected in the Dominican Republic. Tax revenues from CIT account for 15.6% of total tax (2.1% of GDP), which makes it the second-largest source of tax revenues

after the ITBIS (Figure 4.3). CIT has been on the rise since 2010, when it represented 8.8% of total taxes (1.1% of GDP), but CIT revenues as a percentage of GDP are substantially lower in the Dominican Republic than the averages for LAC (3.6% of GDP) or OECD average (2.8% of GDP) (OECD et al., 2022_[4]). The increase in CIT revenues happened despite the decrease in the statutory tax rate from 29% in 2011 to 27% in 2015, where it has since remained. This tax rate is near the 28% average in the LAC region but above the 22% average among OECD countries. The increase in CIT revenues despite falling rates can be partly explained by recent reforms that aimed to reduce distortions and widen the tax base (World Bank, 2021_[20]).

The corporate tax rate in the Dominican Republic is near the LAC average, yet CIT efficiency levels are low. CIT efficiency refers to the actual CIT revenues that are collected relative to the potential CIT that could be raised, and is calculated as a ratio of actual CIT revenues as a share of GDP by the weighted average of the statutory tax rate. Of the LAC countries where the efficiency rate has been calculated, the Dominican Republic lags behind Brazil, Chile, Colombia, Costa Rica, Mexico, Panama, Paraguay, Peru and Uruguay, and only outperforms Ecuador and Guatemala. Increasing the revenue efficiency of the Dominican Republic's CIT to the LAC average would boost revenue collection by an estimated 0.9% of GDP (World Bank, 2021_[20]).

Low CIT revenues and efficiency can be explained by the proliferation of tax incentives and high tax evasion. The Dominican Republic has traditionally used tax incentives to attract investment, such as via Free Trade Zones (FTZs). Tax incentives are targeted tax provisions that provide favourable deviations from the standard tax treatment and can take many different forms and designs (Celani, Dressler and Hanappi, 2022_[22]) (Box 4.1). Sectors that have benefited from tax incentives include mining, forestry, energy, tourism and border development areas.

Generous tax treatment measures can reduce the actual tax liabilities faced by companies and can be usefully assessed through a forward-looking effective tax rate (ETR) (Hanappi, 2018_[23]). The ETR differs from the statutory tax rate because the rules of fiscal depreciation, a number of related provisions (e.g. allowances for corporate equity, half-year conventions and inventory valuation methods) and tax incentives might reduce tax liabilities (OECD, 2020_[24]).¹ The Dominican Republic's effective average tax rate (EATR), excluding incentives, is 2.2 percentage points lower than the statutory rate (Figure 4.5). This is similar to other LAC economies, such as Guatemala (1.9 percentage points lower than the statutory rate), Colombia (1.9 percentage points lower), Nicaragua (2.8 percentage points lower) and Brazil (6.7 percentage points lower), indicating generous corporate tax bases (Botey et al., forthcoming_[25]). Providing generous tax incentives can result in much lower ETRs (Box 4.2). Moreover, corporate tax evasion in the Dominican Republic is as high as 61.9%, or a tax gap of 4.2% of GDP (see Section on Fighting Tax Evasion) (ECLAC, 2020_[26]; Ministerio de Hacienda, 2018_[12]).

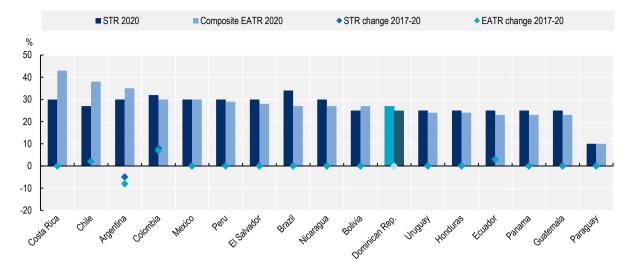


Figure 4.5. EATRs in LAC, excluding incentives

Note: STR refers to standard statutory rate. EATR refers to effective average tax rate. Source: Botey et al. (forthcoming_[25]).

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Box 4.1. Building an Investment Tax Incentives Database

Tax incentives for investment are frequently used worldwide, including in LAC countries. Tax incentives are targeted tax provisions that provide favourable deviations from the standard tax treatment in a country. They can potentially promote investment and positively affect output, employment, and productivity, or other objectives related to the United Nations Sustainable Development Goals (SDGs). If poorly designed, they may be of limited effectiveness and could result in windfall gains for projects that would have taken place regardless of the incentives. Tax incentives can also reduce revenue-raising capacity, create economic distortions, increase administrative and compliance costs, and potentially increase tax competition. Striking the right balance between an efficient and attractive tax regime for domestic and foreign investment and securing the necessary revenues for public spending and development is a particular concern in developing countries.

The widespread use of tax incentives globally, along with concerns about their net impact, is an important policy concern for national governments and the international policy community. Recent OECD research provides insights into tax incentive policies and increases the policy relevance of tax incentive analysis, with the objective of helping policy makers make smarter use of tax incentives and reform inefficient ones.

The OECD Investment Tax Incentives Database (ITID) systematically compiles quantitative and qualitative information on the design and targeting of CIT incentives across countries using a consistent data collection methodology. For each tax incentive, the ITID includes information along three dimensions (Figure 4.6): instrument-specific design features, eligibility conditions, and legal basis. As of July 2021, the database covers 36 developing countries in Eurasia, the Middle East, North Africa, Southeast Asia and sub-Saharan Africa. Future additions to the ITID could include LAC countries.

Figure 4.6. Key dimensions of the OECD ITID **DESIGN FEATURES ELIGIBILITY CONDITIONS LEGAL BASIS** Which investors and How is the tax How does the tax incentive projects qualify to receive incentive governed? reduce taxation? the tax incentive? E.g. tax incentive instrument; E.g. tax incentive instrument; E.g. legal provision (if temporary tax exemption) (if temporary tax exemption) introducing the tax incentive; length in years; reduced length in years; reduced granting authority. CIT rate; sunset clause. CIT rate; sunset clause.

(Celani, Dressler and Wermelinger, 2022_[27])present the methodology and key classifications underlying the ITID and provide the first descriptive statistics based on information from the 36 included countries. Tax incentive designs are multidimensional, complex, and often specific to a certain sector, region or investor within a country. Adjusting design features of incentives in specific contexts can improve tax incentive policy making by, for example, improving effectiveness or limiting forgone revenue. However, this also reduces transparency and can have unintended effects. ETR analysis can help make complex features of tax incentives comparable (Box 4.2) and is an additional step towards developing policy guidance based on detailed information from the ITID.

Source: Elaboration based on (Celani, Dressler and Wermelinger, 2022[27]).

Box 4.2. Assessing tax incentives for investing in LAC using ETRs

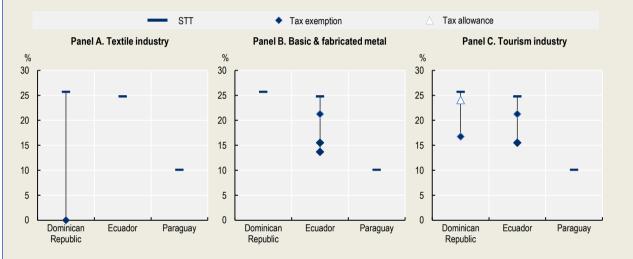
As in most countries around the world, governments in LAC countries frequently use tax incentives to reduce the tax costs of investment in specific activities, sectors and locations. Comparison of preferential tax treatments is not straightforward, as tax incentive designs and targeting strategies are complex and multidimensional. Tax incentive analysis should account for such complexities and evaluate them jointly with standard tax system features, as these provide the starting point with respect to which incentives provide relief, and can vary across countries. ETR-based analysis can capture the combined effects of the standard tax system and tax incentive designs. It allows comparison between the effective tax costs associated with a given investment across locations, sectors and activities. The OECD is currently conducting new research to extend the ETR methodology for estimating ETRs under tax incentives in order to evaluate the incentives' effect on providing tax relief and to develop recommendations for policy reform (Celani, Dressler and Hanappi, 2022_[22]).

This box illustrates how the ETR framework can be useful in analysing investment tax incentives. It presents ETRs for a standardised investment project in three industries (textiles, metals and tourism) in the Dominican Republic, Ecuador and Paraguay. Figure 4.7 presents ETRs under standard tax treatment, i.e. excluding tax incentives (denoted by the horizontal black marker) and accounting for industry-specific tax incentives, if available. The blue diamonds represent tax exemptions and the white triangles represent tax allowances. Multiple markers in a specific country and industry indicate that various incentives apply,

depending on additional eligibility conditions. For example, investment in tourism in Ecuador (Panel C) benefits from a ten-year tax exemption when located in an Economic Special Development Zone and a five-year exemption otherwise.

Investment tax incentives lower the tax costs of investment to various degrees across the three industries and countries. While the Dominican Republic and Ecuador start from a 25% standard ETR, they offer tax incentives that substantially lower effective taxation in some industries. For example, ETRs can be as low as 0% in the Dominican Republic's textile industry and up to 45% lower than standard taxation in Ecuador's metal industry (13.7% compared with 24.8%). While Paraguay does not use CIT incentives, it applies a relatively low standard CIT rate, reaching the lowest ETR in the three countries' metal and tourism industries.

Figure 4.7. Investment tax incentives lower ETRs across industries



EATR under standard tax treatment (STT) and investment tax incentives in the corresponding

Note: This figure considers investment tax incentives and STT on 1 January 2020. EATRs are calculated for a standardised investment in a single non-residential building asset. STT considers country-specific standard CIT rates, asset-specific capital allowance rates and cost recovery method. Temporarily or permanently tax-exempt income does not give rise to standard capital allowances. Source: Authors' elaboration on (Celani, Dressler and Hanappi, 2022_[22]).

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As a member of the OECD/Group of Twenty (G20) Inclusive Framework on Base Erosion and Profit Shifting (BEPS), the Dominican Republic has agreed on the two-pillar solution to address the challenges of digitalisation and globalisation. This two-pillar solution, which has been agreed by 135 countries and jurisdictions, aims to ensure that multinational enterprises (MNEs) pay their fair share in taxes. Pillar One aims to ensure a fairer distribution of profits and taxing rights among countries with respect to the largest MNEs, which are the winners of globalisation. Pillar Two aims to limit tax competition by putting a floor on CIT through the introduction of a global minimum corporate tax rate of 15% that countries can use to protect their tax bases. The new framework for international tax and the agreed Detailed Implementation Plan envisages implementation of the new rules by 2023 (OECD, 2021_[28]).

Property and wealth taxes have great potential for expansion while improving the efficiency and equality of the system

Property taxes in the Dominican Republic account for a small proportion of total taxes levied. These taxes are an appropriate tool for taxing the wealthiest families and increasing the redistributive power of the tax system in a country where large inequalities persist. Indeed, recurrent taxes on property have been found to be among the least detrimental to growth and can have a positive impact on equity, while being difficult to evade due to the immobility of the tax base (O'Reilly, 2018[15]).

Property taxes accounted for 0.7% of GDP (or 5.0% of total taxes) in the Dominican Republic in 2020. Their main components are recurrent taxes on immovable property or real estate (11% of total property and wealth taxes), recurrent taxes on net wealth (18%), inheritance and gift taxes (2%), taxes on financial and capital transactions (62%), and other or non-recurrent taxes (7%) (OECD et al., 2022_[4]). Immovable property and real estate taxes and inheritance and gift taxes are of special interest because of their potential to raise further revenues with low distortionary effects and high redistributive impact.

Real estate taxes and inheritance and gift taxes remain a potential revenue source for Dominican authorities. These account for 2% of total property taxes, well below the levels in OECD member countries, which average 7%. These taxes not only generate few changes in behaviour, as net wealth in later life is not sensitive to changes in inheritance tax, but can also be highly progressive and can generate greater equality of opportunity. Gifts, for example, are highly tax responsive and are not commonly used as a strategy for reducing inheritance taxes. A main advantage of these types of taxes is that they are relatively easy to levy, as the tax is levied at the time that the property or inheritance is transferred. Given the low levels of tax revenue from these types of taxes in the Dominican Republic, it could be worth strengthening their design and implementation and rationalising the exemptions. Although the political costs of this kind of reform can be high as it mostly affects the elites, in a context of growing inequalities and social unrest, it can have clear benefits, especially in a situation of low tax morale and low trust in institutions (OECD et al., 2019[29]; Pineda et al., 2021[30]; OECD, 2019[31]; Jiménez et al., 2021[32]).

Taxes on immovable property accounted for 0.06% of GDP in 2020 (11% of total property and wealth taxes) in the Dominican Republic. These taxes are low when compared with the LAC average of 0.4% of GDP, or with the average in OECD member countries of a little more than 1% of GDP. These figures suggest that there is still room for further improvements concerning property tax in the Dominican Republic (OECD et al., 2022^[4]).

A number of factors undermine tax revenue from immovable property in the Dominican Republic. There is a low level of property registration due to high levels of informality, which erodes the tax base. The tax base is also eroded by high threshold exemptions properties below (all DOP 8 138 353.26 (Dominican pesos) are exempt, almost the average price of a two- or three-bedroom house in Santo Domingo). Similarly, only urban properties are required to pay property tax, and foreign property investments in selected tourist zones are also exempt. The lack of a unified and easy-to-access property registry results in a system with high transaction costs and creates uncertainty among the business sector, hampering investments. Two systems coexist simultaneously: the Title Registry (Registro de Títulos), also known as Sistema Torrens Dominicano, and the Civil Registry and Mortgage Conservatorship (Registro Civil y Conservaduría de Hipotecas), also known as Sistema Ministerial. The Title Registry covers only 13% of total properties in the Dominican Republic, whereas the Mortgage Registry has better coverage but provides weaker legal protection. As only one out of every four properties is registered with the Directorate General of Internal Taxes (Dirección General de Impuestos Internos), a very low proportion of properties are taxed and property values are outdated.

Correct and up-to-date information alongside a capable tax administration are essential to unleashing the potential of immovable property taxes. The tax base for the immovable property tax is the appraised value that the local authorities calculate, but often the information that authorities have is outdated and thus differs from the market value. Therefore, reducing the gap between the appraised value and the market

value is a key priority and an exercise in adjustment that needs to be regularly performed. This must be accompanied by an up-to-date land and property registration in central cadastres that makes real efforts to formalise informal settlements. Digital maps, aerial photographs or geographic information systems could also be useful tools. Colombia is a good example of a country where the tax base is determined by decentralised cadastral offices and is based on self-declaration in some cities. Any structural changes to the tax base must be accompanied by strengthening local tax authorities, a stronger co-ordination with the national tax authority and the property registry, and rationalisation of tax exemptions (Ehtisham, Brosio, and Jiménez, 2019_[33]; OECD et al., 2022_[4]; World Bank, 2021_[20]).

The efficiency of taxation on specific sectors (like energy) can be improved, and new taxes can be explored in areas like the digital economy or the green transition

In the Dominican Republic initiatives have already slowly started to create a framework for environmental taxes. For instance, at the end of 2012 the Dominican Republic introduced a tax concerning either new or used vehicles, which is determined based on carbon dioxide (CO₂) concentration per kilometre. In addition to the existing rate of 17% for registration of the first licence plate, tax is calculated based on the declared value of the vehicle in Customs and on the CO₂ emissions in grammes per kilometre, with rates of up to 3%. Other current initiatives include medium-term projects, such as Bono Verde to finance solid waste treatment or the 0.2% Green Tax on the import and production of goods with a high proportion of solid waste such as paper, wood, tires and batteries (Ministerio de Hacienda, 2018_[12]).

The potential of environmental taxes (such as carbon taxes) needs to be balanced with measures to protect more vulnerable groups. Among the different tools available, carbon taxes are a simple and cost-effective way to limit climate change, increase tax revenues and limit health damage from local pollution (OECD, 2019_[34]; OECD, 2021_[35]). Other taxes (such as creating a tax for vehicles that are more than ten years old in order to protect the environment and biodiversity from pollution) offer a new opportunity to raise tax revenues and promote green growth. Moreover, a green tax, or Impuesto Verde, is currently being analysed as a selective tax on the consumption of final goods and intermediate goods that generate solid waste. A rate of 0.2% would be applied to the product for both imported and local goods in order to create a "green bonus". The effects of climate change and green policies such as environmental taxes will further expose the most vulnerable, highlighting the need for compensation schemes. These schemes could include cash transfers, in-kind transfers and support for retraining.

The digitalisation of the economy has led to important challenges in business models and in the valuecreation processes of companies. One proposal currently under discussion is to extend the 18% VAT (ITBIS), or the 10% Selective Consumption Tax, to digital platforms such as Netflix, Spotify, Uber, Cabify and Airbnb, as well as online gaming and data storage platforms. Estimates suggest that the potential of VAT revenue derived from taxes on digital services could have represented 0.4% of the Dominican Republic's GDP in 2018, 0.5% in 2019 and 0.6% in 2020 (Jiménez and Podestá, 2021_[36]). These efforts are essential not only for diversifying tax sources, but also for guaranteeing fair competition between these international platforms and local companies that provide these services.

Policy recommendation	Challenges and opportunities for implementation	
1.1 Rebalance the tax structure to increase the share of direct taxes and increase progressivity		
Launch a technical and political discussion on the feasibility of decreasing the minimum taxable personal income, so that high-income deciles are effectively included.	The country must calibrate and evaluate the sensitivity of the tax rates to reach an optimal balance between collection and equity.	
Explore the potential of personalised VAT (ITBIS) as a way of increasing the overall revenues from these taxes while compensating low-income taxpayers and thus reducing the regressive nature of VAT.	In the implementation of new and innovative taxes, the increases in administrative costs will increase and must be considered. This due to the creation/adaptation and training of the area in charge of identifying the target population and carrying out the compensations.	

Table 4.1. Strengthen tax revenues by restructuring the tax mix

1.2 Enhance the revenue potential of other taxes	
Strengthen property registries in order to boost revenues from property taxes by: 1) moving towards a unified and simplified property registry with an up-to-date land and property registration in central cadastres, and 2) reducing information asymmetries in immovable property; closing the gap between the appraised value and the market value is a key priority and an adjustment that needs to be regularly performed.	A fundamental action is to strengthen the cadastre department (update values) alongside a study to assess the cost-opportunities and calculate how much revenue is foregone. Similarly, Inter-institutional co-operation that allows obtaining the value of the properties in real time through an interconnection of databases will be essential. A proposal is to evaluate the strategy of having a graduated rate for IPI (real estate tax), which increases according to the aggregate value of the properties owned. This would entail a change in legislation, as well as internal measures to detect irregularities and potential evasion of this tax.
Explore the potential of new taxes adapted to the emerging economy, such as digital and green taxes, which serve the dual purpose of raising revenues while creating the incentives for a greener and more digitalised development model.	In the case of green taxes, it will require an amendment of the tax code law, national consensus backed by strong political will (see section and recommendations on fiscal pact).

Note: Based on the meeting held on 23 June 2022, to discuss the draft analysis and policy recommendations with officials from the Ministry of Finance, the Ministry of Economy, Planning and Development (MEPyD), the Central Bank, the National Statistics Office (ONE), the World Bank, the IDB and the European Union.

Source: Authors' elaboration.

Rationalising tax expenditures can create fiscal space and improve the overall impact of the tax system in terms of equity and efficiency

Tax expenditures represent the amount of forgone revenue as a result of special tax provisions that reduce or eliminate the tax liability for specific individuals, economic sectors or businesses. Tax expenditures can be defined as "resources not collected by the state, due to the existence of incentives or benefits that reduce the direct or indirect tax burden of specific taxpayers in relation to a benchmark tax system, in order to achieve certain economic or social policy objectives" (CIAT, 2011_[37]). These tax expenditures are typically used by governments to achieve different economic, social and equity objectives by providing specific conditions to incentivise behavioural change. Tax expenditures take the form of exclusions, exemptions, allowances, credits, reduced rates or tax deferrals.

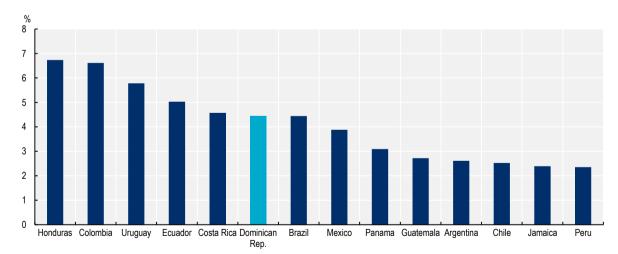


Figure 4.8. Tax expenditures in selected LAC countries as a percentage of GDP, 2021 or latest year available

Source: Authors' calculations based on national sources, (Redonda, von Haldenwang and Aliu, 2021[33]) and (Peláez Longinotti, 2019[39]).

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Tax expenditures represent a significant amount of financial resources in the Dominican Republic. In 2020, tax expenditures accounted for 4.6% of GDP, one of the highest levels in the LAC region (Figure 4.8). Most tax expenditures in the Dominican Republic are associated with indirect taxes. In 2021, as much as 70.1% of tax expenditures came from indirect taxes, with the majority of them related to the ITBIS (54.4% of total tax expenditures) and taxes on hydrocarbons (7.4%) (Figure 4.9). Tax expenditures from direct taxes represented the remaining 29.9% of total tax expenditures, and was split between income taxes (17.2% of total tax expenditures) and wealth tax (12.7% of total tax expenditures). Tax expenditures from the ITBIS represented 2.41% of GDP, and all tax expenditures from indirect taxes accounted for 3.12% of GDP, while those resulting from direct taxes represented 1.32% of GDP, divided between 0.76% of GDP from income taxes and 0.56% from wealth and property tax (Ministerio de Hacienda, 2020_[40]).

In a country where tax revenues as a share of GDP are low (and among the lowest in the LAC region), exploring the potential to rationalise these tax expenditures is critical. Indeed, the narrow tax base observed in the Dominican Republic is partly the result of widely implemented tax provisions, which are often not well designed or targeted. This can lead to regressive tax expenditures that provide greater benefits to those who need them less, or that are not conducive to job creation or economic growth. Likewise, the proliferation of tax expenditures increases the complexity of the tax system, creating greater opportunities for evasion and tax planning. In sum, tax expenditures can undermine tax revenue collection, increase inequalities, reduce efficiency and add complexity. A reform or the elimination of outdated, poorly targeted tax expenditures that do not achieve the associated policy objectives can be a source of greater tax revenue by broadening the tax base while supporting a more effective, equal and simple tax system.

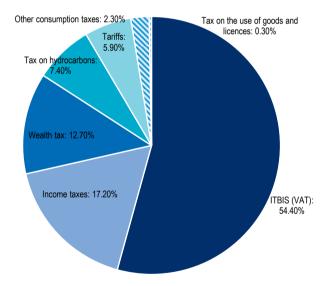


Figure 4.9. Tax expenditure breakdown, as a percentage of total tax expenditures, 2021

Source: Authors' elaboration based on (Ministerio de Hacienda, 2020[40]).

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There is room to evaluate the distributional and efficiency implications of tax expenditures in the Dominican Republic. In the case of the ITBIS, which is the main source of tax expenditures (Figure 4.9), around 88% of tax expenditures in 2013 benefitted higher-income groups (World Bank, 2019_[41]). There is scope to reconsider exemptions of non-essential goods and services; for instance, those related to tourism or certain cultural products. This could increase tax revenues from the ITBIS. Other exemptions could also be re-evaluated, as long as their potential elimination is accompanied by measures to support and

compensate the most vulnerable groups, such as direct cash transfers or targeted reductions of social security contributions.

A non-negligible share of tax expenditures is derived from income taxes (Figure 4.8). Regarding PIT, there is scope for reconsidering some of these exemptions, particularly because these taxes tend to be progressive in nature, meaning that tax provisions in this domain can limit their positive distributional impact (OECD/DIAN, 2021_[42]; Solidaridad, 2018_[43]). This is the case in the exemptions on expenditure in education, which have the rationale of incentivising investment in education but can end up benefitting people with higher levels of income, as evidence points to wealthier people making greater use of these advantages (OXFAM, 2020_[44]).

When examining tax expenditures from the perspective of productive sectors of the economy, FTZs, power generation, tourism and mining account for the largest share, altogether representing 23.8% of the total tax expenditure expected in 2021 (Ministerio de Hacienda, 2021_[3]). FTZs and special zones in border regions provide particularly strong privileges to the firms operating in these areas of the country, significantly undermining CIT revenues. In 2020, 692 firms were part of Free Trade Zones, contributing 3.2% of the GDP; these firms were mostly concentrated in services (23.4% of total firms), tobacco and derivatives (14.3%), textiles (12.6%) and agroindustrial products (7.8%) (CNZFE, 2021_[45]). FTZs account for 13.5% of total tax expenditures in the Dominican Republic, while tourism accounts for 3% and mining accounts for 1.8%. These exemptions represent a cost of around 1.8% of GDP and also include fuel for electricity generation, imports for production in FTZs, and some taxes on property. Within this share, FTZs account for 0.6% of GDP and exemptions within the tax on hydrocarbons for electricity generation represent 0.4% of GDP (Ministerio de Hacienda, 2021_[3]).

The advantages granted to firms in FTZs and other special tax regimes raise an important guestion about whether they generate more benefits than costs and, consequently, whether there is scope to restructure some of these tax regimes in order to increase the tax base and overall tax revenues. Several studies have been conducted in the Dominican Republic to evaluate the convenience of these regimes, with mixed results. The World Bank (2017) used administrative data on income tax declarations in order to assess the net benefits of totally exempting firms in FTZs in the Dominican Republic from paying CIT. The results showed that while these firms create a greater number of jobs compared with those that are not part of this special regime (FTZs create three times more employment than non-FTZ firms), that job creation comes at a very high cost: each of those jobs costs five times more in terms of revenue forgone. In addition to this, the Inter-American Center of Tax Administrations (CIAT) and the United Nations Department of Economic and Social Affairs (UN-DESA) (2018) conducted a cost-benefit analysis using administrative data on tax incentives for the tourism sector from 2002 to 2015. The conclusions of this study pointed out that the negative impact of the costs of these tax incentives on GDP is greater than the benefits. Investment in infrastructure rather than fiscal incentives would definitely be more profitable for both the tourism sector and economic growth. More recently, a cost-benefit analysis of the FTZs concluded that, at the aggregate level, this regime has an average net positive annual contribution of 2.7% of GDP, including the direct and indirect effects (Cardoza, Vidal and Taveras, 2019[46]). However, when the results are analysed at the company level, around 16% of all companies operating in FTZs create greater tax expenditures than benefits, suggesting that a more granular evaluation of these tax regimes can help identify specific firms or sub-sectors whose participation in them is not justified.

Periodical assessments are needed in order to continuously evaluate the distributional and efficiency implications of tax expenditures. The Dominican Republic's Ministry of Finance already publishes tax expenditure reports, providing a good overview of forgone revenues. However, the analysis could be further developed to more explicitly present how tax expenditures contribute to the policy objectives they were designed to achieve, including economic growth, job creation or supporting lower-income groups. If the social benefits of these tax expenditures are not greater than the social costs, or if there is a better mechanism through which to deliver those benefits, then the tax expenditures should be reconsidered. Similarly, in the case of special tax regimes, regular cost-benefit analyses should be conducted in order

to carefully evaluate their contribution to achieving policy objectives, given that these are a major source of forgone tax revenues that need well-grounded justification. In the Dominican Republic, information on the net benefits of these special tax regimes is scarce and should be expanded to all special regimes.

Avoiding arbitrariness in the criteria for admitting firms into FTZs and other special tax regimes by setting up clear qualification conditions can be an effective policy for limiting the forgone tax revenue as a result of the FTZ special tax regime. In this respect, the governance of special economic regimes must also be redesigned so as to reduce the excessive influence of private interests, which tend to shape the criteria in their favour in order to perpetuate their advantageous position. Once implemented, these systems generate significant benefits for the recipients, thus serving vested interests with a particular motivation to keep the incentives in place and to make their modification extremely difficult (Daude, Gutiérrez and Melguizo, 2014_[47]). Including all tax expenditures in the tax code, or giving the Ministry of Finance responsibility for granting all these incentives, could be effective methods of reducing arbitrariness.

Table 4.2. Rationalise tax exemptions to raise revenue capacity and improve the overall impact of the tax system in terms of equity, efficiency and simplicity

Policy recommendation	Challenges and opportunities for implementation
2.1 Rethink tax exemptions on main sources of revenue	
Rethink VAT (ITBIS) exemptions in order to improve efficiency and reduce its regressive impact – for example, exemptions applied to financial services or to the imports of low-value goods, or exemptions on certain non-essential goods and services such as those related to tourism or certain cultural products. Measures aimed at reducing VAT exemptions should be accompanied by clear measures to compensate lower- income groups, such as direct cash transfers or the targeted reductions of social security contributions.	It would be of key importance to periodically and accurately estimate the corresponding fiscal sacrifices and political/social costs of eliminating or implementing tax exemptions.
Evaluate PIT deductions, such as exemptions for educational expenditure, which can be regressive	It was suggested than rather tax exemptions, it would be better to apply a general tax and compensate possible affected sectors.
2.2 Evaluate the overall impact of special economic regimes forgone tax revenues – outweigh the benefits	and consider a gradual phasing out of those where the costs – in terms of
Rethink tax incentives associated with special economic regimes through periodical assessments in order to ensure that their distributional and efficiency implications are evaluated regularly.	Reconsidering the tax incentives should consider the legislative and political/social costs.
Include an analysis in tax expenditure reports of how these incentives contribute to key development objectives such as economic growth, job creation or supporting lower-income groups.	A cost-benefit methodology similar for tax expenditures is needed, and to be used and published periodically. In that sense, Law 253-12 must be enforced (the law establishes that the governmental institutions that administer laws that contemplate exemptions or exonerations must submit to the Ministry of Finance to undergo a cost-benefit analysis of the incentives).
Limit the potential arbitrariness associated with special economic regimes by, for example, strengthening the criteria for admitting companies; rethinking the governance of these regimes in order to balance the distribution of power; including all tax expenditures in the tax code; or giving the Ministry of Finance the main responsibility for granting all these incentives	The criteria and institutions that admit companies to these special regimes might need to be re-examined. Similarly, it is important to follow up on the exemption periods granted.

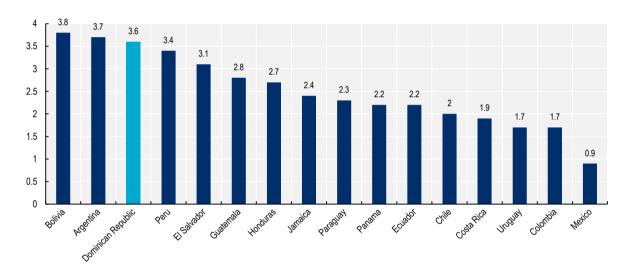
Note: Based on the meeting held on 23 June 2022, to discuss the draft analysis and policy recommendations with officials from the Ministry of Finance, the Ministry of Economy, Planning and Development (MEPyD), the Central Bank, the National Statistics Office (ONE), the World Bank, the IDB and the European Union.

Source: Authors' elaboration.

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Fighting tax non-compliance can be a source of greater tax revenues, while making the tax system more equitable and fair

Tax non-compliance in the Dominican Republic ranks among the highest in the LAC region, and addressing this could be an important source of greater tax collection. Estimated tax non-compliance in the Dominican Republic in 2017 was 61.8% (4.2% of GDP) for CIT and 57.07% (1.68% of GDP) for PIT (Ministerio de Hacienda, 2018_[12]). Concerning the ITBIS, tax non-compliance reached 43.5% in 2017, representing 3.6% of GDP (Figure 4.10). In general, tax non-compliance in the Dominican Republic ranks among the highest in the LAC region, although high heterogeneity is observed across countries. In 2017, tax non-compliance for VAT ranged from 14.8% in Uruguay to 45.3% in Panama, while levels in the European Union were as low as 11.5% (Gómez Sabaini and Morán, 2020_[48]). Similarly, in 2017 tax non-compliance for PIT ranges from 18.7% in Mexico to 69.9% in Guatemala, and for CIT it ranges from 19.9% in Mexico to 79.9% in Guatemala (Gómez Sabaini and Morán, 2020_[48]).





Source: Authors' elaboration based on (Gómez Sabaini and Morán, 2020[48]).

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Recent efforts and experiments to tackle tax non-compliance show that there is room for effective, shortterm measures. The Central Tax Administration made attempts to launch coercive policies and initiatives to fight against terrorism financing (which included tax evasion measures) in 2018. Law 155-17 against Money Laundering and Terrorism Financing was approved by the National Congress in 2017, enacted by the President in November 2017 and enforced by the Dominican Republic's Ministry of Finance from 2018. This law sought to curb tax evasion and other tax-related violations with severe criminal punishments, including prison and substantial monetary fines. Among measures to control tax evasion, the Dominican Republic's Ministry of Finance increased the number of audited taxpayers, resulting in the probability of being audited increasing from 8% in 2017 to 12% in 2018 (Holz et al., 2020_[49]). In order to increase tax morale, high-profile public servants have highlighted the success and accomplishments of this law, and the media widely reported on the imprisonment, preventive detention trials, house arrests, electronic monitoring devices and travel restrictions imposed on taxpayers accused of tax evasion (Holz et al., 2020_[49]). Information campaigns and efforts to raise awareness can have an impact on lowering tax non-compliance. A field experiment conducted in the Dominican Republic put in place a number of "nudges" and assessed their impact on tax compliance among both companies and individuals (Holz et al., $2020_{[49]}$). These nudges consisted of sending messages to more than 28 000 self-employed workers and more than 56 000 firms describing prison sentences and publicly announcing tax evaders, and these were found to increase tax compliance, mainly through the channel of decreasing the amount of tax exemptions claimed. The results of the experiment also showed that firm size is a determinant in the effectiveness of the nudges: larger firms were more responsive to the nudges than smaller firms were. Overall, the messages increased tax revenue by USD 193 million (around 0.23% of the Dominican Republic's GDP) in 2018, of which more than USD 100 million could be attributed solely to the experiment on nudges. This initiative underlines the extent to which a deeper understanding and consciousness of taxpayers could influence their behaviour.

The simplification of the tax system can be beneficial in fighting tax non-compliance, particularly among firms. The existence of multiple tax regimes for different sectors allows firms to undergo aggressive tax planning in order to avoid paying taxes by exploiting gaps and mismatches in the tax rules. These tax planning strategies are not only done locally, but also on an international scale, as businesses artificially shift profits to low- or no-tax locations where there is little or no economic activity, or they erode tax bases through deductible payments such as interests or royalties. This international challenge is addressed by the OECD/G20 Inclusive Framework on BEPS. This framework includes 135 countries and jurisdictions - including the Dominican Republic, which has been a member since 2018 - and outlines 15 domestic and international actions that governments must take in order to tackle tax avoidance. Since its enrolment, the Dominican Republic has participated in many of the associated agreements and actions (such as those related to addressing the challenges arising from the digitalisation of the economy, strengthening the transfer pricing legislation to align with OECD standards, and setting requirements for of tax and financial information by MNEs), but it still has to address the existence of possible harmful tax regimes in the country, which are currently being revised or amended. The Dominican Republic has made progress on the implementation of the transparency standard from the Global Forum on Transparency and Exchange of Information for Tax Purposes, and is considered largely compliant with this standard.

Policy recommendation	Challenges and opportunities for implementation	
3.1. Use digital tools to fight evasion and to leverage existing international agreements		
Launch information campaigns, increase efforts to raise awareness, and use nudges, all of which can have an impact on lowering tax non-compliance.	The country must encourage a tax paying culture through voluntary contributions. To achieve it, taxpayer education (both taxpayers and internal staff), alongside educational campaigns will be essential.	
Use new technologies to cross-check information (for example, large-scale automated data and cross-checking of PIT against information from online vendors), as this could help reduce tax evasion.	The Use of electronic invoicing (e CF) has increased compliance and bill was introduced to expand its coverage and make it mandatory for large companies as of January 2023	
	Administrative and technological costs of implementing automation should be considered and properly planned. In the case of new technologies, documented examples from other countries must be used.	
	A possible revision of the regulation that regulates the procedure for the application of ITBIS to digital services received in the Dominican Republic and provided by foreign suppliers might be needed.	

Table 4.3. Fight tax non-compliance

Note: Based on the meeting held on 23 June 2022, to discuss the draft analysis and policy recommendations with officials from the Ministry of Finance, the Ministry of Economy, Planning and Development (MEPyD), the Central Bank, the National Statistics Office (ONE), the World Bank, the IDB and the European Union.

Source: Authors' elaboration.

Improving the quality of public spending to enhance its impact on well-being

Public spending plays a key role in development by providing basic public services, decreasing inequalities, protecting vulnerable populations and investing in essential infrastructure to promote inclusive growth. Spending in the form of cash transfers can reduce poverty and inequality in the short term, an important factor in the present day. Effective social spending can also provide a buffer for vulnerable populations, giving them at least partial protection in case of an economic, social or environmental shock (Zouhar et al., 2021_[50]). Public spending also plays an important role in providing security, education and healthcare for all, which can reduce inequality and poverty in a country. Investment projects can help a country realise long-term goals for instance by improving infrastructure. The COVID-19 pandemic forced a strong response from the government of the Dominican Republic, with significant public spending and to prioritise efficient spending that aligns with development goals and has a lasting positive impact.

Public spending in the Dominican Republic has recorded sustained growth in the last decades, but has persistently remained below LAC average levels

Public spending in the Dominican Republic has trended steadily upward in the last decades, with a notable spike due to COVID-19; between 1990 and 2019, public spending increased from 8.7% of GDP to 16.3%. However, the country's public spending as a share of GDP has consistently been below the LAC average, which was 21.4% of GDP in 2019 (Figure 4.11). Disparities across the region in levels of public spending are large, with countries like Brazil, Chile, Colombia and Uruguay regularly spending over 20% of GDP on public programmes and services in the years prior to the COVID-19 pandemic.

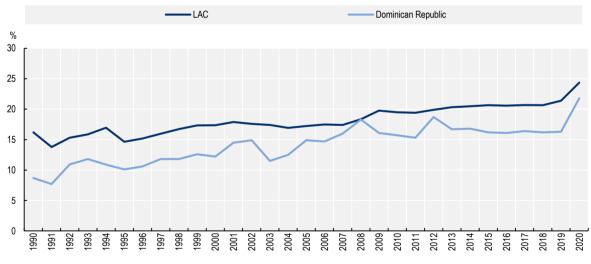


Figure 4.11. Evolution of public spending in the Dominican Republic, 1990-2020

Source: Authors' elaboration based on (ECLAC, 2022[51]).

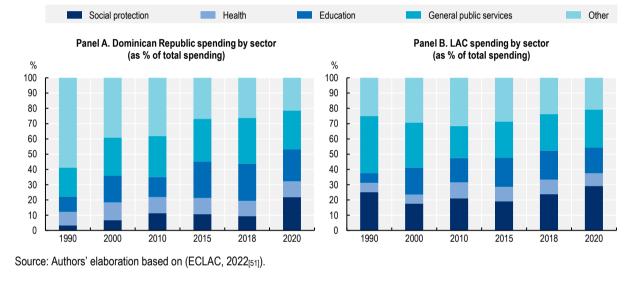
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The crisis induced by the COVID-19 pandemic demanded a large increase in public spending in order to finance the necessary health, economic and social protection measures. As a result, public spending as a share of GDP rose dramatically by 5.5 percentage points, reaching 21.8% of GDP in 2020. In LAC, the average public spending as a share of GDP increased to 24% in 2020, with Brazil and El Salvador spending over 30%. Social protection expenditures experienced a particularly steep upsurge, increasing from 1.5% of GDP in 2018 to 4.8% in 2020.

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The structure of public spending in the Dominican Republic has notably evolved over the last decades, with public services growing in importance. In 2018, almost one-third (30%) of total public spending was directed towards general public services, representing 4.8% of GDP. Similarly, spending on education rose from 10% of total spending in 1990 to more than 24% in 2018 (3.9% of GDP), mostly owing to the legislative approval of an annual spend of 4% of GDP on education. Social protection expenditures also increased during this time, from 3.3% of total spending in 1990 to 9.4% in 2018 (1.5% of GDP). Spending on public health has grown at a slower pace, however, increasing from 8.9% of total spending in 1990 to 10.5% in 2018 (1.6% of GDP). The main difference between LAC economies is in social protection expenditure; in 2018, this accounted for almost 24% across LAC economies (or 5% of GDP) (ECLAC, 2022_[51]) (Figure 4.12). These figures, in general, are below the OECD average, where public spending on health accounted for 9.9% of GDP in 2020 and spending on education made up 4.5% of GDP in 2018 (OECD, 2021_[52]; OECD, 2021_[53]).





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The COVID-19 pandemic has further biased expenditures towards current spending, but long-term investments must be protected in order to stimulate sustained growth

The Dominican Republic needs to balance today's expenditure (current) against tomorrow's (capital), especially in times of crisis. Pre-COVID-19 figures show that current expenditure represented 86.2% of total public spending in 2019, with capital expenditure accounting for the remaining 13.8%. The bias against capital expenditure was further accentuated by the crisis, with current expenditure rising from 14.1% of GDP in 2019 to 19.3% of GDP in 2020, representing the vast majority of public spending due to the COVID-19 pandemic (which accounted for 97% of the increase in public spending in 2020) (Figure 4.13). While the unprecedented impact of the pandemic largely justifies increased public spending in order to protect workers, businesses and households, the recovery will demand a more balanced approach. The multiplier effect of capital spending is often greater than that of public consumption, making the protection of such investments critical during fiscal adjustments in order to reduce costs for long-term output, neutralising the contractionary effects or even stimulating growth in the medium term (Ardanaz et al., 2022_[54]). However, budget rigidities make some categories of public spending inflexible, limiting the capacity of policy makers to make any significant adjustment to expenditures.

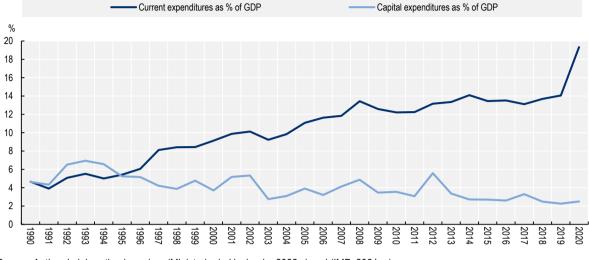


Figure 4.13. Current and capital expenditures in the Dominican Republic, 1990-2020

Source: Authors' elaboration based on (Ministerio de Hacienda, 2022_[2]) and (IMF, 2021_[55]).

As much as current spending is essential in financing day-to-day basic public services and fostering a faster economic recovery, low levels of capital expenditure can also have strong medium- and long-term effects on economic growth. Addressing and maintaining transport infrastructure, electricity, and sanitation, among other services, has a crucial influence on long-term development. By focusing public spending on short-term programmes, limited funds are left for longer-term infrastructure projects. As of 2019, the Dominican Republic was investing less than 0.5% of GDP in each of the key infrastructure areas of electricity, roads, and water and sanitation. In all three cases, the Dominican Republic spent below the LAC average (Figure 4.14). While Dominican state-owned entities remain dependent on government transfers, over the past few years the government has decreased its overall investment in one of the largest: electricity. While current transfers to this sector have remained steady, the decrease manifests as a reduction in capital expenditures, reflecting a reduction in the overall investment in electricity. The financial performance of the electricity sector is largely determined by oil prices, leading to large losses in 2019 and 2020 and potential risks for government finances in the future. Studies showed that a one-standard-deviation increase in the average price of oil in 2020 would have increased overall costs in the sector by 0.2 percentage points of GDP (World Bank, 2021_[56]).

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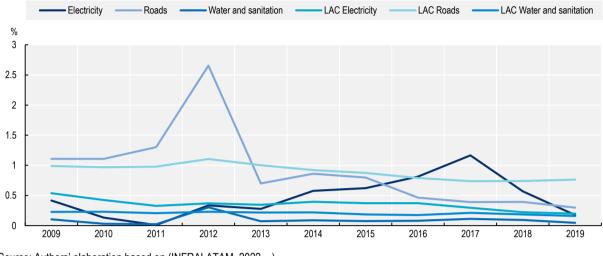


Figure 4.14. Public investment in infrastructure in the Dominican Republic (as a percentage of GDP), 2009-19

Source: Authors' elaboration based on (INFRALATAM, 2022[57]).

Reduced levels of fiscal space underscore the need to strengthen the efficiency of public spending, increasing its impact on equity and growth

The COVID-19 crisis has put pressure on public finances in the Dominican Republic. Low levels of public revenues, coupled with the increased pressure on public expenditure to respond to the immediate impact of the crisis, have reduced the room for manoeuvring in financing the recovery. Against this background, the efficiency of public spending emerges as a key policy area, and making the most of the available public resources becomes particularly relevant in order to ensure an inclusive recovery.

Inefficiencies in public spending in the Dominican Republic are relatively large and are estimated to account for up to 3.8% of GDP, although this is below the LAC average of 4.4% of GDP (World Bank, 2019_[41]). Inefficiencies are primarily caused by leakages in transfers and procurement waste (World Bank, 2019_[41]). In 2018, the Dominican Republic was ranked 131st out of 137 countries in government spending efficiency, and 135th out of 137 countries in the diversion of public funds (WEF, 2018_[58]). A government study that examined the quality of public spending between 2008 and 2017 found that the Dominican Republic ranked 9th in the LAC region overall, but ranked among the worst in terms of spending on health (16th in the region out of 17 countries) and education (12th in the region out of 17 countries) (MEPyD, 2020_[59]). These results suggest that more efficient and effective spending in health and education could help boost the overall efficiency of public spending in the Dominican Republic and increase the quality of life.

The role of public spending in reducing inequalities in the Dominican Republic is very limited. In fact, taxes and transfers contributed to a reduction of the Gini coefficient by only 1 percentage point, below the average 2 percentage points recorded in LAC economies, and still far from the 16-percentage-point reduction achieved by OECD member countries on average (Figure 4.15) (Lustig, 2018[60]; OECD et al., 2019[29]).

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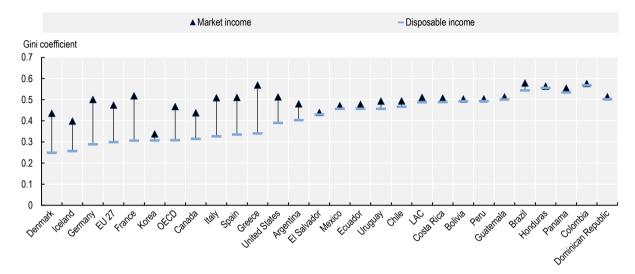


Figure 4.15. Impact of taxes and transfers on income distribution in the Dominican Republic and selected LAC and OECD member countries

Source: Authors' elaboration based on (OECD et al., 2019[29]; Lustig, 2018[60]).

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Despite increases in education spending, learning outcomes in the Dominican Republic remain low, and lower than in some countries with similar levels of education expenditures. In 2013, results from the United Nations Educational, Scientific and Cultural Organization (UNESCO) cognitive test showed that the Dominican Republic had the lowest performance in education in the LAC region. At the time, this was partly attributed to lack of investment in education relative to other countries in the region and also to the poor quality of education spending (OECD, 2013[61]). In the PISA 2018 test, the Dominican Republic scored the lowest among the 79 participating countries in the mathematics and science test, and scored only above the Philippines in the reading test (OECD, 2018[62]). Countries such as Indonesia or Panama managed to achieve better results in PISA tests, while spending a similar amount as the Dominican Republic. Similarly, countries like the Philippines had similar results than the Dominican Republic, but with lower levels of education spending (Figure 4.16). Compared with 2015, results from the 2018 OECD Programme for International Student Assessment showed (PISA) that performance the Dominican Republic in mathematics and sciences was similar, while reading scores were lower (OECD, 2018[62]). These results were achieved in a context of increased levels of public spending in education since 2013, up to 4% of GDP. This performance suggests there are still challenges regarding the efficiency of public spending in education, although investments in education take time to deliver results and some of the impact of increased levels of spending may only become evident in future performance tests.

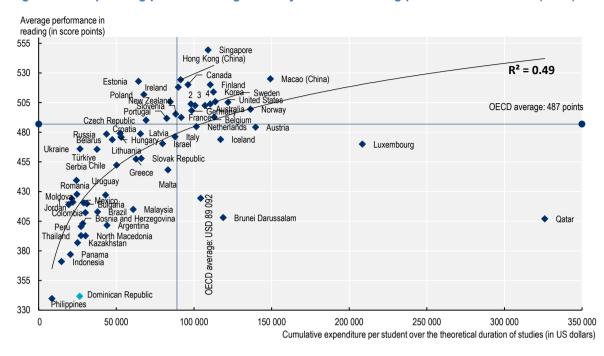


Figure 4.16. Spending per student aged 6-15 years and reading performance in PISA (2018)

Source: (OECD, 2018[62]).

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In the last decade, public spending on health has grown modestly in the Dominican Republic, and key health indicators have shown little improvement. Between 2010 and 2019, life expectancy at birth in the Dominican Republic increased by 2.1 years (from 72.0 years to 74.1 years). The country scores below the LAC average (76.5 years) and far below the regional leaders Costa Rica (80.3 years) and Chile (80.2 years). The Dominican Republic ranks below the LAC average in both numbers of hospital beds per 1 000 inhabitants and average medical and nursing staff per 10 000 inhabitants (below 2 beds and 30 staff). In fact, while public spending in health saw a modest increase from 1.6% to 1.7% of GDP between 2010 and 2017, the share of hospital beds (per 10 000 inhabitants) fell from 1.59 to 1.56 in the same period.

Improving the institutional framework for public spending must be a key priority in order to enhance its impact

Improving public spending by strengthening institutional frameworks is essential in the context of the post-COVID-19 economic recovery. Institutional and fiscal frameworks can play a stabilising role in fiscal policy making, as seen in Chile and Colombia. Instituting a multi-year budgetary framework, promoting greater transparency and establishing fiscal rules that take into account the phase of the business cycle and protect capital investment and key social spending can improve the efficiency of public spending (OECD, 2013_[61]). The Dominican government took action in 2021, with the support of the European Union, by adopting a programme to improve the management of public finances. The main goal of the Reform Support Program of the Public and Financial Administration of the Dominican Republic and the mobilisation of national resources (PROGREF) is to improve co-ordination and communication between budget systems and to ensure transparency and accountability of public spending. Additionally, the programme will seek to ensure that public funds are allocated based on the country's development priorities as suggested by the National Multiannual Plan for the Public Sector and the National Development Strategy (MEPyD, 2020_[59]). Some inefficiencies may be handled without changing current procurement laws, but instead by modifying current practices, which can include consolidating purchases across government departments (bulk buying) and avoiding non-competitive contracts (World Bank, 2021^[56]).

Setting up a fiscal rule could be useful for the Dominican Republic in setting guidelines for balancing budgets and/or for the evolution of debt, revenues and expenditures. In general, fiscal rules can help reduce the risk of a large and rapid reversal of external capital inflows, which can greatly harm foreign financing, cause a sharp depreciation and result in financial instability. Studies show that introducing a fiscal rule can also reduce the risk of sovereign default, especially for emerging markets (Arreaza et al., 2022_[63]). In Colombia, fiscal rules helped the country attain investment grade, and the possibility of a debt anchor for controlling public debt has been explored. Additional changes also highlight the importance of establishing an escape clause in the case of an exogenous shock, such as that experienced as a result of the COVID-19 pandemic. A well-designed escape clause can allow increased government spending in dire situations and can include fiscal measures for returning to the rule's goals in the medium term (Arreaza et al., 2022_[63]). A fiscal rule in the Dominican Republic could be the cornerstone of a future fiscal pact, as part of a broader set of fiscal measures.

Improved targeting of social programmes is a priority in order to enhance their impact and support the most vulnerable populations, particularly in the post-COVID-19 recovery context. Reducing poverty and improving living standards must continue to be the focus, but particular attention must be given to households in extreme poverty and households where all members work in informal jobs. In fact, using the household as the unit of analysis can provide greater efficiency in targeting social protection programmes (OECD et al., 2022_[64]). The response to the COVID-19 crisis leaves some lessons regarding social protection. In particular, measures to improve the interoperability of existing registries, as well as innovative ways of giving cash transfers to informal workers, point to some interesting methods for improving the impact of social protection programmes (Basto-Aguirre, Nieto-Parra and Vázquez-Zamora, 2020_[65]). Finally, the variety of small interventions in social protection can undermine their efficiency due to their limited scopes and budgets. Having a small number of well-implemented programmes is preferable to having numerous programmes with overlapping initiatives.

Combining new policies with *ex ante* evaluations can improve the quality and legitimacy of new measures. In economies where fiscal space is limited, it is important to use every available tool to ensure that the policies being designed are sound. *Ex ante* evaluations can help guide budget allocations in order to increase efficiency, improve the design of future policies and increase transparency by providing a level of accountability to citizens. A recent Inter-American Development Bank (IDB) study revealed that 44% of OECD member countries believe that *ex ante* evaluations have a high degree of influence on their budget decisions. If the goal of the *ex ante* evaluation is to influence the allocation of budgetary resources, then the best, most centralised option is to have the central budget authority spearhead the study, as this offers the best alternative for linking the findings of the evaluation to the budget (Fritscher, Roy Rogers and Motta, 2022_[66]).

The need for a fiscal pact in the Dominican Republic to face the post-COVID-19 recovery

In its 2030 National Development Strategy, the Dominican Republic included a fiscal pact as part of its commitment to sustainably finance development in the country. In 2022, a decade later, this fiscal pact was yet to be introduced, but the context of the post-COVID-19 recovery, together with the findings presented in this chapter, underscore the importance of moving forward in building a holistic and well-co-ordinated fiscal strategy backed by a broad consensus.

This is particularly true not only because of the different fiscal challenges facing the Dominican Republic, as well as the financial requirements for a post-COVID-19 recovery, but also because as much as 40% of Dominicans found it justifiable to evade paying taxes in 2015 (OECD et al., 2019_[29]). These low levels of "tax morale" reveal that citizens do not see value in paying taxes. This can be due to many factors, including

low levels of trust in public institutions. For this reason, a fiscal pact must also be seen as an opportunity to build and restore trust – a fundamental ingredient for policy making – in the country.

While the political economy of a fiscal pact is complex, achieving such type of broad consensus is also an opportunity to build an inclusive and sustainable recovery. The role of fiscal policy for the post-COVID-19 recovery must be holistic, making use of all fiscal policy tools and co-ordinating measures not only to strengthen tax revenue collection, but also to improve the efficiency of expenditures and underpin debt sustainability. Bundling the various fiscal reforms into a comprehensive package can help to build fiscal legitimacy, as well as reduce political constraints, facilitating political support and addressing distributional issues by making the system more progressive. Fiscal measures should be co-ordinated under a well-defined sequence of policies that can be adapted to the different stages of the recovery. Finally, there needs to be a broad consensus and national dialogue surrounding the timing and dimensions of the required fiscal measures, not only for the immediate recovery from the crisis, but also for longer-term development that is sustainable and inclusive (Nieto-Parra, Orozco and Mora, 2021_[67]).

Strengthening the role of the financial system for development in the Dominican Republic

Mobilising domestic public and private financial resources is key to boosting long-term growth and promoting citizens' well-being. First, it increases the financing available for scaling up gross domestic investment in physical capital, infrastructure, housing and other intermediate goods. Second, it supports technical progress and innovation by allowing riskier investors to discover more investment options. Third, it bolsters productive diversification, resulting in more formal economic activities and hence tax revenues to finance development. Finally, it promotes a virtuous circle of investment in registered productive sectors, employment, additional public revenues (as the tax base rises) and productivity growth.

In a context of limited fiscal space and major financial constraints, mobilising private resources is critical. The Dominican Republic has scope for mobilising financial resources through private and public savings from both domestic and international sources, as well as room to manoeuvre in order to implement public policies in support of that mobilisation. Despite having modestly raised private credit to GDP and public revenues to GDP in the last 15 years, together with growing opportunities to fund private investment in local, dynamic and tradeable sectors, the Dominican Republic's financial system remains underdeveloped compared with other LAC and OECD member countries.

More sustainable and diversified financing is required to finance the recovery from COVID-19 and spur long-term growth. This section analyses the financial markets in the Dominican Republic and examines the main barriers to more effectively mobilising financial resources and channelling these towards financing inclusive and sustainable development.

The remainder of this section is organised as follows. First, it analyses the Dominican Republic's banking system, its strengths and weaknesses, and the main barriers to increasing access to credit and financial inclusion. Second, it centres on the public debt market, focusing on analysing debt levels and sustainability, improvements and pending challenges in debt management, and the development of the local currency bond market. Third, it explores the main challenges to, and opportunities for, further deepening the private debt market. The chapter concludes with a series of policy recommendations for achieving greater depth and improving the institutional framework of the Dominican Republic's financial system.

Developing the banking system

The banking system has been resilient to recent global crises

The Dominican Republic's formal financial system is regulated by the Junta Monetaria (Monetary Board), which is responsible for financial, monetary and exchange rate policy. The Central Bank and the Superintendency of Banks are subordinate to the Junta Monetaria and are in charge of regulation and supervision of the compliance of financial intermediaries (including banks) with financial and macroprudential policies.

Since the banking crisis in 2003-04, banks and the financial system in the Dominican Republic have managed to weather subsequent crises, namely the global financial crisis of 2008-09 and the recent crisis resulting from the COVID-19 pandemic. The Dominican financial system's resilience is mostly due to sound and credible regulatory standards, which can be further strengthened by progressive adherence to Basel III standards. This allowed an ambitious monetary policy response to the COVID-19 crisis involving reductions in minimum reserve requirements and cuts in monetary policy rates. A flexible exchange rate regime acted as a shock absorber during the pandemic.

The banking system exhibited relatively sound liquidity and solvency indicators over the last decade. The share of non-performing loans (NPL) as a percentage of total loans has decreased from 2.9% in 2011 to 1.3% in 2021 (Table 4.4). The return on assets and return on equity of the financial intermediaries also showed a downward trajectory as a result of slightly narrowing bank spreads and changes in non-performing loans. The experience in recent years showed that lending rates reacted more than deposit rates to changes in monetary policy, causing a reduction of bank spreads when monetary conditions eased. Despite narrowing bank spreads, the profitability of the financial system increased on the back of economic growth during 2021. The overall solvency ratio improved by 50% between 2011 and 2021, with limited growth during 2020 due to the COVID-19 pandemic.

	Dec- 2011	Dec- 2013	Dec- 2015	Dec- 2017	Dec- 2019	Dec- 2020	Jun- 2021	Dec- 2021
Return on Asset	2.35	2.33	2.29	1.93	2.28	1.75	2.4	2.29
Return on Equity	19.93	20.63	20.07	16.7	19.52	15.59	21.77	20.66
Financial Income/Loans	14.71	14.27	13.02	12.75	11.55	10.85	10.77	9.78
Cash/Deposits	36.62	33.37	34.33	29.65	25.93	30.47	26.97	23.86
Non-Performing Loans (NPL)/Total Loans	2.87	2.19	1.68	1.86	1.55	1.94	1.69	1.3
Provision for NPL/NPL	111.74	134.82	152.37	149.3	162.07	203.91	252.96	332.81
Solvency Index	17.33	16.69	15.97	18.25	16.57	21.07	22.37	ND

Table 4.4. Financial indicators in the Dominican Republic's financial system

Source: Authors' elaboration based on (Superintendencia de Bancos, 2021[68]).

During the COVID-19 crisis, the Central Bank and the Superintendency of Banks adopted macroprudential and supervisory measures in order to provide additional liquidity to support the economy. The new regulations allowed banks to cover reserve requirements with public bonds (and Central Bank notes in local currency) up to the amount of DOP 36 billion (about 0.75% of GDP), which was equivalent to a 3.25% reduction in reserve requirements. These resources were earmarked to provide credit to households and businesses at an interest rate capped at 8%, injecting significant liquidity to the system (IMF, 2020_[69]). Additionally, the Central Bank temporarily froze internal debtor scorings in case of refinancing needs, and returned loan provisioning to the prevailing levels as of March 2020.

Mobilising additional, less costly resources without compromising financial stability is a significant challenge ahead in the public policy agenda. As became apparent during the COVID-19 pandemic, there

challenge ahead in the public policy agenda. As became apparent during the COVID-19 pandemic, there remains large scope for the banking system to continue assisting the economic and social development of the Dominican Republic through reducing real lending interest rates, increasing credit to the private sector and SMEs, implementing more effective and comprehensive financial inclusion and education strategies, and fostering competition.

Banking depth remains low compared with other LAC and emerging countries

While the banking system in the Dominican Republic has proven to be resilient, it does not contribute sufficiently to financing development, despite the expansion of banking depth. Banking depth, measured as the percentage of banking credit to GDP, has been improving since 2010. The banking-credit-to-GDP ratio stood at 28.9% of GDP in 2019, five percentage points higher than in 2010. The increase in banking depth was a well-established trend in most LAC countries during the last decade, supported by macroeconomic stability, economic growth and abundant global liquidity.

However, the Dominican Republic shows lower levels of banking depth than most of its LAC and international peers (Figure 4.17). Peer LAC countries have raised the average banking-credit-to-GDP ratio by 14 percentage points since 2010 to reach 60% of GDP. This ratio averages almost 98% in OECD member countries.

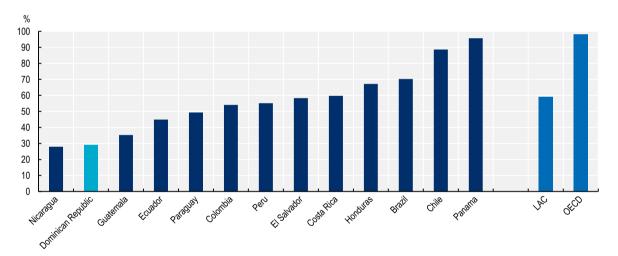


Figure 4.17. Banking credit as a percentage of GDP, 2019

Source: Authors' elaboration based on (World Bank, 2022[70]).

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The composition of the Dominican Republic's loan portfolio has been relatively stable since 2012. Banking credit to the private sector is led by commercial loans (56% of total lending in December 2020), followed by consumer loans (26% of total lending in December 2020), while mortgage lending accounts for 18% of total lending. Other types of lending (such as microcredit) represent less than 1% of total banking credit (Superintendencia de Bancos, 2021_[68]).

Finally, as of the latest internationally comparable data available from 2017, 56% of Dominican people aged 15 years or over hold a bank account, which is roughly the LAC average but well below the OECD member country average of 95%. Banking lending is very low among individuals, and only 20-25% of people who save money do so with formal financial institutions according to the National Survey of

Financial Inclusion. Only 16% of those aged 15 years or over possess a credit card; that is three percentage points below the LAC average (19%) and far below the OECD member country average (57%) (Table 4.5).

Country			Fin	ancial Indicator/Yea	r	
	Account (% age 15+)			Credit Car	d Ownership (% age	15+)
	2011	2014	2017	2011	2014	2017
Dominican Republic	38%	54%	56%	12%	11%	16%
Panama	25%	44%	46%	11%	10%	8%
Costa Rica	50%	65%	68%	12%	14%	14%
Honduras	21%	31%	45%	5%	6%	5%
Ecuador	37%	46%	51%	10%	6%	9%
Peru	20%	29%	43%	10%	12%	12%
LAC	39%	52%	55%	18%	22%	19%
OECD	90%	94%	95%	51%	53%	57%

Table 4.5. Bank account holdings and credit card ownership in selected LAC countries, 2011-17

Source: Authors' elaboration based on (World Bank, 2021[71])

The banking system remains highly concentrated, and real interest rates and spreads are high

The financial system in the Dominican Republic remained highly concentrated in the last decade. The ten largest entities by assets held controlled 90.2% of deposits by the end of 2020, 3.3 percentage points higher than in 2012. This level of concentration is also higher than in other LAC countries. Among a sample of 19 regional peers, the Dominican Republic presented the fourth-most concentrated financial system in LAC, with a strong average correlation between the degree of concentration and the level of net interest margins (Tambunlertchai et al., 2021_[72])

The financial system in the Dominican Republic is made up of 17 Multiple Banks (MBs), 10 Savings and Loan Associations (SLAs), 14 Savings and Loan Banks (SLBs), 6 Credit Unions and Cooperatives (CUCs), and 1 state-owned financial institution (Superintendencia de Bancos, 2021_[68]). MBs and SLAs alone account for 97% of assets held. Other types of financial intermediaries have a minor share in the financial system, including microfinance institutions; these usually provide financial services (i.e. credit) to informal microenterprises and informal workers, which account for more than 50% of total employment.

Real lending interest rates faced by the private sector remained high, at close to 10%, between 2010 and 2019 (Figure 4.16). However, in 2021, real interest rates fell to 3.9% in MBs and to 4.6% in SLAs following the easing of financial conditions implemented by the Central Bank as part of the countercyclical measures adopted during the COVID-19 pandemic. Between August 2020 and October 2021, the monetary policy rate was lowered to 3.0% (from 4.5% at the end of 2019). However, the Central Bank afterwards decided to begin a normalisation process for its monetary policy, given that inflation has been affected by higher oil prices and supply chain disruptions (Banco Central de la Republica Dominicana, 2022_[73]). The monetary policy rate has been increasing since November 2021 when it stood at 3.50. Since then it has been increased 9 times to reach a monetary policy rate of 8.7% in October 2022.

High real interest rates are key barriers to accessing banking finance in the formal sector of the Dominican Republic's economy. Operating costs remained high and stable between 2010 and 2019; the ratio of operating costs to total assets was above 6% before the COVID-19 pandemic, but it reached an average of 5.3% in December 2021, the lowest level since 2000, showing that there is room for improving efficiency and lowering net interest margins (Banco Central de la Republica Dominicana, 2022_[73]).

Real deposit interest rates have been positive over the last decade. In 2016, these reached 4% in MBs and were even higher in other types of financial institutions (Figure 4.18). This is a major and positive change compared with the prevailing negative interest rates of the 2000s because it stimulates formal savings in the banking system. Positive real interest rates in the long term contribute to the development of the banking system and the availability of credit to the private sector through increased private savings. In this regard, low banking depth is also reflected in the deposits-to-GDP ratio, which is also lower in the Dominican Republic (30.4% of GDP) than in the LAC (55.3% of GDP) and OECD (98.2% of GDP) averages (Figure 4.19), and in the considerably low percentage of people saving in the formal financial system (Banco Central de la Republica Dominicana, 2022_[73]) (Box 4.3).

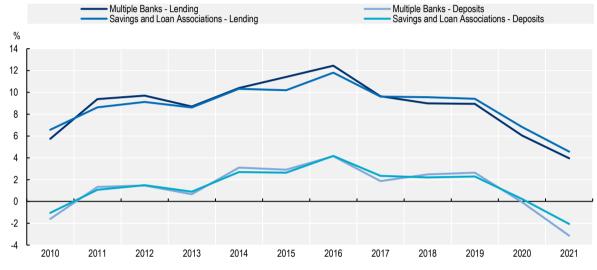


Figure 4.18. Real Lending and Deposits rate in Multiple Banks and Savings and Loan Associations

Source: Authors' elaboration based on (Banco Central de la Republica Dominicana, 2022[73]).

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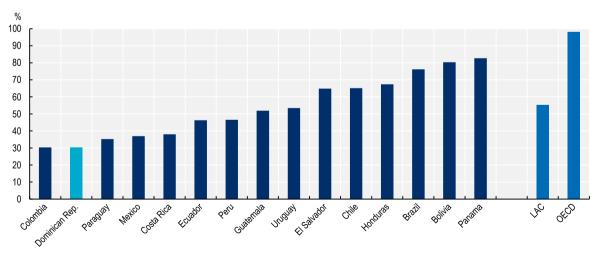


Figure 4.19. Deposits as a percentage of GDP, 2020

Note: LAC and OECD averages are simple averages of countries available. Source: Authors' elaboration based on (IDB, 2020[74]; World Bank, 2020[75]).

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Box 4.3. Mobilising resources for greater financial inclusion

Financial inclusion means that individuals and businesses have access to useful and affordable financial products and services – transactions, payments, savings, credit and insurance – that meet their needs and that are delivered in a responsible and sustainable way. Financial inclusion is a key enabler to reduce extreme poverty and boost shared prosperity (World Bank, 2021_[76]).

Financial inclusion in the Dominican Republic faces challenges of a structural nature, such as high levels of informality, relatively low levels of tax collection, a small public pension system, low levels of financial literacy and relatively high levels of mistrust. These barriers are not unique to the Dominican Republic, however, and can be found in other countries in LAC (OECD et al., 2019_[29]).

According to *Informe de Encuesta Nacional de Inclusión Financiera (ENIF) 2019*, published by the Central Bank of the Dominican Republic, 54% of people surveyed did not have any financial product in a financial institution; the remaining 46% had at least one financial product. The most used financial services and products are savings accounts (34%) and payroll accounts (23%), with a low percentage of people holding personal credit cards (9%). That report also found that access to and possession of financial products and services is less than their actual use (BCRD, 2020_[77]).

Another important finding of the report is that 80% of Dominicans borrow money through the informal sector. The main reasons for borrowing are a lack of sufficient savings (36%) and insufficient salaries to cover expenses (32%). On the other hand, survey participants indicated that the main reasons to neither have nor request a loan are high interest rates (42%) and cultural issues (BCRD, 2020_[77]).

In the last decades, there was a significant increase in the total nominal volume of credit granted to microenterprises, but in comparison with the volume of total credit granted to the private sector or as a percentage of GDP, the amount of credit granted to microenterprises has actually decreased. This type of credit represented only 2.5% of total credits granted to the private sector and 0.7% of GDP in 2020.

All of this offers an opportunity to develop a financial inclusion strategy in the medium to long term, with the objective of increasing the supply and use of financial products and services by Dominicans. This will require structural changes in order to promote the creation of formal jobs, as well as greater financial awareness and the dissemination of education campaigns to all Dominicans who remain informal.

Partial dollarisation could pose some risks to the system

The current financial regulations allow banks and other financial institutions to take deposits and lend money in US dollars. The Dominican Republic has a partially dollarised financial system, with 24% of loans and close to 30% of deposits denominated in foreign currency. Commercial credit accounts for more than 90% of foreign currency loans, whereas a very small proportion of such loans are for consumer credit and mortgages. As has been stressed by many (De la Torre and Schmukler, 2004_[78]), partial dollarisation could lead to currency and maturity mismatches between assets and liabilities, or even between revenues and expenditures. This might cause some financial instability in the face of a deposit withdrawal, a credit crunch, and/or a currency depreciation. Therefore, specific regulations are needed in order to avoid these risks.

The Dominican Republic succeeded in lengthening maturities at lower costs in 2020

Developing domestic debt markets can be growth-enhancing and promote socio-economic development. Long-term financing through bond issuances and other related securities allow economies to raise investment capital for infrastructure, housing or equipment investment, to smooth consumption, and to cope with climate and health emergencies, and thus support long-term economic, social and environmental progress. More accessible and affordable debt markets and the diversification of the investor base while managing portfolio risks contribute to lower refinancing costs and longer maturities.

In spite of the COVID-19 crisis, the Dominican government succeeded in accessing the international bond market in 2020. The country issued public securities in the amount of USD 6 000 million at maturities of 10, 12 and 40 years. Indeed, in January 2021, the Dominican Republic was able to issue a ten-year bond for USD 1 000 million with an interest rate of 4.50%, the lowest issued by the country at this maturity. Moreover, it also issued a 40-year bond, the longest-term instrument issued on international markets, at a rate of 5.875%, the lowest issued for a bond with a maturity greater than 30 years. This constitutes a historical milestone in the international capital markets for the Dominican Republic. Investors' demand exceeded the amount bid by more than four times. In addition, this issuance allowed the average maturity of the debt to be extended from 9.7 years to 11.0 years, which reduced the risk of refinancing the debt, while maintaining the average interest rate levels of the portfolio (Ministerio de Hacienda, 2020_[79]).

In 2020, the Dominican Republic also executed a liability management operation which consisted of repurchasing bonds due in 2021, 2024 and 2025 with the proceeds of a 12-year maturity bond issuance of USD 1 266 million. According to the Ministry of Finance, this operation had multiple benefits for the debt portfolio. First, it entailed a reduction of the debt service burden by USD 1 132 million for the 2021-25 period; second, it caused a decrease in the average cost of debt from 6.16% to 6.06%; and third, it brought about an increase in the average maturity of the global USD bond portfolio from 17.19 years to 17.79 years, with a minimum increase in the total public debt of USD 6.1 million (Ministerio de Hacienda, 2020_[80]).

In February 2022, the country issued USD 3 564 million in 7- and 11-year maturity bonds with 5.5% and 6.0% coupons, respectively. The proceeds allowed the government to reduce USD 1 100 million in debt payments that were due between 2022 and 2024 through a repurchase of local and external bonds. This liability operation extended the duration of USD-denominated debt by 0.3 years (Ministerio de Hacienda, 2022_[2]).

From a regional perspective, the COVID-19 pandemic increased the need to provide financing through bond issuances in most LAC countries in 2020. The Dominican Republic also increased its market access at the lowest rate on record, issuing a mix of foreign and domestic bonds. High international liquidity (and in particular, capital flows towards sovereign bonds) in emerging markets during the pandemic contributed to this positive trend (Figure 4.20) (OECD et al., 2021_[81]).

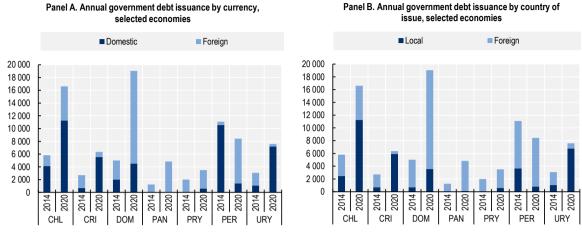


Figure 4.20. Annual government debt issuance of total active debt in selected LAC countries, by currency and by country of issuance, 2014 and 2020

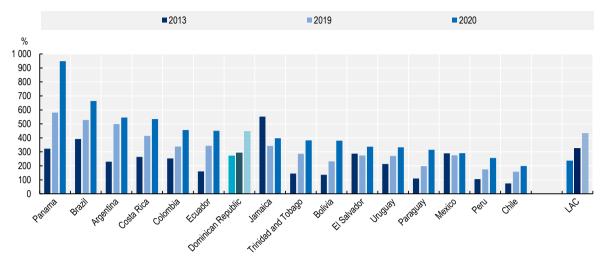
Source: (OECD et al., 2021[81]).

In April 2020, the Dominican Republic obtained emergency financial assistance through the International Monetary Fund's (IMF's) Rapid Financing Instrument (RFI) of about USD 650 million for essential COVID-19-related health expenditures and to support vulnerable populations. Multilateral institutions, such as the World Bank and the IDB, also provided USD 1 453 million for development projects and budget support in 2020.

Despite successful debt management practices and the reduction of average bond financing costs, public debt ratios have increased considerably

Levels of public debt in the Dominican Republic have increased considerably compared with the levels before the 2008 global financial crisis. The public debt-to-tax ratios (a proxy indicator of a country's financial capacity to pay for its public debt) increased from close to 274% in 2007 to around 294% in 2019, up to 447% in 2020 leaving the Dominican Republic in a weaker position after the COVID-19 crisis (Figure 4.21) (OECD et al., 2021_[81]). Moreover, the COVID-19 pandemic deteriorated the consolidated public sector debt-to-GDP ratio, which reached 70.3% in 2020, almost 20 percentage points higher than in 2019 (53.2%) (IMF, 2022_[82]) (Ministerio de Hacienda, 2021_[3]). This sharp rise in 2020 was fuelled by the impact of the COVID-19 pandemic, which triggered a 6.7% fall in economic activity with an overall fiscal deficit of 7.7% of GDP. However, public debt was reduced to 62.1% of GDP in 2021 and the ratio should continue to trend downward, to an estimated 59.2% in 2022 (IMF, 2022_[82]). Non-financial public sector debt, according to national data, was at 40.4% of GDP in 2019, increased to 56.6% in 2020, and decreased again to 50.4% in 2021 and to 46.5% by October 2022 (Dirección General Crédito Público, 2022_[83]).

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As of December 2021, most public debt of the Dominican Republic – including IMF, bilateral and development loans – was external (55.7%). The outstanding internal debt issued by the Treasury and by the Central Bank represent similar shares of total debt (23% and 21% of the portfolio, respectively), giving both entities similar importance in the local debt market (Figure 4.22). Regarding external public debt, as of 2020, foreign bonds (77% of total) made up the largest share, followed by multilateral financing (17%), bilateral financing (3%) and commercial banks (2%); this pattern is similar to that in other countries with good access to the international bond market (e.g. Mexico, Peru) (Figure 4.23).

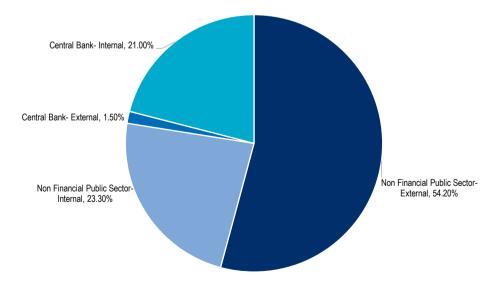


Figure 4.22. Composition of outstanding public debt by issuer and legislation – December 2020

Source: Authors' elaboration based on (Dirección General Crédito Público, 2022[83]).

StatLink ms https://stat.link/wiax5j

Source: (OECD et al., 2021[81]).

StatLink msp https://stat.link/cwaznh

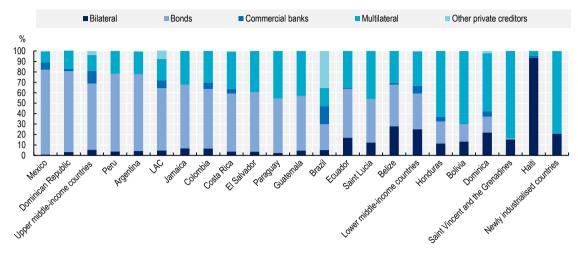


Figure 4.23. Total external public debt stock by creditor (public and private) in selected LAC countries, 2020

Note: LAC is the simple average, which gives equal weight to all creditors; LAC takes into consideration the amount issued by each LAC country. "LMI" and "UMI" are all lower-middle-income and upper-middle-income countries in the world, respectively, as classified by the World Bank in International Debt Statistics.

Source: Authors' elaboration based on (World Bank, 2022[84]).

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The Dominican Republic has developed a medium-term debt strategy following best international practices, but new efforts should ensue in order to guarantee sustainability and expand its financing potential

Following best international practices in public debt management, the Debt Management Office (DMO) also developed a Medium-Term Debt Management Strategy (MTDS) for the period 2016-20 (Ministerio de Hacienda, 2016_[85]). An MTDS is a plan that a government intends to implement over the medium term in order to achieve the desired composition of the government debt portfolio, which captures the government's preferences regarding the cost-risk trade-off. It operationalises debt management objectives with a strong focus on managing the risk exposure embedded in the debt portfolio (IMF, 2009_[86]).

In the case of the Dominican Republic, the MTDS for 2016-20 had five strategic guidelines: 1) to reduce the exchange rate risk of the portfolio by increasing the share of local currency debt; 2) to deepen the local debt market; 3) to diversify the investors' base in the international market; 4) to increase the average maturity of external financing and execute liability operations (such as the one executed in 2020) in order to reduce exposure to refinancing risk; and 5) to set an adequate maturity profile in order to avoid strong fiscal pressures from a high debt service burden (Ministerio de Hacienda, 2016_[85]).

These broad guidelines were translated into four quantitative targets: 1) the percentage of foreigncurrency-denominated debt had to remain between 74% and 80% of the total outstanding debt; 2) the short-term debt should be equal to or less than 12% of the total outstanding debt; 3) the average maturity of internal debt should be 7 years (±1 year); and 4) the proportion of debt refinancing interest rates in a year should be between 14% and 20% of portfolio. The DMO monitored the goals carefully and periodically reported on compliance with the targets. By December 2020, all quantitative targets had been met with the government playing an active role in liability management; some progress had also been made in the development of local currency debt markets and in the extension of the average lifespan of the portfolio (Ministerio de Hacienda, 2020_[87]). The fulfilment of quantitative targets set in the MTDS to enhance debt management practices is consistent with the strategic guidelines and strengthens the reputation of the DMO to meet its long-term goals. In this regard, the creation of a new MTDS which benefits from the lessons learned would be a natural step to continue to strengthen the management capabilities of the DMO over time. Recent debt management operations in 2021 suggest that the Dominican government is currently committed to an efficient debt management strategy with goals similar to those contained in the MTDS for 2016-20 (Ministerio de Hacienda, 2022_[2]).

Country risk has returned to pre-pandemic levels, and the yield curve of international issuances displays a normal shape

In general, the Dominican Republic's sovereign spreads have followed regional trends of country risk measured by the Emerging Markets Bond Index (EMBI) Latam. By March 2021, one year after COVID-19 began to affect Western economies, country risk was between 300 and 400 basis points (bps), close to pre-pandemic levels. In November 2022, country risk in the Dominican Republic was at 382, well below the LAC level, at 452 bps ((Banco Central de la Republica Dominicana, 2022_[73]) Moreover, the yield curve of external bonds (in US dollars) has the typical upward slope shape. Bonds on the long end yield 6%, while those on the short end yield less than 2% (Figure 4.24).

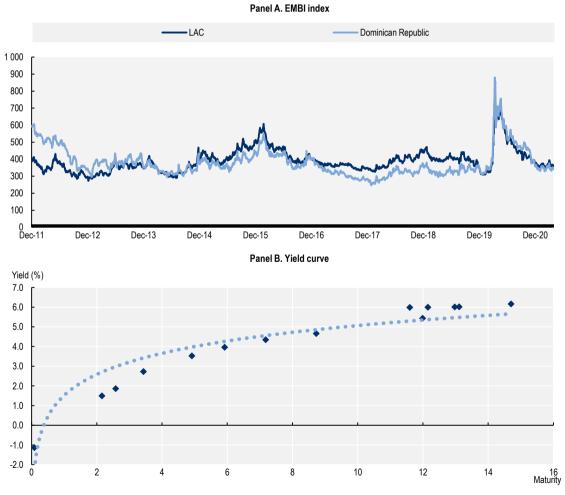


Figure 4.24. Country risk and yield curve on external bonds

Source: Authors' elaboration based on (Bloomberg, 2021[88]) and (Banco Central de la Republica Dominicana, 2022[73]).

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In order to obtain the investment grade in the medium term, the Dominican Republic will need to circumvent some structural hurdles and diminish its fiscal and external vulnerability to shocks. Major credit rating agencies place the country at the same level in their scales (BB- with a negative outlook for the Standard and Poor's (S&P) and Fitch ratings, and Ba3 for Moody's), two notches below investment grade. This rating implies that the Dominican Republic is a less vulnerable issuer in the short term but still faces diverse uncertainties related to adverse business, financial and economic conditions (Banco Central de la Republica Dominicana, 2022_[73]).

Credit rating agencies also recognised that COVID-19 severely affected economic activity, especially the tourism, construction and manufacturing sectors. However, these agencies did not downgrade the country during the worst period of the pandemic in 2020. S&P recognised that the Dominican Republic has greater potential growth compared with countries with similar creditworthiness, which eases some external weaknesses in the medium term (S&P Global Ratings, 2020_[89]).On the other hand, long-lasting difficulty in delivering structural reforms in order to reduce fiscal and external vulnerabilities is still present and could limit long-term growth. In the last decade, good economic performance and fluid access to international markets helped the country consistently improve its ratings. Since 2010, S&P and Fitch have upgraded the Dominican Republic's credit rating by two notches and Moody's has upgraded it by one notch, but the country's rating provided by these agencies has remained below investment grade (Table 4.6) (Banco Central de la Republica Dominicana, 2022_[73]). In December 2021, S&P raised the Dominican Republic's credit outlook from "negative" to "stable" due to an impressive economic recovery that reversed the external deterioration caused by COVID-19. Fitch Ratings also changed the credit perspective from "negative" to "stable" thanks to higher-than-expected economic growth and the reduction of the country's fiscal deficit.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
S&P	В	B+	B+	B+	B+	BB-							
Fitch	В	В	В	В	B+	B+	BB-						
Moodys	B1	Ba3	Ba3	Ba3	Ba3	Ba3	Ba3						

Table 4.6. Credit ratings for the Dominican Republic, 2010-21

Source: Authors' elaboration based on (Banco Central de la Republica Dominicana, 2022[73])

Although co-ordination in the local debt market between the Central Bank and the Treasury has improved, it requires additional fine-tuning

Co-ordination between the Ministry of Finance and the Central Bank is crucial for the development of the Dominican Republic's local debt market (OECD, 2012[90]). This co-ordination is critical in order to avoid debt fragmentation, unnecessary competition, yield curve distortions and additional issuance costs. These two entities are the main public issuers of domestic debt. However, each entity has different goals in managing internal debt. The Treasury is primarily concerned with the cost of lending, while the Central Bank uses its liabilities to fulfil monetary policy objectives and intervene in exchange rate markets.

In 2012-13, the Treasury and the Central Bank used to issue bonds at similar maturities (Figure 4.25, Panel A) with little or no co-ordination regarding issuance dates, interest rates, types of securities or placement methods (OECD, 2012[90]). This created inefficiencies in the market and prevented it from developing further, mainly because the lack of co-ordination caused a significant crowding out of the private sector, which was in an unfavourable position to compete for domestic financing in the medium term.

Improving co-ordination between both entities has been indicated as a key policy priority, including maturity space separation and the establishment of a Co-ordination Committee (OECD, 2012[90]). In recent years, the Central Bank and the Ministry of Finance have established regular meetings to strengthen the co-ordination of public debt issuances in the local market. In particular, co-ordination was strengthened

with the signing of a Memorandum of Understanding between both institutions in October 2019, which established periodic co-ordination meetings. In each meeting, the calendar of issuances and the amounts and types of bonds are discussed given the segmentation in duration for each issuer (the Central Bank at the short end and the Treasury at the long end of the yield curve).

Maturity segmentation has improved, but further co-ordination could still reduce the cost of financing at the short end of the curve, provided that good macroeconomic and financial conditions persist. In 2020, the Central Bank issued notes with a maturity of less than 8 years and the Treasury sold notes with a maturity of between 9 and 20 years (Figure 4.25, Panel B). It is worth noting that the Treasury was able to issue 20-year bonds, the longest maturities ever in the local market. Together with the issuance of 10- and 15-year notes, the Treasury has managed to lengthen the average maturity compared with issuances in previous years. In turn, the Central Bank has moved in the opposite direction, lowering the average maturity to less than four years.

However, despite different maturities, the average interest rate was similar between the two entities in 2020. Given the different objectives of the Central Bank and the Treasury – that is, monetary and exchange rate policy versus refinancing debt obligations or supporting the development of a bond market, respectively – relatively high short-term interest rates for Central Bank securities could undermine the Treasury's ability to achieve lower long-term interest rates in local currency bonds.

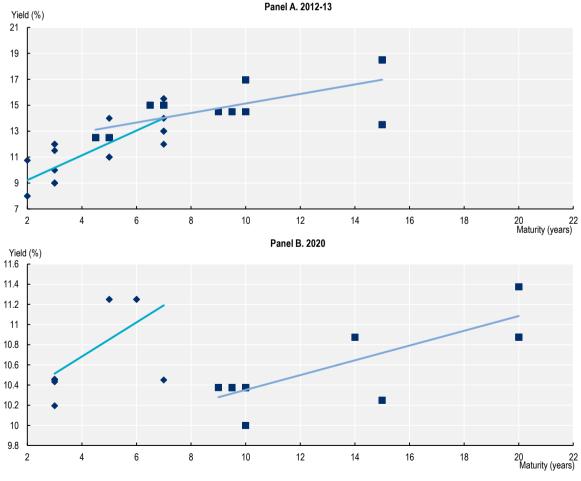


Figure 4.25. Domestic public debt issuances by the Central Bank and the Treasury: Yield and maturity

Source: Ministerio de Hacienda y Banco Central de Republica Dominicana.

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To summarise, while the Central Bank and the Ministry of Finance have made considerable efforts to improve co-ordinated issuances in capital markets (e.g. differentiation regarding debt maturity by both issuers), the cost of debt issuance remains relatively high for the Central Bank compared with that for the Ministry of Finance. This affects the cost of public debt and therefore public finances, as well as the development of the private fixed-income market.

The market of local currency bonds is being developed, but additional efforts are needed

Beyond better co-ordination between the Central Bank and the Ministry of Finance in relation to debt issuances in the domestic bond market, improving the functioning of the local currency bond market is critical, and indeed there have been improvements in this in recent years. A first step was the implementation of a market maker programme (programa creadores de mercado). The main objectives of the programme were to: 1) improve the liquidity and transparency of the local sovereign debt market; 2) reduce the liquidity premium; and 3) develop a yield curve of Treasury debt (Dirección General de Crédito Publico, 2012_[91]).

The main obligations of market makers (MMs) are: to place minimum bids for each security with a spread below 500 bps, underwriting at least 4% of each primary auction; to complete a monthly survey about the programme; to issue a research paper reviewing the recent evolution and perspectives of the primary and secondary markets; and to comply with the Guide of Good Practices and Ethics. In return, there are several benefits for MMs: 1) access to first and second rounds in primary auctions, 2) participation in meetings with the Ministry of Finance to review debt management perspectives, 3) access to liability management operations, and 4) access to external bond auctions.

The evaluation of MMs relies on three indicators: 1) participation in primary market auctions, 2) participation in secondary markets, and 3) "on-screen" liquidity. Each December the DMO evaluates each participant and designates the top seven brokers as MMs. Other market participants enter the programme as market maker candidates (MMCs), with fewer obligations and benefits. MMCs can become MMs if they improve their position in the ranking. According to interviews with authorities from the Treasury, this programme is progressing satisfactorily.

Another important milestone for the local currency debt market is the issuance of external bonds denominated in Dominican pesos. In February 2018, the Dominican Republic issued DOP 40 000 million (USD 833 million) of 5-years external bonds with a coupon of 8.9%. This was the country's first issuance of external bonds in the international markets, reflecting the confidence in the macroeconomic framework, exchange rate stability, and an increasing appetite for risk. In 2019, the Treasury made another issuance of DOP 50 253 million with a 15-year maturity and a 9.75% interest rate. The threefold increase in the maturity of this issuance at a cost of 0.85 percentage points higher than the previous issuance represented significant progress. The issuance of local currency bonds on the external market contributed to reducing the share of foreign currency debt and diversifying the investor base, two of the goals set out in the MTDS for 2016-20.

These issuances were followed by the inclusion of the Dominican Republic in the JPMorgan Government Bond Index-Emerging Markets (GBI-EM) in Q2 2018. Investors view the GBI-EM as a global benchmark of local currency bond allocation. Many investment funds use benchmark indexes to guide their portfolio allocation and to create additional demand for qualified local currency bond issuers. The inclusion of the Dominican Republic in the GBI-EM may have indicated the existence of a benchmark-driven investor base of around USD 340 billion at the time (Arslanalp et al., 2020_[92]).

The future development of the investor base and the increased liquidity in the local currency bond market could be promoted in several ways. A repurchase agreement, or "repo", is a short-term agreement to sell securities in order to buy them back at a slightly higher price. A repo market could increase investors' capacity to invest in long-term bonds. Repos and reverse repos are thus used for short-term borrowing and lending, often with a tenor of overnight to 48 hours, in order to provide temporary liquidity.

Malaysia and Poland are two recent examples of successful implementation of a repo market for local currency bonds (IMF/World Bank, 2021_[93]). The issuance of benchmark medium- and long-term bonds could also provide a reference for the repo market. Such initiatives often require action from a broad range of stakeholders such as the DMO, financial regulators and other policy makers. The market infrastructure should be enhanced accordingly.

Private debt market and mutual funds

New players came into the local private bond market, but it remains underdeveloped

After the global financial crisis of 2008-09, the rise of nonfinancial corporate debt was concentrated in emerging economies. Corporate debt rose almost twice as fast as GDP in emerging economies, from 56% to 96% of GDP between 2008 and 2018 (Abraham, Cortina and Schmukler, 2020[94]). However, the main catalyst for this growth was the expansion in bond issuances in the People's Republic of China and East Asia.

The local private bond market in the Dominican Republic has made some progress in recent years, mainly in terms of better market regulation and diversification of issuers. However, the capital market remains underdeveloped. Since 2013, the total amount of private debt issued as a percentage of GDP has fluctuated between 0.7% and 0.2%, while in LAC countries it has ranged from 25% to 50% of GDP (Abraham, Cortina and Schmukler, 2020_[94]). New issuances reached its higher amount in 2017, with 131 issuances amounting to DOP 23 648 million. Since then, issuances returned to previous levels with minimal participation by USD-denominated bond issuances (Figure 4.26). In 2020, the size of the local private bond market was approximately 20 times smaller than public sector issuances.

One explanation for this trend in issuances on the local market is that large local companies prefer to issue international notes or to access credit facilities or loans in the United States or the international market in foreign currencies. This gives companies access to more liquid and to deeper debt markets, and reduces financing and transaction costs compared with the local market (OECD, 2012_[90]), which is linked to the still high interest rates in the Central Bank's issuances in the domestic market. A recent example of access to the foreign debt market was the case of AES Dominicana, an oil company that in May 2021 executed a liability management operation issuing USD 300 million of 2028 notes at a rate of 5.7%, the lowest ever for a Dominican firm. Other companies, such as Aeropuertos Dominicanos Siglo XXI (AERODOM) and Grupo Diesco, are also active players in the external debt market. Another impediment to issuing bonds domestically is the narrow investor base (IOSCO, 2011_[95]).

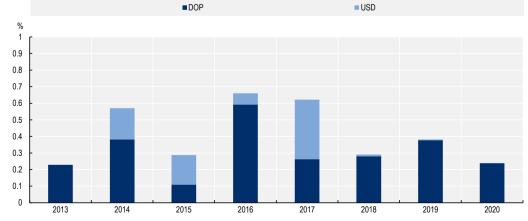


Figure 4.26. Private bond issuances in the Dominican Republic as a share of GDP, 2013-20

Source: Authors' elaboration based on information provided by Dirección de Oferta Pública/ (SIMV, 2021[96]).

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According to the capital markets regulator, the Superintendencia del Mercado de Valores (SIMV), the number of private issuers grew from 24 in 2012 to 32 in 2021, despite the decreasing number of issuances during the later years (SIMV, 2021_[96]). This is probably because international development organisations, such as the International Finance Corporation (IFC) and IDB Invest, issued their first bonds to finance development projects in the Dominican Republic. In 2012, the IFC launched a DOP 390 million bond (the Taino Bond) to support the development of capital markets in the Dominican Republic and increase the availability of local-currency financing for private sector companies. The Taino Bond was the first domestic placement by an international triple-A-rated issuer in the Dominican Republic (IFC, 2012_[97]).

Four years later, the IFC issued another 6.5-year maturity DOP 180 million Taino Bond to support domestic capital markets and boost financing for micro-entrepreneurs in the Dominican Republic. In 2019, IDB Invest, a member of the IDB Group, issued its first bond in the Dominican capital markets in the amount of DOP 500 million (IDB Invest, 2019[98]). The bond, which has a fixed rate of 8.8% and matures in 2022, received interest from local investors, especially pension funds and other institutional investors. In 2020, a securitisation company, TIDOM, made the first issuance of mortgage-backed securities in the history of the Dominican Republic for DOP 1 210.5 million in order to promote the development of a mortgage market (SIMV, 2020[99]).

Other sectors (e.g. construction, oil and mining) have also entered the market. The main issuers come from the financial sector (61% of total issuances between 2013 and 2020) and electricity and road maintenance companies (34% of total issuances between 2013 and 2020) (Figure 4.27). The electricity companies mainly issued foreign currency-denominated bonds. As previously noted, the issuance of USD-denominated bonds is mostly recommended to companies whose income is at least partially generated in foreign currency, as it reduces exchange rate risks in its balance sheet and hence the cost of financing. Most of the bonds (86% of the total) were issued with a maturity greater than five years, demonstrating that the private market allows companies to obtain medium-term financing (SIMV, 2021[96]).

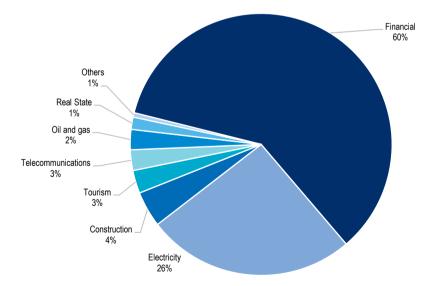


Figure 4.27. Local private bond public offerings by economic sector, 2012-Q1 2021

Source: Authors' elaboration based on information provided by Dirección de Oferta Pública/ (SIMV, 2021[96]).

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Another recent development in the local capital market since 2012 is the creation of the mutual fund industry in the Dominican Republic. The first mutual fund was approved in 2012; since then, 56 mutual

funds have been approved (22 closed funds and 34 open funds), reaching DOP 3 701 million in assets under management (3.5% of GDP on average). Fixed income funds are the predominant players in the market (51.8% of approvals), followed by development funds (26.8%) and real estate funds (19.6%). Shareholders of mutual funds have also skyrocketed since 2015, when mutual funds only had 1 861 shareholders. As of 2022, 26 768 individuals and firms have invested in mutual funds, a 14-fold increase since 2015 (Figure 4.28) (SIMV, 2021[96]).



Figure 4.28. Mutual funds (2013-21): Assets under management and shareholders

Market turnover has also increased substantially. According to recent data provided by the SIMV, centralised market's turnover reached 82% of GDP in 2020, four times higher than in 2012. Transactions have also risen by 1 147% between 2012 and 2020. Both indicators demonstrate a positive trend in liquidity fuelled by the growth in issuances of public and private bonds and by the new industry of mutual funds (SIMV, 2021[96]).

A new securities law was passed to improve minority investor protection and market functioning

On the regulatory side, a claw (Law 249-17) to improve the functioning of the stock market and companies in the Dominican Republic was passed in 2017, strengthening the protection of minority investors by increasing the independence of the boards of directors of public companies. The enhancements for minority investors and corporate governance were acknowledged by the *Doing Business 2019* report. In this respect, the Dominican Republic managed to climb 13 positions in the Minority Investor Protection indicator (Superintendencia del Mercado de Valores, 2018_[100]). The law also promoted the use of centralised systems of compensation and liquidation of orders, improving price formation and liquidity.

In October 2019, an additional regulation, based on Law 249-17, was issued by the National Council of Securities Markets to regulate public offering of fixed income and equity. It specified the role and obligations of the issuers, the structurers, and the regulator (SIMV) during the issuing process and once placed on the market.

Law 249-17 and the related regulations have benefitted greatly from consultations with several key stakeholders such as the Central Bank, the Ministry of Finance, the Stockbroker Association (APB), the

Source: Authors' elaboration based on information provided by Dirección de Oferta Pública/ (SIMV, 2021₁₉₆₁).

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Dominican Association of Investment Fund Management Companies (Asociación Dominicana de Sociedades Administradoras de Fondos de Inversión, ADOSAFI), the Dominican Stock Exchange (Bolsa de Valores de la República Dominicana; BVRD), the local securities depository (CEVALDOM), and relevant stockbrokers. The legal framework is based on best practices recommended by the International Organization of Securities Commissions (IOSCO). As part of the ongoing efforts to continue improving regulatory and compliance standards, the SIMV signed a Memorandum of Understanding of technical assistance with IOSCO in 2018.

The process of public offerings has been shortened; the regulatory authority has 3 business days to check if a request is complete and a maximum of 25 business days to formally respond. This period could be extended by another 25 business days, if required. The response time to authorisation requests, once completed, averages 21 business days, a major improvement on the 90 days that a successful authorisation might have taken before the legal reform.

The regulation also includes a faster reviewing process for frequent issuers (issuers who have had a previous issuance in the last 12 months) and for issuances restricted to institutional or professional investors. In these cases, the regulatory body must answer within ten business days after the initial review period of three days. It should be noted that the average approval time for applications by frequent issuers has been 7 business days since 2020, which is a considerable reduction from the previous time of up to 90 days and should contribute to improving the efficiency and development of the domestic private market. Standardised forms and manuals were published to contribute to a better performance of the requests.

In November 2020, the SIMV also signed a co-operation agreement with the Superintendencia de Bancos (Banking Superintendency), the Superintendencia de Seguros (Superintendency of Insurance) and the Superintendencia de Pensiones (Superintendency of Pensions) in order to simplify and review the documentation of public offerings. This agreement includes a single window for public offerings so that financial institutions and other regulated entities can make a single request on a public offering, reducing approval time and enhancing transparency.

Issuances of SMEs are promoted by specific requirements of financial information to lower the barriers to accessing the market. Credit rating assessment is not required if the total public issuances by an SME do not exceed DOP 60 million.² The new framework also redefined retail investors as those whose offer in the primary market is less than DOP 2 million, or USD 40 000,³ in primary market auctions. The participation of such investors is prioritised in primary market auctions and retail investors have priority to subscribe up to 30% of issuances with an investment grade rating. After the allocation to retail investors, the remaining amount will be available to investors in general (including retail investors).

The regulation also laid the foundations for further innovations in the domestic market, such as green and social bond issuances and integration with foreign stock markets. In 2020, the regulator issued guidelines for the issuance of green, social, and sustainable bonds. These enhancements encouraged EGE Haina, an electricity producer, to become the first Dominican issuer of green bonds (USD 100 million) in April 2021. A green bond is a debt security that is issued to raise capital specifically to support climate-related or environmental projects. This specific use of the funds raised distinguishes green bonds from regular bonds, and investors also assess the environmental purpose of the projects that these bonds intend to support (World Bank, 2015_[101]).

Recent reforms in the stock market solved the regulatory issues identified in previous studies (OECD, 2012[90]), promoting better investor protection, market functioning and the primary market placement process. The process of new issuances has been considerably shortened and transaction costs have been reduced, with additional benefits for frequent investors and SMEs. Co-ordination between regulatory agencies and standardisation of forms also boost both private and public offerings. New regulations also promoted the issuance of green, social, and sustainable bonds, which, given the growing importance of the climate change agenda in the international investor community, are key to diversifying the private investor base and promoting environmentally focused investment projects.

Pension funds continue to invest a large portion of their portfolios in public sector bonds. This bias reduces the liquidity of the private bond market and hinders the availability of funding for private sector investment. As recognised in previous reports (OECD, 2012[90]), this trend is a long-term problem and appropriate incentives in the regulation of pension fund portfolios could be a step towards stronger demand for private bonds in the Dominican Republic.

Trading in foreign stock markets is allowed under the new regulatory framework. However, further steps should be taken to integrate the local stock market into regional initiatives. Regional institutions such as the Central American Monetary Council have been co-ordinating efforts to harmonise capital markets, with some success. In 2007, the Asociación de Mercados de Capitales de las Américas (Capital Markets Association of the Americas, AMERCA) initiative was announced by the stock markets of Costa Rica, El Salvador and Panama. The integration of stock markets provides efficiency gains through economies of scale and lower financing costs for the private sector.⁴

Policy recommendations

Box 4.4. Policy recommendations

Policy objective 1: Strengthen tax revenues by restructuring the tax mix

1.1 Rebalance the tax structure to increase the share of direct taxes and the level of progressivity:

- Launch a technical and political discussion on the feasibility of decreasing the minimum taxable personal income, so that high-income deciles are effectively included.
- Explore the potential of personalised VAT (ITBIS) as a way of increasing the overall revenues from these taxes while compensating low-income taxpayers and thus reducing the regressive nature of VAT.

1.2 Enhance the revenue potential of other taxes:

- Strengthen property registries in order to boost revenues from property taxes by: 1) moving towards a unified and simplified property registry with an up-to-date land and property registration in central cadastres, and 2) reducing information asymmetries in immovable property; closing the gap between the appraised value and the market value is a key priority and an adjustment that needs to be regularly performed.
- Explore the potential of new taxes adapted to the emerging economy, such as digital and green taxes, which serve the dual purpose of raising revenues while creating the incentives for a greener and more digitalised development model.

Policy objective 2: Rationalise tax exemptions in order to raise revenue capacity and improve the overall impact of the tax system in terms of equity, efficiency and simplicity

2.1 Rethink tax exemptions on main sources of revenue:

Rethink VAT (ITBIS) exemptions in order to improve efficiency and reduce its regressive impact

 for example, exemptions applied to financial services or to the imports of low-value goods, or
 exemptions on certain non-essential goods and services such as those related to tourism or
 certain cultural products. Measures aimed at reducing VAT exemptions should be accompanied
 by clear measures to compensate lower-income groups, such as direct cash transfers or the
 targeted reductions of social security contributions.

• Evaluate PIT deductions, such as exemptions for educational expenditure, which can be regressive.

2.2. Evaluate the overall impact of special economic regimes and consider a gradual phasing out of those where the costs – in terms of forgone tax revenues – outweigh the benefits:

- Rethink tax incentives associated with special economic regimes through periodical assessments in order to ensure that their distributional and efficiency implications are evaluated regularly.
- Include an analysis in tax expenditure reports of how these incentives contribute to key development objectives such as economic growth, job creation or supporting lower-income groups.
- Limit the potential arbitrariness associated with special economic regimes by, for example, strengthening the criteria for admitting companies; rethinking the governance of these regimes in order to balance the distribution of power; including all tax expenditures in the tax code; or giving the Ministry of Finance the main responsibility for granting all these incentives.

Policy objective 3: Fight tax non-compliance

3.1. Use digital tools to fight evasion and to leverage existing international agreements:

- Expand the use of e-CF and advance towards making it compulsory, and work to strengthen the implementation of the destination principle.
- As a member of the OECD/G20 Inclusive Framework on BEPS, implement the two-pillar solution in order to address the challenges of digitalisation and globalisation.

3.2. Use digital tools to increase tax compliance through the simplification of the tax system or a better taxation of digital trade:

- Launch information campaigns, increase efforts to raise awareness, and use nudges, all of which can have an impact on lowering tax non-compliance.
- Adopt recommendations from the OECD/WBG VAT Digital Toolkit for Latin America and the Caribbean, aimed at addressing the VAT challenges of the digital trade.
- Use new technologies to cross-check information (for example, large-scale automated data and cross-checking of PIT against information from online vendors), as this could help reduce tax evasion.

Policy objective 4: Improve the quality and efficiency of public expenditure

- Improve the targeting of social programmes, strengthen the interoperability of existing registries, and make use of measures of vulnerability at the household level and of innovative ways of giving cash transfers to informal workers. Having a small number of well-implemented programmes is preferable to, and more cost-efficient than, having numerous overlapping programmes.
- Accompany new policies with ex ante evaluations led by the central budget authority. Ex ante evaluations can help guide budget allocations in order to increase efficiency, improve the design of future policies, and increase transparency by providing a level of accountability to citizens.
- Strengthen solid fiscal frameworks. Instituting a multi-year budgetary framework that includes a
 fiscal rule can promote greater transparency and protect capital investment as well as key social
 spending at different stages of the economic cycle or against possible internal or external
 shocks. A fiscal rule could set guidelines to achieve budget balance and/or for the evolution of
 debt, revenues and expenditures.

Policy objective 5: Implement a fiscal pact to support the recovery and build a more inclusive and sustainable financing model in the Dominican Republic

 Build a holistic and well co-ordinated fiscal strategy for the recovery, backed by a broad consensus, and advance towards the objective established in the National Development Strategy 2030 of increasing tax revenues to 21.5% of GDP by 2025 and 24% of GDP by 2030.

Policy objective 6: Strengthen the banking system to channel financial resources to productive activities and increase financial inclusion

- Pursue the convergence of regulatory standards to international standards such as NIIF and Basel III standards, in order to preserve the banking system solvency and liquidity and allow the financial system on the whole to act countercyclically in the face of external shocks.
- Seek further reductions of real lending interest rates to promote investment and long term growth, through increased competition among banks and other financial institutions, including by promoting Fintech or digital banks.
- Advance in an ambitious National Strategy for Financial Inclusion.

Policy objective 7: Deepen and further develop the public and private debt market in the country

- Elaborate a new Medium Term Debt Strategy (MTDS) with new guidelines which reflect the new environment after the COVID-19 shock and the lessons learned from the previous MTDS (2016-2020) to enhance the risk management and planning capabilities of the Debt Management Office.
- Continue strengthening the co-ordination between the Treasury, the Central Bank, and other regulatory bodies like the Superintendencia de Valores in the local market to lower lending interest rates, promote long term bond liquidity and continue diversifying in the investor base.
- To advance in efforts to develop a local-currency risk-free bond yield curve, and developing the private debt market in a sustainable manner, promoting the diversification of the investor base through appropriate changes in pension fund and mutual portfolio regulations and tax incentives for individuals.

Notes

¹ The ETR can be calculated using forward indicators, synthetic tax policy indicators (calculated using information about specific tax policy rules), or backward indicators (calculated by dividing actual tax payments by profits earned over a given period) (OECD, 2020_[24]).

² This amount is indexed to inflation on an annual basis.

³ The previous thresholds to be considered a retail investor were DOP 0.5 million or USD 10 000.

⁴ For a detailed analysis of financial integration efforts in Central America, see Barboza (2013).

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5 Achieving digital transformation for inclusive and sustainable development in the Dominican Republic

> The digital transformation has the potential to improve productivity, foster inclusiveness, help tackle climate change, and transform public institutions. However, if not accompanied by an adequate policy mix, the digital transformation can also deepen existing inequalities and create new gaps. This chapter analyses where the Dominican Republic stands in its efforts to advance a digital transformation, and provides policy recommendations to make this a driver of greater well-being for all. In particular, the chapter analyses key dimensions for the digital transformation of households and schools, as two fundamental areas where technologies can play a role in favouring inclusion and reducing socioeconomic inequalities. It also examines how the digital transformation can be a driver of greater productivity, improving the adoption of new technologies by firms, and what policies will help in making the most of the digital transformation of labour markets. Finally, this chapter argues in favour of a strategic vision of the digital transformation, so that digital issues are addressed in a holistic and coherent manner.

Introduction

The digital transformation represents a profound and impactful global trend that could bring enormous opportunities for inclusive and sustainable development in the Dominican Republic. Indeed, digital innovation has the potential to improve productivity, foster inclusiveness, help tackle climate change, transform public institutions and increase the overall well-being of citizens. However, if not accompanied by an adequate policy mix, the digital transformation can also deepen existing inequalities and create new gaps, generating digital divides that could be a source of exclusion and aggravate structural development challenges in the country (OECD et al., 2020[1]).

The coronavirus (COVID-19) crisis has been a good example of some of the opportunities and challenges brought about by the digital transformation. Digital technologies allowed part of the population to keep working or studying, and allowed certain companies to continue operations while complying with social distancing measures. However, most vulnerable households, workers and companies have struggled through the pandemic and have not had the chance to benefit from these digital opportunities. The affluent and middle-class populations are more likely to be connected and to have integrated digital technologies into their work, educational and family life. Conversely, the poor and vulnerable populations are more likely to have little or no digital access or skills, and are left without the opportunity to telework or sell goods online, while their children may be unable to continue learning remotely (OECD et al., 2020[1]).

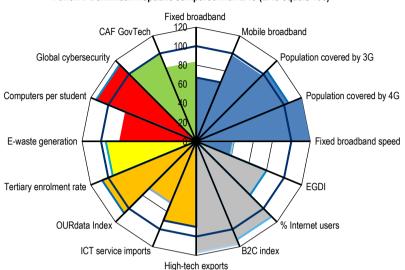
In recent years, Latin America and the Caribbean (LAC) has become a hub for digital innovation and homegrown start-ups. Foreign companies have also expanded into the region and helped the market expand. The LAC region is now home to 23 "unicorns" (start-up companies that are valued at more than USD 1 billion [United States dollars]), including Colombia-based Rappi and Brazil-based iFood (Crunchbase, 2021_[2]). These examples help demonstrate that there is great scope to continue to expand the benefits of the digital transformation for micro-, small- and medium-sized enterprises (MSMEs), which represent 99.5% of all companies in the region and 61.2% of employment (OECD et al, 2021_[3]).

The Dominican Republic can benefit greatly from the digital transformation, both in recovering from the COVID-19 pandemic and in supporting inclusive and sustainable development in the longer term. Not only does the digital transformation hold an enormous development potential, but failing to embrace it could leave the Dominican Republic behind in a world that will inevitably become more digital, and could thus represent a missed opportunity to "leapfrog" and accelerate development in the country.

Embracing the digital transformation and making it work for all in the Dominican Republic will require strong policy ambition. In 2021, Decree 71-21 created the Gabinete de Transformación Digital (Digital Transformation Cabinet) – which is in charge of developing a new Digital Agenda 2030 – and the national dialogue on digital transformation (*Dialogo de las reformas 2021: Transformacion Digital*) was initiated; these two events provide good evidence of the political commitment to enable a digital transformation in the country (Consejo Economico y Social, 2021_[4]). In this light, this chapter analyses the main challenges and opportunities that the digital transformation could present for the Dominican Republic in order to make policy recommendations that will allow the digital transformation to be a catalyst for more inclusion and greater well-being for all.

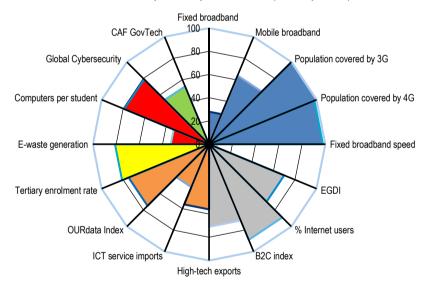
Progress towards a digital transformation in the Dominican Republic shows mixed results. The Organisation for Economic Co-operation and Development's (OECD's) Going Digital framework provides a framework based on seven key dimensions, which allows for a snapshot of the progress the Dominican Republic has made towards the digital transformation in comparison with the LAC and OECD member country averages (Figure 5.1) (OECD, 2019^[5]). The number of fixed broadband subscriptions (per 100 inhabitants) and of active mobile broadband subscriptions, two key indicators for enhancing access, improved significantly in the Dominican Republic between 2008 and 2018, yet these figures are below the OECD member country average. Similarly, the country is also continuing to improve and reduce the gap with respect to the share of Internet users in comparison with the OECD member country average.

Figure 5.1. Going Digital framework indicators for the Dominican Republic relative to LAC and the OECD, 2020 or latest year available



Panel A. Dominican Republic compared with LAC (LAC equals 100)

Panel B. Dominican Republic compared with OECD (OECD equals 100)



Note: Based on selected indicators from the country notes adapted from the OECD's Going Digital project. Indicators were chosen depending on data availability for LAC countries. The border of the circle represents outcomes that are better for the Dominican Republic for a given indicator than the LAC (Panel A) or the OECD (Panel B) average. The full names of the indicators (clockwise from the top) are: fixed broadband subscriptions (per 100 inhabitants); proportion of the population covered by at least 3G network; proportion of the population covered by at least 4G network; fixed broadband speed (in megabits per second [Mbps]); E-Government Development Index; share of Internet users (as a percentage of the population); UNCTAD B2C E-commerce Index; high-technology exports (as a percentage of manufactured exports); share of information and communications technology (ICT) service imports (as a percentage of total trade in services); OECD OURdata Index; gross tertiary enrolment rate; e-waste generation per capita (in kilogrammes [kg]); number of students per computer; Global Cybersecurity Index; and the CAF GovTech Index. The LAC average is derived from different countries depending on the data availability for countries in LAC. Each calculation includes as many countries in the region that were found in each source as possible. The full list of countries considered is: Argentina, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Mexico, Panama, Paraguay, Peru and Uruguay.

Source: Authors' calculations based on (OECD, 2019[5]).

Other key indicators of effective use show that, despite also making strides in the last decade, performance is below the OECD standards (see E-Government Development Index and United Nations Conference on Trade and Development (UNCTAD) Business-to-Consumer (B2C) E-commerce Index) (Figure 5.1). Digital innovation remains a key area for improvement; high-technology exports (as a percentage of manufactured exports) continue to lag behind the OECD member country and LAC averages. The Dominican Republic has an average tertiary enrolment rate that is comparable to the LAC average, but is still below the average among OECD member countries. In terms of an inclusive digital society, the Dominican Republic has increased the number of computers per student; however, this is also still below the OECD average. The Global Cybersecurity Index illustrates that there is room for improvement in the LAC region as a whole in terms of strengthening trust.

This chapter has four sections. The first focuses on the digital transformation in households and schools, with a particular focus on the potential for inclusiveness brought about by digital technologies and by making these accessible and useful for all, hence overcoming existing digital divides. The second section focuses on the digital transformation for workers and companies, with an emphasis on the potential of digital technologies to promote productivity growth and production transformation, as well as the creation of better-quality job opportunities. The third section acknowledges that policy efforts to embrace the digital transformation must move beyond a sectoral approach, adopting a co-ordinated, coherent and transversal strategic view. In this respect, the development of a well-designed digital agenda that is aligned with the broader National Development Strategy is a key factor for a successful digital Agenda and reinforced the importance of harbouring a digital ecosystem in the Dominican Republic (Consejo Economico y Social, 2021_[4]). Similarly, international co-operation is needed in order to reach the full potential of digital transformation. Finally, the fourth section presents the main conclusions and policy recommendations for key areas of action in order to make the digital transformation work for all in the Dominican Republic.

Making the digital transformation work for households and schools in the Dominican Republic

Ensuring that the entire population has access to the Internet and digital services, and has the capacity to make good use of them, is a basic and necessary step towards ensuring that the digital transformation benefits everyone. In most developing countries, the primary barriers to mobile Internet adoption are affordability; knowledge and digital skills; lack of relevant content and services; and access to enablers (OECD, 2021_[6]). Although the Dominican Republic has made significant strides in the last decade, as evidenced during the COVID-19 crisis, there are still important digital divides across different segments of society and the country still lags behind LAC and OECD member countries in various dimensions. This section analyses where the Dominican Republic stands based on key indicators for a digital transformation that benefits all households and schools.

The digital transformation for households

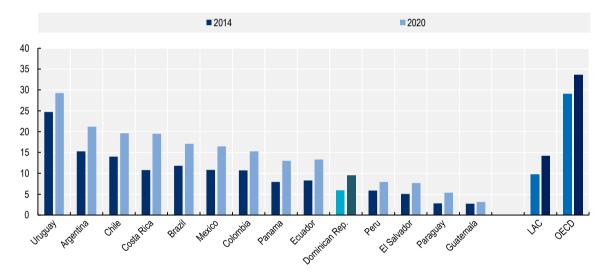
More people are connected to the Internet than ever in the Dominican Republic, a trend that should continue. However, gaps in access and use persist, both internally (across territories, as well as between socio-economic, age and gender groups) and in comparison with other LAC countries and the OECD. The COVID-19 crisis has shown that households with fewer ICT resources were more likely to be affected by the crisis. Policy action must not only focus on continuing to increase connectivity and access, but must also ensure that improvements are well-distributed across socio-economic groups. The Dominican Republic's 2030 Digital Agenda highlights the importance of these dimensions, listing connectivity and access as one of the five main pillars for the digital transformation in the country, with a focus on improving fixed broadband infrastructure and reducing the divide between urban and rural areas.

In addition, the *Plan Nacional Plurianual del Sector Publico 2021-2024* emphasises the need to reduce the digital divide by improving access, increasing use of digital devices and improving ICT (MEPYD, 2021[7]).

Access and use have improved significantly

The Dominican Republic made improvements in terms of fixed broadband connections from 2014 (5.9 connections per 100 inhabitants) to 2020 (9.5 connections per 100 inhabitants); however, it still finds itself well below the averages for the LAC (14.2 connections per 100 inhabitants) and OECD member countries (33.6 connections per 100 inhabitants) (Figure 5.2). Access to the Internet can also be analysed at the household level, under the assumption that each fixed broadband connection can be utilised by all the members of a household. In particular, only around 32% of households had access to a fixed broadband connection to the Internet in 2018, below the LAC (42%) and world (55%) averages, despite significant improvements between 2014 and 2018 (ONTIC, $2020_{[8]}$). These results highlight the need for policy to continue to emphasise the importance of providing access and connectivity to all in order to close these regional and global gaps.





Source: Authors' elaboration based on (ITU, 2021[9]).

In the last decade, pathways to the Internet continued to increase in volume and mobile connections emerged as one of the leading alternatives, especially in developing countries. The Dominican Republic continues to improve in the share of active mobile broadband subscriptions per 100 inhabitants, which jumped from 31.2 subscriptions in 2014 to 70.9 subscriptions in 2020, but is still below the averages for LAC countries (72.1 subscriptions) and OECD member countries (110.9 subscriptions) (Figure 5.3).

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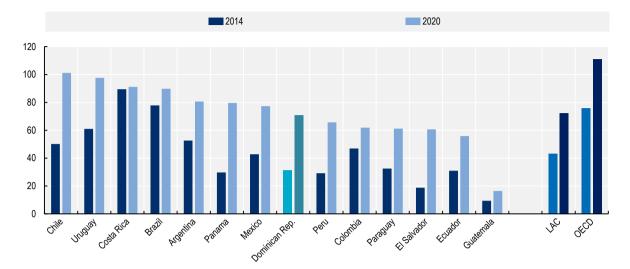


Figure 5.3. Active mobile broadband subscriptions per 100 inhabitants in the Dominican Republic, selected LAC countries, and the OECD

Source: Authors' elaboration based on (ITU, 2021[9]).

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The prevalence of mobile phones in society suggests that building a strong mobile broadband network can be an effective method of ensuring Internet access for all. This is the case in the Dominican Republic, where 80% of mobile broadband Internet access is through cellular devices (INDOTEL, 2021_[10]). This is similar to the trend in other LAC countries, where the number of active mobile broadband subscriptions in 2018 was more than five times higher than the number of fixed broadband subscriptions (OECD et al., 2020_[1]).

The expansion of fixed and mobile broadband in the Dominican Republic has led to a significant increase in the overall numbers of Internet users. As of 2020, the Dominican Republic had one of the highest rates of Internet users in the LAC region, with rates of Internet access above the regional average. Since 2010, the percentage of Internet users in the Dominican Republic has more than doubled, from 31.4% to 76.9%, around ten percentage points below the OECD average (Figure 5.4). This percentage represents the proportion of individuals aged five years or over using the Internet, based on results from national household surveys. From December 2019 to December 2020, the total number of Internet accounts in the Dominican Republic increased by 15.9%, while from December 2020 to December 2021, this number increased by 8%, reflecting the demand for digital tools during the COVID-19 pandemic (INDOTEL, 2021[10]).

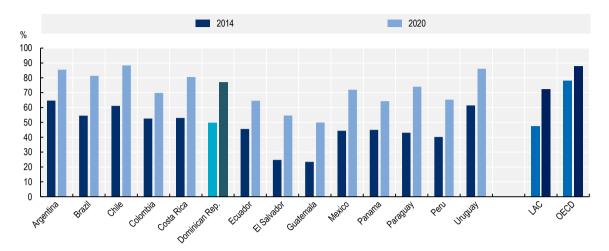


Figure 5.4. Share of Internet users in the Dominican Republic, selected LAC countries, and the OECD

Source: Authors' elaboration based on (ITU, 2021[9])

Ensuring that people can access the Internet through mobile broadband subscriptions is crucial and has numerous benefits, but should not be viewed as a substitute for making fixed broadband connections available and affordable for all households. Advances in mobile networks open the door for users to take advantage of a growing number of services and applications, while increased 3G and 4G network coverage enables them to exchange information at rapid speeds. However, mobile broadband should still be viewed as a complement to fixed broadband, which generally delivers a relatively larger bandwidth, higher speeds and better quality. Due to the difference in speeds, fixed broadband can be a cheaper alternative for streaming videos, downloading large files, teleworking or doing complex tasks online. Furthermore, usage caps are often applied to mobile broadband services, whereas fixed broadband is relevant from a policy perspective, as it has been shown to have a positive impact on welfare, increasing consumption while reducing levels of both poverty and extreme poverty (World Bank, 2020_[12]). Local reports also suggest that large spikes in Internet usage during work hours are due in part to individuals who connect to public networks from their mobile phones, as they are not able to afford an Internet connection at home.

In order to bring more people online, the Dominican Republic must continue to invest in and prioritise communication networks while it further advances its agenda to expand access to fixed broadband. In particular, the National Broadband Plan of 2020 stated that universal access to the Internet is a human right and gave the Dominican Institute of Telecommunications (Instituto Dominicano de las Telecomunicaciones; INDOTEL) the responsibility for co-ordinating and implementing this vision, as per Decree 539-20. The Decree also required the necessary actions to be taken to guarantee that bandwidth frequencies of 700 megahertz (Mhz) would be available for public tender by the end of 2021 and instructed the Dominican Electricity Transmission Company (Empresa de Transmisión Eléctrica Dominicana; ETED) to continue developing the national fibre-optic network to ensure its availability everywhere. Another important project is "Conectar los no conectados" ("Connect the unconnected"), which aims to provide Internet access and services to rural populations by supplying affordable 4G connections and subsidising demand for cellular devices, especially for single mothers who are heads of household.

In addition, the Digital Agenda 2030 sets specific connectivity targets, particularly to increase the Dominican Republic's score on the Broadband Development Index (Índice de Desarrollo de la Banda Ancha; IDBA) – which takes into account relevant public policy, regulation, infrastructure and application

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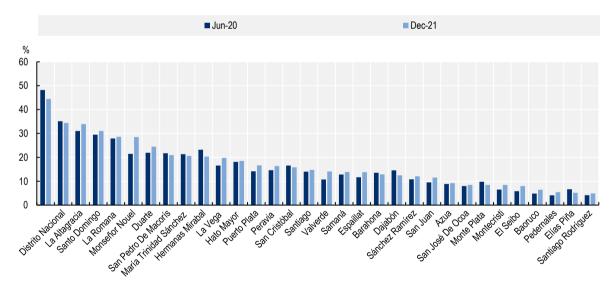
- from 5.6 to 6.4 by 2027 and to 7.1 by 2030 (IBD, 2018[13]). The Dominican Republic currently scores higher than the LAC average of 4.7 but below the OECD average of 6.3 on the IDBA. IDBA scores range from 1 to 8, where 1 indicates a poor state of bandwidth development in a country and 8 indicates exemplary development.

Digital divides persist and have become particularly evident throughout the COVID-19 pandemic

While the Dominican Republic has experienced a rapid expansion of connectivity, disparities in access and usage across territories, socio-economic status, age and gender persist, and these may have been exacerbated during the pandemic.

Territorial disparities represent one of the major inequalities in the Dominican Republic's digital transformation. In fact, the share of households with access to Internet ranges from 44.4% in highly populated and developed provinces such as the Distrito Nacional or 34.4% in La Altagracia, to the low levels of connectivity in smaller, less developed provinces, such as Elías Piña (5.4%) or Independencia (4.9%). There is a difference of 45.8 percentage points between the region with the highest share of households with Internet connectivity and the region with the lowest share (Figure 5.5).

Nine out of the 32 provinces in the Dominican Republic do not reach the 10% threshold of households with Internet (Figure 5.5). Similar results are found for individuals with fixed broadband connections, where significant territorial differences persist.



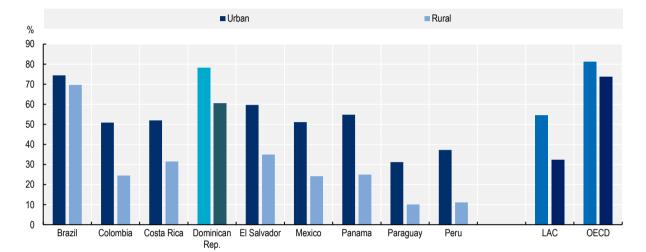


Note: "Internet account" refers to the total number of accounts by province. The number of households in the province was calculated using the relevant population data and the average household size in the Dominican Republic. Source: Authors' calculations based on data from (INDOTEL, 2021_[14]).

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Territorial disparities in the Dominican Republic tend to be similar to those in other LAC countries. In 2018, there was a significant divide in the number of computer users between urban and rural areas. The share of computer users in the Dominican Republic was 78.1% in urban areas and 60.5% in rural areas, i.e. a 17.6-percentage-point difference. However, both percentages are above the LAC average, at 54.4%

and 32.4%, respectively (Figure 5.6). Addressing the urban–rural divide in connectivity is a critical issue whose importance has been exacerbated by the COVID-19 pandemic, not only in the Dominican Republic but generally across the LAC region. Those with a cellular device and broadband connection at home were able to telework, study, access telemedicine and shop for goods, putting such individuals at a considerable advantage compared with the most disadvantaged and disconnected segments of the population. Investing in digitalisation in rural areas has important implications; for example, real-time payment solutions and smart contracts would fundamentally enhance the agriculture sector and improve its efficiency while also enhancing rural–urban supply chains (OECD et al, 2021_[3]).

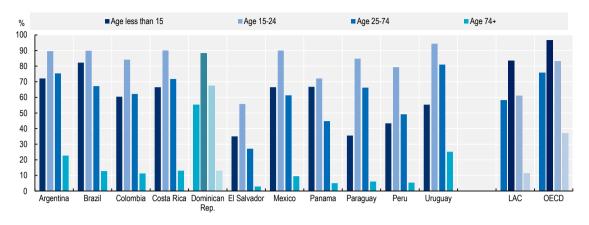




Source: Authors' elaboration based on (ITU, 2021[9]).

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Significant connectivity gaps exist across age groups in the Dominican Republic. Because they use computers and the Internet less, those in older age groups take less advantage of opportunities for connectivity than those in younger generations. The share of individuals using the Internet reached 88.2% in 2017 for those aged 15-24 years, while it fell to 67.5% and to 12.9% for those aged 25-74 years and over 74 years, respectively (Figure 5.7). While these figures are not particularly different from the LAC average, they are clearly well below the OECD levels.





Source: Authors' elaboration based on (ITU, 2021[9]).

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Gender gaps in terms of ICT use are relatively small in the Dominican Republic, with a slightly larger share of females using computers than males. Gender-related divergences are evident in other key areas such as access to digital skills or the specific uses made of ICT devices. In fact, recent studies in LAC show a gender gap with regard to individuals who conduct online transactions (20% of men and 15% of women) and who work with spreadsheets (24% of men and 20% of women) (OECD et al., 2020[1]).

Persisting digital divides across different socio-economic dimensions underline the need to develop broadband policies in order to reach the most disadvantaged populations. Territorial connectivity is a key challenge that demands ambitious targeting of remote areas with quality broadband at affordable prices. This digital transformation is particularly challenging for older generations, and specific policies should be aimed at these segments of the population in order to train and then retrain them so that they can benefit from digital technologies and participate effectively in the labour market. This also emphasises the importance of developing digital skills at an early age. Gender and income divides are also profound, providing evidence that the digital transformation still does not sufficiently promote inclusion, but rather perpetuates deeply ingrained inequalities. The COVID-19 pandemic has accentuated these digital divides, demonstrating the consequences of uneven access to Internet connectivity and underscoring the importance of an ambitious national policy to provide connectivity for all households.

Availability, affordability and quality of digital devices remain challenges to greater connectivity in households

Beyond the need for available and reliable broadband networks, it is equally important that individuals have devices that enable them to access digital services. Mobile phones, which are crucial in connecting individuals to the Internet, are the most prevalent digital device in the Dominican Republic (INDOTEL, 2021_[10]). It must be noted, however, that older devices generally offer fewer benefits due to higher latency (the delay between transmission of a signal and when it reaches the receiving device) and lack of compatibility with new apps and software.

The availability of computers and other devices is a critical aspect of the digital transformation. In 2018, 26.7% of households in the Dominican Republic had computers, which is below the LAC (43.2%) and global (48.8%) averages (Figure 5.8, Panel A).

The distribution of access to digital devices across socio-economic groups shows significant divergences in the Dominican Republic. Among low-income groups, only 2.1% of individuals had access to a computer

in 2018, compared with 42.9% among high-income groups. Access to mobile phones is more widespread, although there are also significant gaps: in 2018, 55.3% of those in very-low-income groups had a mobile phone, compared with 84.8% of those in high-income groups (Figure 5.8, Panel B).

Recent plans have focused on increasing the number of digital devices that are given to students. In 2021, 19 000 devices were provided to students in the Espaillat province and an additional 55 000 devices were provided to students in San Pedro de Macorís. In 2020, more than 100 000 devices were given to students in Santiago to help guarantee effective remote learning during the COVID-19 pandemic (Hoy Digital, $2020_{[15]}$). Plans to increase computer usage among students could follow the example of the "one laptop per child" programmes that have been implemented in other LAC countries (such as Peru and Uruguay) with mixed results. In particular, accompanying the distribution of digital devices with training for both teachers and students seems to be a critical factor in making them a true catalyst for improved learning outcomes (OECD et al., $2020_{[11]}$).

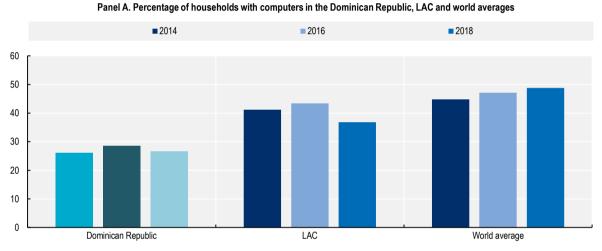
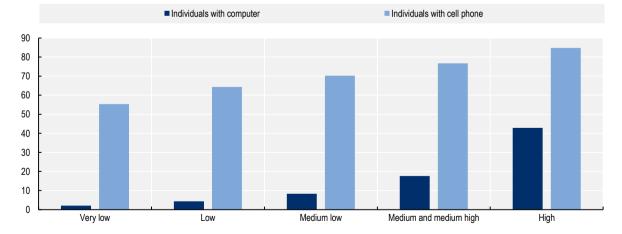


Figure 5.8. Households with computers and device usage, by socio-economic group

Panel B. Individuals with computers or cell phones by socio-economic group in the Dominican Republic



Note: The LAC average for 2018 is based on a smaller number of countries than previous years. Source: Authors' elaboration based on (ONTIC, 2020[8]) for Panel A. and on (ENHOGAR, 2018[16]) for Panel B.

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In order to reach every individual, especially those in lower socio-economic groups, plans must be put in place to ensure that an Internet connection is affordable for everyone. The 1998 General Telecommunications Law No. 153-98 laid the groundwork for this, declaring affordable pricing as one of its main objectives (IDB, 2020_[17]). However, in 2015, 38% of households without Internet listed high prices as the primary reason (ENHOGAR, 2015_[18]). Similarly, the Dominican Republic ranked 34th out of 65 countries for fixed broadband affordability (calculated as dollars per month in terms of purchasing power parity) and 42nd for mobile broadband affordability, below the OECD average in both cases and indicating the need for further improvements (IDB, 2020_[17]). In 2020, the Dominican Republic ranked eighth out of 31 LAC countries (using purchasing power parity) for fixed broadband baskets. However, the country is one of the most expensive for both low- and high-speed mobile data (ITU, 2021_[19]).

The Digital Agenda 2030 emphasises the importance of affordability, highlighting the high prices of telecommunications services as one of the major areas of improvement needed in order to boost connectivity. The affordability index used in the Agenda indicates that 1 gigabyte (GB) of data currently costs 1.23% of the average household income, below the LAC average of 2.64% (Figure 5.9). However, this cost per GB may be masking the particular difficulties that low-income households face in affording Internet connectivity. The goal is to reduce this figure to 0.66% by 2030. Due to the prevalence and importance of mobile broadband in the Dominican Republic, it is critical that mobile data be made affordable and available to all. In 2021, the cheapest plans providing at least 5GB of monthly high-speed data cost USD 18.10, up from USD 17.00 in 2020. These results are also below the regional average of USD 28.00 for 2021 (ITU, 2021_[19]).

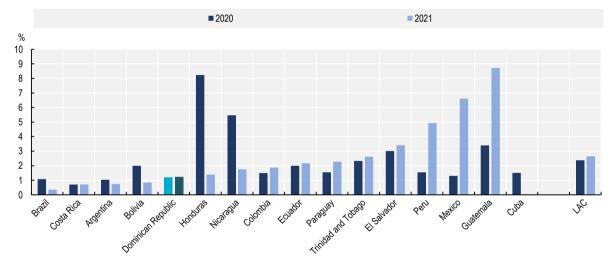


Figure 5.9. Affordability index in the Dominican Republic and selected LAC countries

Source: Authors' elaboration based on (A4AI, 2021[20]).

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High-speed Internet connectivity is a crucial component of the digital transformation and is key to providing citizens with the opportunity to make sophisticated use of digital technologies for work, learning and accessing public services. Similarly, as the digital transformation progresses globally, it is vital to install compatible infrastructure that is in line with international advancements. This translates to ensuring that the population is able to access 4G and 5G services, which, as of December 2021, are only available in the Distrito Nacional. Fixed broadband packages currently offer a wide range of plans, depending on price, from speeds of 512 kilobits per second (Kbps) to 100 Mbps. In 2020, the average download speed of mobile broadband connections, the most prevalent type of broadband in the Dominican Republic, was

29.7 Mbps, below the global average of 36.0 Mbps. This is despite an improvement of 4.1 Mbps since 2019 (INDOTEL, 2021_[10]). In order to continue to improve, the Dominican Republic has developed a framework under the National Broadband Plan to invest in improving the infrastructure and providing higher-speed broadband connections for all, as per Decree 539-20.

Almost every individual (99.2%) in the Dominican Republic lived in an area covered by a 3G network in 2018. This is above the LAC average (94.6%) and similar to the OECD average (98.9%). The significant improvement in 3G coverage since 2014 reflects a general global trend and helps ensure the possibility of basic connectivity for all citizens. It is important to note that this indicator reflects the possibility of accessing 3G networks rather than the proportion of people who actually take advantage of this access.

As of 2018, coverage by 4G networks (96.6%) had significantly improved since 2014, and was above the LAC average (79.9%) but below the OECD average (98.9%) (Figure 5.10). 4G is also referred to as Long-Term Evolution (LTE) and represents a significant upgrade over its 3G predecessor. More advanced networks are crucial to faster connections and pave the way for e-commerce, social media use and other options that require data to be quickly transferred and processed (O'Halloran, 2019_[21]). In 2018, 4G overtook 2G to become the leading mobile technology globally, and could account for 60% of global mobile connections by 2023 (GSMA, 2019_[22]). The Dominican Republic recognised this trend and its importance, and responded by deploying 4G between 2010 and 2015 with rapid development and assistance from telecommunications services, similar to the actions taken previously in order to establish 3G networks (ONTIC, 2020_[8]).

In order to maintain this momentum, the Dominican Republic must now continue implementing 5G technology throughout the country. The network will be extended to other big cities in the coming months, with the eventual goal of covering the entire country. 5G provides a significant upgrade over 4G in terms of latency, allowing for real-time remote control at large scales and across wide distances. While the benefits of 5G will primarily be felt in the manufacturing industry, other benefits include driver health monitoring, smart traffic control, and establishing real-time monitoring systems (O'Halloran, 2019_[21]).

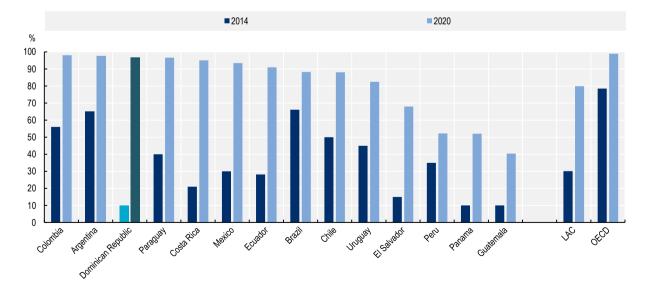


Figure 5.10. Proportion of the population covered by 4G networks in the Dominican Republic, selected LAC countries and the OECD

Note: Data from 2014 and 2020 or latest available year. Source: Authors' elaboration based on (UN Statistics Division, 2018_[23]).

In addition, the Digital Agenda 2030 highlights implementing digital television as an important action under the "connectivity and access" pillar. The process requires changing the television signal from analogue to digital. This will improve the quality of the television signal in the Dominican Republic and will increase the capacity of the radio spectrum, which will be especially beneficial for 5G mobile devices. Providing digital television for free and ensuring availability for all is key to reducing the digital divide (INDOTEL, 2021[10]). In October 2020, the Dominican Republic laid out plans to use television channels to broadcast educational content. This was proposed as an alternative to remote learning in order to continue to limit the spread of COVID-19 in the country, while still providing a solution for students without Internet-enabled devices (Acento, 2021[24]).

The digital transformation for schools

The digital transformation of the education system could be a major enabler of inclusive development in the Dominican Republic. On the one hand, ICT can significantly improve learning and teaching practices and educational outcomes, while expanding the breadth of these improvements to the majority of citizens. For instance, new technologies can foster the development of innovative teaching practices, enable personalised and remote courses and feedback, and encourage students' interest and engagement through new learning modalities, such as gamification (OECD et al., 2020[1]). On the other hand, as digital technologies transform societies and economies globally, the educational system will play a critical role in training and preparing citizens to thrive in a digital world through the development of fundamental cognitive, non-cognitive and digital skills. Preparing students so they have the tools necessary for a successful school-to-work transition is critical. Therefore, rethinking school-to-work transition programmes and focusing on a wider skill set for young people must be central aspects of digital education policies (OECD, 2021[6]).

The Dominican Republic must continue to prioritise the role of the digital transformation in education. The Digital Agenda 2030 lists "education and digital skills" as one of the five key pillars of the digital transformation. This Agenda assesses the primary areas for improvement while setting tangible goals for the short, medium and long term.

The COVID-19 pandemic has affected education, with large divergences due to existing divides in the educational system, and in access to and use of digital technologies throughout the educational system. With approximately 20% of the Dominican population enrolled in schools before the pandemic, responding to the educational challenges of COVID-19 is a priority and has highlighted structural challenges and divides within the educational system that must be dealt with (IDEICE, 2020_[25]). In general, students struggled to access educational resources, with only one in five students being able to access the Internet whenever they needed it. One-half of adolescent students were only able to access the Internet through their mobile phone, limiting the types of activities they could participate in. Results for Internet access by socio-economic group show that only 30% of those in low-income groups have Internet access, while 70% of those in high-income groups have Internet access. Furthermore, while all adolescent students who took part in Kids Online reported that they were able to maintain some sort of contact with the education system, only 40% of those in low-income groups said they could access video calls for classes (UNICEF and INDOTEL, 2021_[26]).

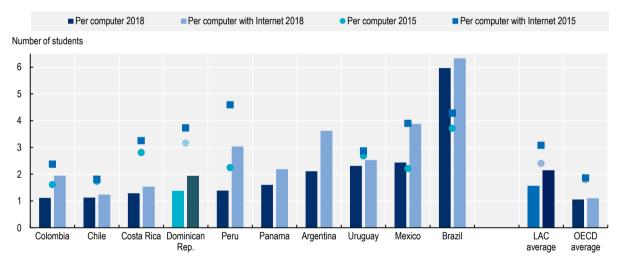
In response to the COVID-19 pandemic, the Ministry of Education of the Dominican Republic (Ministerio de Educación de la República Dominicana; MINERD) established the plan for educational support (Plan de apoyo educativo) in order to contribute to the general access to remote learning for students, reinforce learning habits, and educate the population about COVID-19. The plan also emphasises providing students with devices, and several important measures have resulted in the provision of computers and electronic booklets to students throughout the country (IDEICE, 2020_[25]).

MINERD is leading multiple initiatives to integrate the digital transformation into the education system. Before the COVID-19 pandemic, the Dominican Republic had been working on launching the *Educando*

and Eduplan digital portals, which would provide material for both students and teachers online, respectively (IDB, 2021_[27]). Through these plans, MINERD recommends leveraging WhatsApp, Zoom and other platforms in order to communicate with, and provide content for, students (IDEICE, 2020_[25]). The *Informatica Prepara* programme is an alternative that provides a series of videos on the basic principles of computer use, which is crucial for both students and teachers who lack familiarity with digital devices (Ministerio de la Presidencia, 2021_[28]).

Access to ICT in schools has increased, but it must be extended across the education system in order to bridge existing gaps

The Dominican Republic has seen an increase in access to ICT in schools in recent years; in fact, the number of students per computer has declined since 2015. In 2018, there was one computer available per 1.4 students, and almost one computer with an Internet connection per 2.0 students. This places the Dominican Republic in a slightly better position than the LAC average, but worse off than the OECD average, which in 2018 was approximately one Internet-connected computer for every student (Figure 5.11).





Source: Authors' calculations based on (OECD et al., 2020[1]) and (OECD, 2018[29]).

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Access to ICT devices in school is critical for making the most of digital learning and teaching, and can be a source of equitable access to technologies. Indeed, in countries where household Internet connectivity is not universal and where large gaps remain at the household level, schools can play a role in facilitating access and bridging the gap between students with and without Internet connectivity at home (OECD et al., 2020^[1]).

However, this is only partially true in the Dominican Republic, as notable gaps still exist across different socio-economic groups in terms of access to ICT both at school and at home. In fact, ICT availability – both at home and at school – among those in the fourth income quartile is more than double that in the first income quartile. This gap is larger than the LAC average, where ICT availability at home among those in the fourth income quartile, but ICT availability at school is only around 37% higher for the fourth income quartile than for the first income quartile. In OECD member

countries, the differences between the first and the fourth economic, social and cultural status (ESCS) quartiles (classified by the Programme for International Student Assessment [PISA]) represent 32% for ICT availability at home and 13% for ICT availability at school (Figure 5.12). The PISA ICT availability indexes for school and home calculate the combined availability of various digital tools – including computers, the Internet and smartphones – on a scale from 0 (which represents no access to any digital tool) to 10 (which represents access to every tool listed), or to 11 in the case of ICT availability at home. According to these indexes, the Dominican Republic shows significant differences in the availability of ICT for students across different ESCS quartiles.

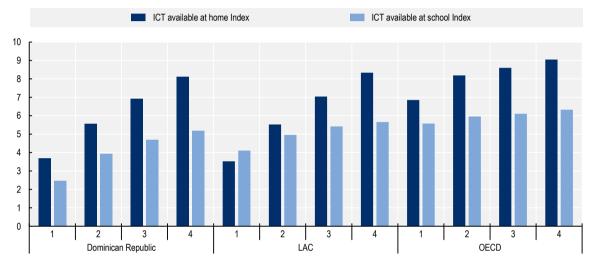


Figure 5.12. ICT availability index at home and at school, by PISA ESCS quartile

Source: Authors' calculations based on (OECD et al., 2020[1]) and (OECD, 2018[29]).

Extending ICT infrastructure across schools is a relevant policy for improving education outcomes and benefitting from the digital transformation. Fairness in resource allocation is important to ensuring equality in education opportunities and is related to overall education system performance. High-performing countries tend to allocate resources (including computers and digital tools) more equitably, regardless of individual schools' socio-economic profiles. Better access to ICT at school may compensate for low access in rural or socio-economically disadvantaged homes (OECD/CAF/ECLAC, 2014_[30]).

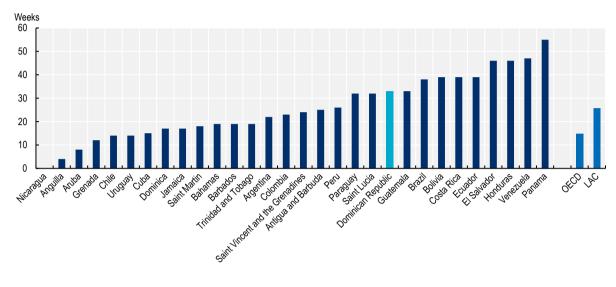
COVID-19 has shown the risks and benefits of online learning, and has highlighted the fact that there is a long way to go in improving access to home-based online learning platforms

The COVID-19 pandemic may have had an amplifying effect on educational inequalities, particularly in countries like the Dominican Republic where these were already large. With approximately 2.7 million students enrolled in school and an average of 30% of the curriculum still left to be covered when the pandemic started, many students who could not access educational content from home were harmed (IDEICE, 2020_[25]; Ministerio de la Presidencia, 2021_[28]).

Schools had to close due to lockdowns and other additional measures adopted throughout the COVID-19 pandemic. In general, school closures have been longer in LAC than in OECD member countries, which threatens to deepen educational inequalities. In the Dominican Republic, students have lost 33 weeks of education on average, above the OECD (15 weeks) and LAC (26 weeks) averages (Figure 5.13). School

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closures are directly linked to potential learning loss, with particularly negative results for vulnerable students (OECD et al, 2021_[3]).



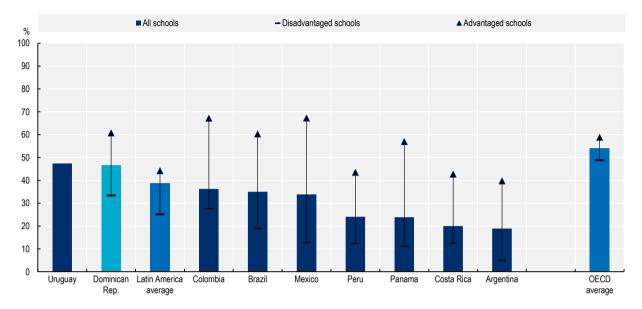


However, not all households were equipped with the necessary technology, not all parents were prepared to take on teaching duties alongside trying to keep or find a job, and not all schools and teachers were ready to provide training in an online format (OECD et al., 2020_[1]). In the Greater Santo Domingo area and in Cibao, where the majority of schools in the Dominican Republic are located, almost 30% of students did not have access to digital education platforms (Ministerio de la Presidencia, 2021_[28]). It is difficult to predict the impact this will have on human capital accumulation, future earnings and general well-being, but it will surely be more acute for students from rural and more disadvantaged socio-economic backgrounds (OECD et al., 2020_[1]; Psacharopoulos, G. et al., 2020_[31]).

On average, schools' readiness to provide effective online learning was relatively good in the Dominican Republic, albeit with notable differences between advantaged and disadvantaged schools that may amplify socio-economic gaps in education. On average, 47% of schools were equipped with effective online learning support platforms. However, while 61% of 15-year-old students attending advantaged schools had access to these platforms, only 33% of 15-year-old students attending disadvantaged schools had such access (Figure 5.14). This represents a 28-percentage-point difference.

Source: (OECD et al, 2021_[3]).

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Source: Authors' calculations based on (OECD et al., 2020[1]; OECD, 2018[29]).

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Beyond the unequal distribution of the availability of online platforms across schools, there are other gaps across both schools and households that limit the potential of online learning. Indeed, the availability of online learning platforms must be complemented by access to Internet-enabled devices at home, which is particularly challenging for students from more disadvantaged socio-economic backgrounds. Students in the Dominican Republic from households in the lowest income quintile rarely have access to a computer at home (13%) for doing homework, below the LAC (29%) and OECD (75%) averages, resulting in a significant disadvantage compared with access among students from households in the highest income quintile (81%) (Figure 5.15).

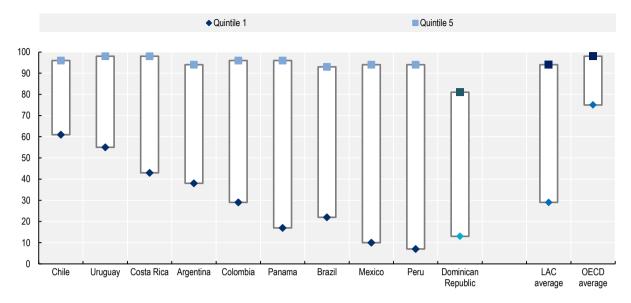


Figure 5.15. Access to a computer at home for doing homework, by socio-economic quintile

Source: Authors' elaboration based on (OECD, 2018[29]).

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Moving towards a truly digitalised education system with better education outcomes involves going beyond access to ICT and deeply transforming teaching and learning practices

The digital transformation of the education system involves various dimensions that go beyond access to ICT and are critical to effectively changing teaching and learning practices. Simply providing students and teachers with digital devices does not ensure better educational performance (Bulman and Fairlie, $2016_{[32]}$; Escueta et al., $2017_{[33]}$; OECD et al., $2020_{[1]}$). If not used properly, computers can have no effect or negative effects on educational outcomes, and the impact of computer-assisted instruction depends on whether it is used as a substitute for or as a complement to traditional teaching, as well as on the quality of the teaching methodology that computer-assisted instruction is replacing or complementing (OECD et al., $2020_{[1]}$). In light of this, the use of computer-assisted training is generally more effective in improving performance in developing countries, where it replaces lower-quality instruction or compensates for a lack of teachers (Banerjee et al., $2007_{[34]}$; OECD et al., $2020_{[1]}$).

Teacher-guided digital learning is among the most effective ways to help children develop skills (OECD et al., $2020_{[1]}$). Children with little adult supervision may spend their time using computers for activities unrelated to homework or studying. Interventions to increase access should implement mechanisms to ensure proper use – for instance, preloading computers with interactive educational software and apps that launch automatically in order to encourage their use (IDB, $2011_{[35]}$). Similarly, an alternative to providing digital devices to all students could be holding computer labs for one or two hours per week, where training is provided in a targeted and focused manner.

Teachers must have adequate technological skills in order to make the most of the digital transformation of the education system. Investment in digital devices dedicated to teachers and in teacher training tends to result in better student performance (Denoël et al., 2017_[36]). The quality of these digital tools and their co-ordination with other teaching practices, as well as the type and quality of teacher training, are essential dimensions of teachers' technological abilities. On average, 58% of 15-year-olds in LAC countries attended schools whose principals required that teachers have the necessary technical and pedagogical skills to

integrate digital devices into the curriculum, with large discrepancies depending on the socio-economic status of the school. In Colombia, for example, 75% of advantaged schools reported being prepared, compared with less than one-half of disadvantaged schools (OECD et al., 2020[1]).

The digital skills of the population are a critical dimension for making the most of the digital transformation in order to improve educational performance. Digital skills are needed to obtain better educational outcomes from a technology-rich education system. Likewise, improving digital skills must be one of the core objectives of a digitally transformed education system in order for students to go on to thrive in a digital society. One key element in this respect is promoting digital skills early in life. Early exposure to digital devices is correlated with better performance in the PISA test, highlighting the importance of investing in early ICT education. In 2018, 50% of 15-year-old students in the Dominican Republic had started using a digital device before the age of 10 years, similar to figures for Mexico but below those for Chile and Uruguay (75%) (OECD et al., 2020[1]). Digital skills among Dominicans are low by international standards, and are similar to the LAC average. The Dominican Republic ranks 53rd in the world in terms of ICT skills (Figure 5.16). While this indicator covers more than the ICT skills of students and refers to all active workers, it highlights the importance that ICT education programmes will have going forward in closing the gap with other countries and enabling people to take full advantage of the digital transformation both at school and in the labour market.

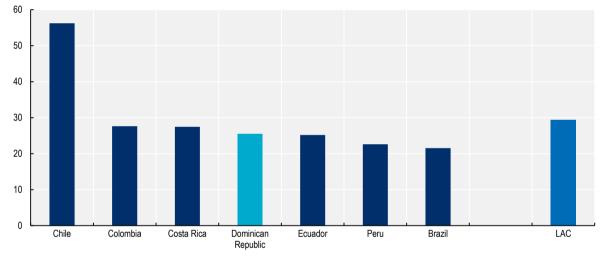


Figure 5.16. Availability of ICT skills

Note: ICT skills, indicator 2.1.2 under the "people" pillar of the Network Readiness Index, are defined as the average standardised answer to the question, "In your country, to what extent does the active population possess sufficient digital skills (e.g. computer skills, basic coding, digital reading)?" [1=not at all; 7=to a great extent]. Results are based on the World Economic Forum's Executive Opinion Survey, which is conducted on an annual basis.

Source: Authors' elaboration based on (Network Readiness Index, 2020[37]).

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Challenges and opportunities to move from analysis to action

Table 5.1. Increase connectivity throughout the Dominican Republic to ensure a successful and inclusive digital transformation

Policy recommendation	Challenges and opportunities for implementation
• •	d Internet connections in the Dominican Republic and close the gap h LAC and the OECD
Invest in communication networks, creating the conditions to attract private investment and to foster public–private partnerships.	Barriers remain to facilitate private investment. Reducing red tape, providing legal security, and strengthening inter-institutional articulation are critical areas of action.
Expand the deployment of 4G networks across the country.	Barriers remain to facilitate private investment. Reducing red tape, providing legal security, and strengthening inter-institutional articulation are critical areas of action.
1.2. Reduce gaps in access, particularly in rural areas ar	nd across low-income populations, to reduce the digital divide
Expand connectivity in rural areas by making full use of existing technologies.	The possibility of providing tax deductions for internet services in these areas should be analysed and considered.
Expand connectivity through enhanced public networks, particularly in remote or less advantaged areas.	Forging partnerships with the private sector will also be fundamental
Subsidise access to the Internet for low-income populations, making use of existing mechanisms such as conditional cash transfers, in order to better identify and target these transfers to vulnerable households.	Concerns around this recommendation focus on the impact on public finances and on fiscal sustainability. If implemented, a mechanism to gradually phase out these subsidies would be important.
1.3. Improve affordability and availability of digital devic	es and services:
Continue to distribute digital devices to students, particularly those from less advantaged socio-economic backgrounds, accompanied by training for both teachers and students.	Training should be provided for teachers, students and parents.
Strengthen efforts to distribute digital devices among vulnerable populations, making use of existing mechanisms such as conditional cash transfers.	This policy should be well coordinated with the previous one and with strong mechanisms for effective focalisation
Create conditions for affordable access to digital devices and services.	Agreed

Note: Based on the workshop held in Santo Domingo on 20 June 2022, to discuss this draft and the policy recommendations with representatives from Ministry of Presidency; Ministry of Economy, Development and Planning; Ministry of Education; INDOTEL; OGTIC and CODOPYME. Source: Authors' elaboration.

Table 5.2. Enhance digital skills and the use of digital tools in the education system and in the transition to the new world of work

Policy recommendation	Challenges and opportunities for implementation
1.1. Develop digital skills among students and teachers as well as acr	oss the adult population
Mainstream digital skills and tools across the education system, starting from early childhood. This should involve engaging the whole community in a debate to reform educational curricula at all levels of education, with the objective of including digital skills as a core educational objective.	Lack of institutional coordination is a key barrier. Teachers do not have enough incentives to engage in training and improve their skills. Engaging with other local actors, like parent association and associations and church, is crucial.
Develop an ambitious programme of training current and future teachers in digital skills and innovative pedagogical methods that are adapted to the needs of the digital society.	Developing the teacher career with a strong, transversal digital pillar will be crucial.
Develop specific programmes to train the adult population in digital skills.	Improve existing programmes, and develop specific programmes fo adult population.
1.2. Reinforce the availability of digital tools within the education syst	em
Bridge the gap in ICT availability – including online educational resources and platforms, as well as digital devices for teaching and learning – across schools of different socio-economic backgrounds.	Adapt existing tools to the necessities of the Dominican education system. Improving connectivity in most disadvantaged schools is essential.

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Develop a national map that identifies the needs of schools in terms of Agreed connectivity, ICT and digital endowments in order to develop targeted actions in the most disadvantaged areas. 1.3. Strengthen linkages between the education system and the emerging digital economy Agreed, though the challenge of adequately training teachers in Strengthen the digital component within the vocational education and training system, as well as in higher education, with specific third-level degrees digital skills is vital and takes time. It is important to also promote related to new/emerging professional profiles in the digital economy. generic skills that are durable and facilitate adaptation to change. Develop mechanisms to identify the demand for skills and, in particular, Agreed, though lack of financial resources can be an issue. the emerging needs of the digital economy, in order to inform the development of adapted curricula and educational pathways and to favour the transition to the new world of work.

Note: Based on the workshop held in Santo Domingo on 20 June 2022, to discuss this draft and the policy recommendations with representatives from Ministry of Presidency; Ministry of Economy, Development and Planning; Ministry of Education; INDOTEL; OGTIC and CODOPYME. Source: Authors' elaboration.

The digital transformation of the Dominican economy: A catalyst for more productivity and better-quality job opportunities

Digital technologies can be a catalyst for productivity growth

Increasing productivity remains a central development challenge for the Dominican Republic, and for LAC countries in general, which face persistently low levels of productivity – known as a "productivity trap" (OECD et al., 2019_[38]). Although there is high heterogeneity across countries in the region, LAC has been generally characterised by a growth model based on low-value-added exports and an abundance of low-skilled labour. In this context, gross domestic product (GDP) growth has been stimulated more by the accumulation of production factors and, to a large extent, the expansion of the labour force than by productivity growth (OECD et al., 2020_[1]).

Labour productivity in the Dominican Republic as a percentage of labour productivity in OECD member countries has remained stagnant. While it represented 50% around 1950, it declined to less than 40% during the 1990s before slightly and gradually increasing to around 40% by 2019 (Figure 5.17).

Because the digital transformation can be a catalyst for productivity growth, it represents an opportunity for the Dominican Republic. The digital revolution involves large disruptions that promote productive diversification and that can enable sustained productivity growth and trigger innovation. Harnessing the opportunities this presents depends on how economies, productive sectors, institutions and societies position themselves to absorb and adapt to new technology (OECD et al., 2020[1]). New technologies change the way companies produce goods and services, innovate, and interact with other companies, workers, consumers and governments. Digitalisation opens the door for superior data storage capacities and increased processing capabilities, while artificial intelligence enables companies to automate increasingly complex tasks (OECD, 2019[40]).

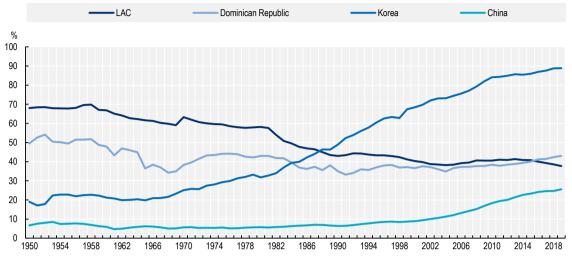


Figure 5.17. Labour productivity of the Dominican Republic, LAC, Korea and the People's Republic of China (hereafter: China) relative to the OECD average, 1950-2018

Note: Simple average of 17 LAC countries covered by The Conference board. Labour productivity is measured as the labour productivity per person employed in 2019 USD.

Source: Authors' calculations based on (The Conference Board, 2020[39]).

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Basic advances in Internet connectivity and access are linked to economic growth. For instance, recent studies have shown that a 1.00% increase in mobile broadband penetration is associated with a 0.15% increase in GDP on average. However, they indicate a saturation effect, where the contribution to GDP is less in more developed countries. In addition, a 1.00% increase in fixed broadband penetration is associated with a 0.08% increase in GDP on average (ONTIC, $2020_{[8]}$). The addition of 10 broadband connections for every 100 people can increase GDP by 1.21 percentage points in developing countries. Therefore, improving and investing in connectivity must be a policy priority in order to increase productivity and economic growth (IICA, $2020_{[41]}$).

The digital transformation can also be a motivator of productivity growth by fostering production transformation. For instance, digital technologies have a strong potential to transform the agri-food industry in the Dominican Republic. The industry is going through a transformational period where it must adapt to new consumer preferences, while greener and more inclusive value chains also need to become a priority. At the same time, new energy sources, forms of distribution and smart packaging have emerged as important global trends. The agri-food industry is an important part of the economy, contributing 10% of the Dominican Republic's GDP and ranking as the third-largest employer in the country. Maintaining a competitive industry that is integrated into regional markets will require the adoption of the latest technologies and best practices (OECD/UNCTAD/ECLAC, 2020_[42]).

The Digital Agenda 2030 highlights the importance of establishing a digital economy, listing this as one of the five priority areas. The general objective of this priority is to elevate the competitiveness and productivity of the economy through the development and incorporation of technology in productive processes. The document highlights the low level of technology adoption by MSMEs and the lack of resources for research and development (R&D) as key areas for improvement. The issues regarding low productivity and implementing a digital economy mentioned in the Digital Agenda 2030 are not specific to the Dominican Republic and are present in many LAC countries. Policies to address these issues can be drafted based on regional experiences and using lessons learned in other similar countries.

Incorporation of digital technologies is not sufficient to increase productivity; a digital ecosystem is required

The spread of ICT is not enough to increase productivity, as illustrated by the fact that many countries globally have seen a slowdown in productivity growth in the last decade. This phenomenon, often referred to as the "productivity paradox", is puzzling, as productivity would be expected to grow in a period where so many new technologies are being introduced, more companies and countries are being integrated into global value chains, and workers in general are more highly educated (OECD et al., 2020[1]). This paradox could be partially explained by the inadequate methods of measuring productivity. However, recent research suggests that the uneven adoption of digital tools across companies, industries and sectors plays a vital role in explaining these results. Large companies, especially in ICT-intensive sectors, are the main beneficiaries of technological progress, leveraging new tools in the production process. Laggard companies, typically MSMEs, often have limited capabilities or incentives for adopting new technologies and best practices (OECD, 2019[5]).

This tendency for new ICT to spread unevenly across companies and sectors poses a challenge to the digital transformation of the Dominican Republic's economy, given that the productive sector of the country is dominated by low-producing MSMEs. MSMEs represent 98.2% of total companies in the Dominican Republic (SIPEN, 2021_[43]). The large majority of microenterprises in the Dominican Republic are concentrated in less dynamic, less export-oriented sectors. In 2018, around 45% of microenterprises were in the wholesale and retail industries, 15% were conducting professional business activities, and 9% were in manufacturing (OECD/UNCTAD/ECLAC, 2020_[42]).

Each new technology that is adopted in isolation creates certain benefits; however, the largest potential lies in the combination of multiple new technologies within a broader digital ecosystem. Developing a holistic digital ecosystem is essential to facilitating companies' adoption of new technology and increasing the impact of the digital transformation on productivity growth. Successful digital transformation strategies for productivity depend on more than just increasing ICT use. Complementary investments are essential in a digital ecosystem and are key to enhancing the impact of ICT; these investments include: innovation, with investment in R&D and technology accelerating the benefits of digital technologies; infrastructure, not only related to digital connectivity but also to transport connectivity and logistics; skills and human capital, as digital skills can strengthen the link between the adoption of digital technology and productivity; sectoral sophistication, as digital technology adoption varies across sectors and sector-level structures, and productivity gains tend to be greater for sectors with standardised, routine-intensive activities; and organisation capabilities, including managerial abilities, which can magnify productivity gains (OECD et al., 2020_[1]).

Having a strong innovation system is critical to making the most of the digital transformation and promoting productivity growth, yet the Dominican Republic underperforms in this area. R&D investment is low: the country reported R&D investment of 0.01% of GDP in 2015, lower than the LAC (0.7%) and OECD (2.34%) averages in 2018. Beyond the low levels of R&D, the Dominican Republic lacks officially reported data, which complicates the analysis of innovation. The country has two key financing bodies for promoting R&D: the National Fund for Innovation and Scientific and Technological Development (Fondo Nacional de Innovación y Desarrollo Científico y Tecnológico; FONDOCYT) and the National Fund for Agricultural and Forestry Research. In both cases, funding represents less than 0.05% of the budget, far below the share in countries such as Chile (0.4%) and Uruguay (0.35%) (OECD/UNCTAD/ECLAC, 2020[42]). Greater efforts in R&D and innovation could boost productivity as well as the quality of production (Pérez, De los Santos and Beinte, 2015[44]).

The Dominican Republic's ICT patent applications under the Patent Cooperation Treaty (PCT) have decreased, ranking below the LAC average (Figure 5.18). Intangible assets such as patents help boost digital innovation in a country and should be prioritised (OECD, 2019^[5]).

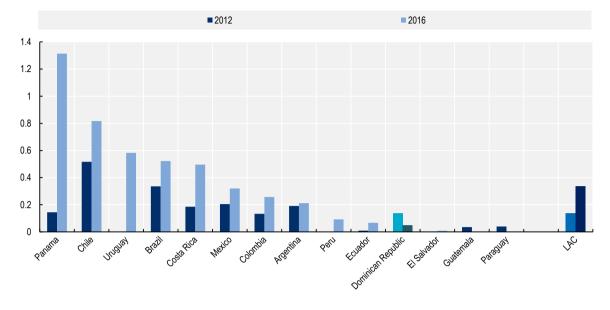


Figure 5.18. Number of ICT PCT patent applications per 1 million people for the Dominican Republic and selected LAC countries

Source: Authors' elaboration based on (WIPO, 2020[45]).

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The past few years have seen some growth in the digital economy in the Central America, Panama and the Dominican Republic (CAPARD) sub-region. The digital economy is defined as the portion of total economic production derived from a series of broad digital inputs, such as digital skills, digital equipment and goods, and intermediate digital services used in production. Digital economy revenues amounted to 19% of GDP in the Dominican Republic in 2019, behind only Guatemala (22.5%) in the CAPARD sub-region. Fintech has been particularly important to the growth of the digital economy, growing on average by 23% in the CAPARD sub-region in 2019 and by 27% in the Dominican Republic (IDB, 2020[46]) in the same period.

A high-performing logistics system is another critical dimension of building a stronger digital ecosystem that is conducive to productivity growth. The Dominican Republic's score on the Logistics Performance Index has decreased in recent years and is currently below the LAC average (Figure 5.19). Digitalising a country's supply chain is a key component of improving its Logistics Performance Index score. Low levels of digitalisation in the Dominican Republic's land transport industry contribute to the gap between it and the OECD by creating a bottleneck in supply chain efficiency. In addition, land transport is more fragmented in LAC countries and consists primarily of small and medium-sized enterprises (SMEs), which produces further barriers to introducing digital processes as SMEs tend to have low investment capacity and limited implementation of digital technology (CAF, 2020_[47]).

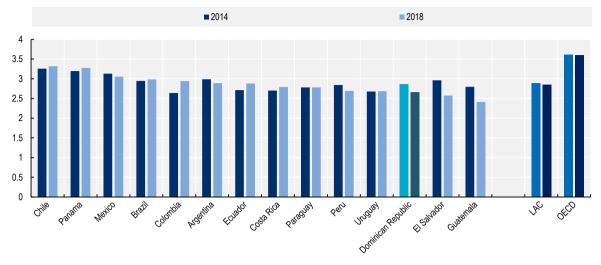


Figure 5.19. Logistics Performance Index scores, 2014 and 2018

Source: (CAF, 2020[47]).

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Moving the digital transformation of the economy forward involves supporting companies in adopting and adapting to new technologies

Policies must be drafted in order to incentivise all MSMEs – not just those in digitally intensive sectors – to utilise the latest tools brought forth by digital innovation. In order for MSMEs to scale up and eventually internationalise, they will need to invest in in-house innovation, engage in e-commerce and participate in knowledge networks.

The Dominican Republic is below the LAC average for e-commerce use as a proportion of all retail (Figure 5.20). This highlights the low adoption of e-commerce by companies in the Dominican Republic, although adoption has increased slightly during the COVID-19 pandemic. E-commerce is an important component of the digital economy, only behind fintech in terms of percentage of revenues provided. With 22 million users (or 32% of the population) in 2019, demand for e-commerce is high in the CAPARD sub-region. A more developed e-commerce system will also enable companies to tap into regional markets without necessarily having a physical presence in multiple countries (IDB, 2020_[46]). It is important to note that the UNCTAD B2C E-commerce Index 2020 ranks the Dominican Republic 67th overall and 4th in the LAC region, indicating that, in general, there is relatively high e-commerce use in the country (UNCTAD, 2020_[48]).

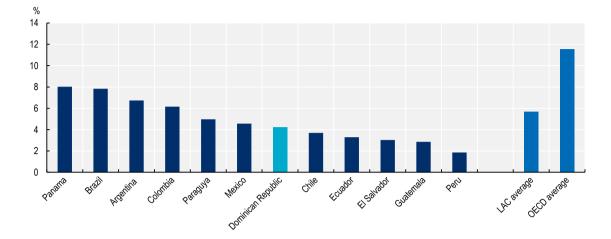
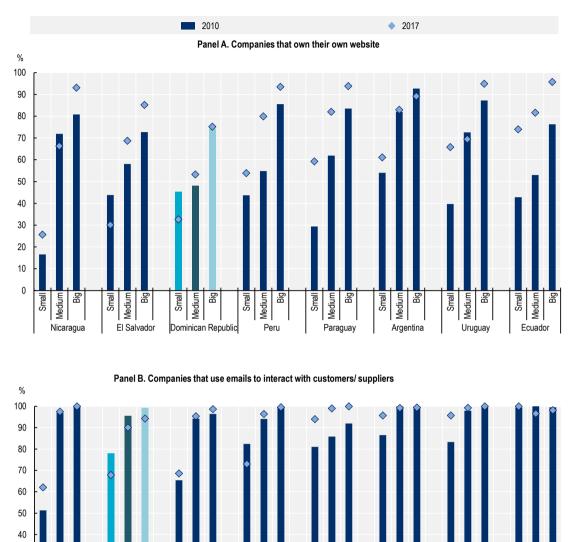


Figure 5.20. E-commerce usage as a proportion of all retail in the Dominican Republic, selected LAC countries and the OECD, 2020

Like other countries in the LAC region, there is a gap in the Dominican Republic between small and large companies in terms of owning a website and using email to interact with customers; this demonstrates discrepancies in the use of basic technology according to company size. While email has been widely adopted in medium-sized and large enterprises, small companies in the Dominican Republic actually reduced their use of email between 2010 (slightly less than 50%) and 2017 (30%) (Figure 5.21). Appropriate policies are needed in order to close this productivity gap between smaller and larger companies, as research suggests that the productivity paradox could be largely caused by the uneven adoption of technology by companies in a given country (OECD et al., 2020[1]). The digital agenda highlights the need to boost the adoption of basic technologies and digital services, especially by MSMEs.

Source: Authors' elaboration based on (CAF, 2020[47]).

StatLink ms https://stat.link/6jn5uo





Source: Authors' elaboration based on (World Bank, 2020[49]).

Dominican Rep.

Medium

Paraguay

Big

Small

Medium

El Salvador

Small

Big

Small Medium Big

Medium

Nicaragua

Small

Big

StatLink ms https://stat.link/t53jdc

Medium

Ecuador

Small

Big

Medium

Uruguay

Small

Big

The overall adoption of emerging technologies in the Dominican Republic is on par with the LAC average, but further policy support is needed in order to boost the adoption of ICT by MSMEs and to facilitate their digital transformation. The availability of cutting-edge technology is a necessary pre-condition for companies to transform themselves and increase their productivity (Figure 5.22).

Medium

Peru

Big

Small

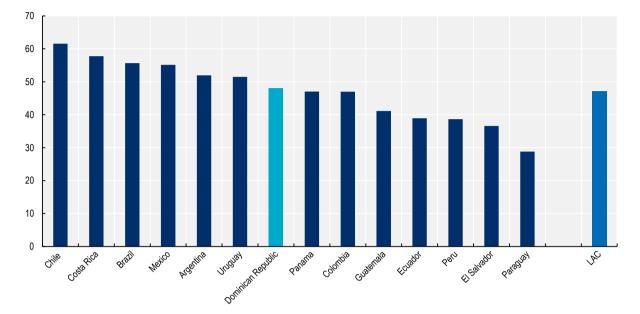
Medium

Argentina

Small

Big

Figure 5.22. Adoption of emerging technology



Adoption of emerging technology

Note: Adoption of emerging technology is measured as the standardised answer concerning the extent to which countries adopt five types of emerging technology (artificial intelligence; robotics; application- and web-enabled markets; big data analytics; and cloud computing) ranging from 1 (not at all) to 7 (to a great extent – on par with the most technologically advanced countries). Source: Authors' elaboration based on (Network Readiness Index, 2020_[37]).

StatLink and https://stat.link/9pgu52

In order to ensure the productive digital transformation of MSMEs, policy makers must create favourable conditions for the adoption of ICT. These changes include policies that foster ICT investment, skills development and business dynamism. Policies must also address specific challenges faced by MSMEs in the Dominican Republic. Policies that target companies by size must be carefully developed in order to avoid creating a disincentive for smaller companies to scale up. In terms of regulation, this could be seen as an SME choosing to remain small in order to avoid the regulatory burdens that larger enterprises face. Making an exception in certain rules for SMEs in order to facilitate compliance can help foster digital innovation. Finally, policies that raise awareness of opportunities for partnerships between SMEs and larger companies, both domestically and internationally, can help SMEs fully realise their potential (OECD, 2019_[5]).

The digital transformation for workers: A new world of work

Digital technologies are deeply transforming the world of work, bringing about numerous opportunities – and challenges – for both companies and employees. The digital transformation affects the world of work in multiple ways, such as by changing the economic and labour market structure. New products, services, forms of production and business models have appeared, benefitting sectors that are related to technology and digital services (OECD, 2019_[50]). Similarly, new forms of employment are emerging, as digital technologies have allowed the rise of the platform economy and the expansion of the digital economy and have generated new jobs and shifted demand for skills (e.g. to jobs related to ICT, artificial intelligence, big data and machine learning), as well as more flexible and non-standard forms of employment (e.g. teleworking regardless of the physical location of the company) (OECD et al., 2020_[1]; OECD, 2019_[50]).

Notwithstanding the opportunities that the digital transformation brings to the world of work, the destruction and creation of jobs associated with it, as well as the shift in the skills demanded, can have a deep socioeconomic impact and widen existing inequalities. Digital transformation and new technologies can simultaneously produce substitution and complementarity effects. Whereas routine and easily automated tasks tend to be replaced with technology, new technologies are expected to benefit workers who have the appropriate skills and who can incorporate them into their jobs in order to boost their productivity. The shift in skills demand and the production transformation associated with new technologies can generate a drain of workers from declining occupations and sectors where highly intensive tasks could be easily automated (OECD, 2019_[50]).

The impact of new forms of employment on the Dominican Republic is uncertain but based on its current economic structure, 12% of jobs are at high risk of automation (OECD et al., 2020_[1]). This is slightly below the impact on LAC countries overall, where 16% of jobs, on average, are at high risk of automation and another 16% of occupations may change substantially due to the digital transformation (Figure 5.23). The economic structure of the Dominican Republic can explain the limited impact of the digital transformation on jobs. With a large share of employment concentrated in low-skilled services and sectors like retail and construction (see chapter on labour markets), which are not easily automatable, job destruction may be less prevalent. However, this may also indicate low levels of sophistication in the productive structure, with a low penetration of ICT and an inability to shift the production structure towards higher-value-added sectors. This is, to a large extent, similar to what is observed more generally in the LAC region: non-automatable manual occupations have increased (e.g. cleaning staff and other services) and automation has not affected automatable knowledge occupations (e.g. administrative staff), perhaps because new technologies have not yet been implemented in these sectors (IDB, 2019_[51]).

The impact of the digital transformation on jobs in the Dominican Republic could actually be greater, as technologies do not always affect employment (i.e. by creating or destroying jobs), but may instead transform and/or replace specific tasks within jobs. A job may not disappear, but some of the tasks it involves may be replaced or automated, while other new, more sophisticated tasks may need to be performed manually by a worker. As tasks are disappearing, evolving and emerging, the digital transformation is generating structural changes in the labour market and the demand for skills, for which the Dominican Republic must prepare.

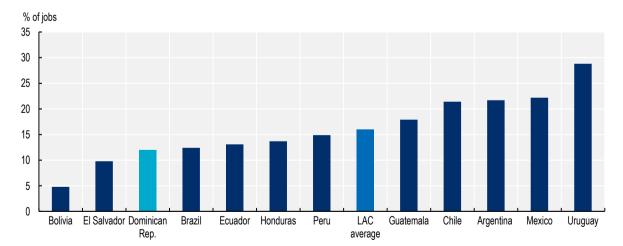


Figure 5.23. Percentage of jobs at high risk of automation

Source: Authors' elaboration based on (Weller, Gontero and Campbell, 2019[52]).

StatLink and https://stat.link/4710e3

The degree to which the opportunities presented by new technologies are exploited will depend to a greater or lesser extent on the ability of countries to develop policies that can adapt the world of work to these digital changes and equip workers with the necessary skills to thrive in the digital world.

Two policy areas stand out as particularly relevant to making the digital transformation a catalyst for better jobs. The first is skills: workers need a mix of skills, including strong cognitive and socio-emotional skills, as well as high-level ICT skills in technology-related occupations. The Dominican Republic ranks 106th in the world in terms of ICT skills, as shown in the previous section (Network Readiness Index, 2020_[37]). This is an area where the entire LAC region lags behind, with only one-third of LAC workers using ICT tools, including computers and smartphones, at work at least weekly or more often, compared with one-half of the European workforce (OECD et al., 2020_[1]).

Apart from digital skills, the digital economy increasingly demands a set of interdisciplinary and transferrable skills for different professions, preparing workers to be able to transition between occupations. These interdisciplinary skills include cognitive skills (such as learning skills) in addition to communication, creativity, critical thinking, teamwork, leadership and presentation skills, which are considered to be transferrable to multiple work contexts and occupations (IDB, 2019_[51]; OECD, 2019_[50]).

The second policy area is lifelong learning: these systems can enhance the accessibility and quality of education and provide training and learning opportunities throughout all stages of life, increasing workers' chances of acquiring the required skills to adapt to a rapidly changing labour market. These lifelong learning policies include a variety of formal, informal, on-the-job and unintentional types of learning that can support workers throughout their lives by providing them with the capacity to adapt, as well as with different types of skills, facilitating transitions from one occupation to another (OECD, $2021_{[6]}$). This will be of particular importance for reskilling adults who lose their jobs and may need specific training to adapt to new demands. While the Dominican Republic has a young population, those aged 50 years or over represented one-fifth (20.5%) of the total population in 2020, and will represent 29% of the total population by 2040 and more than one-third of the total population (33.8%) by 2050 (UN Population Division, $2021_{[53]}$).

Challenges and opportunities to move from analysis to action

Table 5.3. Create a digital ecosystem to boost the development of the digital economy

Policy recommendation	Challenges and opportunities for implementation
1.1. Enable the use of digital tools and services by MSMEs and favo	our the emergence of a digital industry:
Put in place specific public programmes to support MSMEs in the adoption of digital technologies and to better connect with larger companies and global value chains through the use of digital tools.	Lack of productive articulation can be challenging. Facilitating access to ICT goods and services by MSMEs is crucial but not enough: training and technical assistance is fundamental.
Set up mechanisms to identify the demand for skills and, in particular, the emerging needs of the digital economy, in order to inform the development of adapted curricula and educational pathways.	Lack of financing could be a challenge.
Develop specific instruments and incentives for the development of the digital industry in the Dominican Republic.	Fiscal barriers and regulatory barriers are still important.
1.2. Develop a holistic digital ecosystem in order to facilitate the dig growth	gital transformation of production processes and productivity
Develop a strategic plan to enhance the digital ecosystem as a catalyst for greater productivity and growth, acknowledging that this must include key complementary investments, including in R&D infrastructure and logistics; and skills and human capital, including organisational and managerial capabilities.	This coordinated perspective is seen as fundamental.

Note: Based on the workshop held in Santo Domingo on 20 June 2022, to discuss this draft and the policy recommendations with representatives from Ministry of Presidency; Ministry of Economy, Development and Planning; Ministry of Education; INDOTEL; OGTIC and CODOPYME. Source: Authors' elaboration.

A strategic vision of the digital transformation: The importance of development planning and the role of a digital agenda

The digital transformation affects and creates opportunities in almost every dimension of public policy. Thus, embracing the digital transformation calls for policies and practices that address digital issues in a holistic and coherent manner. In this context, the success in moving towards a digital economy and society relies greatly on the capacity to develop a clear, ambitious and cross-cutting digital agenda (DA) that is also linked to a country's broader and longer-term development strategy (OECD et al., 2020[1]).

The Dominican Republic has benefitted from short- and medium-term digital strategies in the past, in particular the República Digital campaign, the main objectives of which were to improve infrastructure and access, e-government and digital services, skills development, productive development and the facilitation of environmental progress and innovation. In 2021, the Dominican Republic established the Gabinete de Transformación Digital (Digital Transformation Cabinet) to oversee the Digital Agenda 2030.

The Dominican Republic's Digital Agenda 2030 builds on previous digital strategies to address new technological challenges while incorporating a long-term vision that involves all social actors in its design and implementation. It is made up of five main axes: 1) governance and regulatory framework; 2) connectivity and access; 3) education and digital skills; 4) digital government; and 5) digital economy. Each of these axes responds to specific objectives through performance measurement indicators, as well as having a precise course of action to follow. By 2030, the Dominican Republic expects to have reduced the digital divide and ensured access to, and use of, digital technologies in a secure and sustainable environment.

There are several criteria that are relevant for the success of a DA, many of which are reflected in the design of the Digital Agenda 2030. Clear responsibility and adequate implementation powers are crucial for the success of DAs. A high-level body leading the strategy can be particularly helpful in co-ordinating a swift digital transformation. In addition, effective co-ordination among government bodies, beyond ICT-related ministries, is also essential for the implementation of a coherent DA, and must be complemented by a comprehensive data governance framework in order to ensure proper data management throughout the DA's life cycle. Similarly, as the digital transformation is promoted by multiple stakeholders, including businesses, individuals and other non-government stakeholders, it is important to ensure an open multistakeholder dialogue, which can help identify obstacles, exchange best practices and create opportunities for public–private partnerships. An effective oversight framework is important for monitoring the implementation of and evaluating DAs. These activities should enable learning and the prioritisation and improvement of policies over time. It is also important that DAs align with national development plans (NDPs) (OECD et al., 2020[1]).

The DA does not operate in isolation; rather, it involves close co-ordination with the broader development strategy, in particular with NDPs, the national bandwidth plan and ministry of education projects to improve ICT access and skills for students. The Dominican Republic's NDP has a time horizon of 2030; hence, the fact that the new DA was developed with an equivalent time horizon rather than being associated with the duration of a presidential term is a relevant step forward. However, the NDP was approved in 2011, and many digital challenges and opportunities have significantly evolved since then. In 2016 and 2017, the local, regional and provincial development plans were updated, in many cases citing the importance of creating a digital society (MEPYD, 2016_[54]). It is therefore important that the Digital Agenda 2030 builds on this work and complements the progress that has already taken place.

Across LAC countries, attention to digital-related policies in NDPs and the level of integration of DAs in NDPs differ. Overall, NDPs in LAC countries focus more on digital policies for productivity enhancement and less on social, institutional and environmental issues (Figure 5.24). The Dominican Republic's National Development Strategy 2030 follows this trend, with a special focus on addressing productivity and social vulnerability concerns. Specifically, the country's NDP emphasises the digital dimension needed in

employment policies and the future of work, i.e. the digitalisation of labour markets and adapting to a new world of work, upgrading skills, and transitioning to more flexible working arrangements and labour market institutions (OECD et al., 2020[1]).

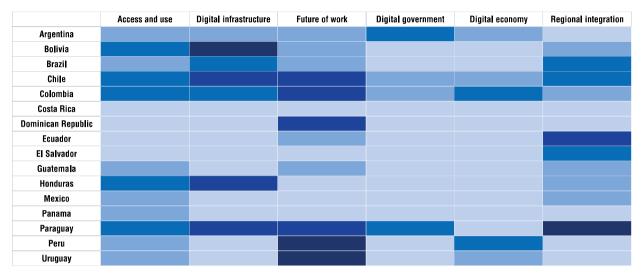


Figure 5.24. Intensity of digital dimensions in NDPs in selected LAC countries, 2019

Note: This figure was created by compiling a list of keywords for each topic; intensity of topic was calculated based on relative frequency of keywords.

Source: (OECD et al., 2020[1]).

Challenges and opportunities to move from analysis to action

Table 5.4. Adopt a strategic, well-co-ordinated vision of the digital transformation

Policy recommendation	Challenges and opportunities for implementation
1.1. Ensure a coherent and holistic approach to the digital transform connected with other national strategies and with the broader l	
Assign clear responsibilities and adequate implementation powers to a high-level body leading the Digital Agenda 2030 (e.g. to the Gabinete de Transformación Digital).	This must be accompanied with clear budget allocations and incentives for articulation.
Ensure effective co-ordination among government bodies (beyond ICT- related ministries); a comprehensive data governance framework; open multi-stakeholder dialogue; and an effective oversight framework.	The Digital Agenda 2030 goes in this direction.
1.2. Strengthen statistical digital capacities	
Enhance the use of digital technologies to improve the collection and use of statistical data and to strengthen their potential to inform public policies (e.g. use of big data).	Technical capacities and financing are two key challenges. Lack of will for co-operation across institutions that produce data is still a barrier.
Develop mechanisms to regularly produce digital indicators that allow monitoring of progress in the Digital Agenda 2030 and a better understanding of emerging challenges and opportunities as the digital transformation continues to advance.	Technical capacities and financing are two key challenges. Lack of will for co-operation across institutions that produce data is still a barrier.

Note: Based on the workshop held in Santo Domingo on 20 June 2022, to discuss this draft and the policy recommendations with representatives from Ministry of Presidency; Ministry of Economy, Development and Planning; Ministry of Education; INDOTEL; OGTIC and CODOPYME. Source: Authors' elaboration.

Policy recommendations

Box 5.1. Policy recommendations

Policy objective 1: Increase connectivity throughout the Dominican Republic to ensure a successful and inclusive digital transformation

1.1 Design policies that continue to increase broadband Internet connections in the Dominican Republic and close the gap with LAC and the OECD:

- Invest in communication networks, creating the conditions to attract private investment and to foster public–private partnerships.
- Expand the deployment of 4G networks across the country.

1.2 Reduce gaps in access, particularly in rural areas and across low-income populations, as this is vital to reducing the digital divide:

- Expand connectivity in rural areas by making full use of existing technologies.
- Expand connectivity through enhanced public networks, particularly in remote or less advantaged areas.
- Subsidise access to the Internet for low-income populations, making use of existing mechanisms such as conditional cash transfers, in order to better identify and target these transfers to vulnerable households.

1.3 Improve affordability and availability of digital devices and services:

- Continue to distribute digital devices to students, particularly those from less advantaged socioeconomic backgrounds, accompanied by training for both teachers and students.
- Strengthen efforts to distribute digital devices among vulnerable populations, making use of existing mechanisms such as conditional cash transfers.
- Create conditions for affordable access to digital devices and services.

Policy objective 2: Enhance digital skills and the use of digital tools in the education system and in the transition to the new world of work

2.1 Develop digital skills among students and teachers as well as across the adult population:

- Mainstream digital skills and tools across the education system, starting from early childhood. This should involve engaging the whole community in a debate to reform educational curricula at all levels of education, with the objective of including digital skills as a core educational objective.
- Develop an ambitious programme of training current and future teachers in digital skills and innovative pedagogical methods that are adapted to the needs of the digital society.
- Develop specific programmes to train the adult population in digital skills.

2.2 Reinforce the availability of digital tools within the education system:

- Bridge the gap in ICT availability including online educational resources and platforms, as well
 as digital devices for teaching and learning across schools of different socio-economic
 backgrounds.
- Develop a national map that identifies the needs of schools in terms of connectivity, ICT and digital endowments in order to develop targeted actions in the most disadvantaged areas.

2.3 Strengthen linkages between the education system and the emerging digital economy:

- Strengthen the digital component within the vocational education and training system, as well
 as in higher education, possibly with specific third-level degrees related to new/emerging
 professional profiles in the digital economy.
- Develop mechanisms to identify the demand for skills and, in particular, the emerging needs of the digital economy, in order to inform the development of adapted curricula and educational pathways and to favour the transition to the new world of work.

Policy objective 3: Create a digital ecosystem to boost the development of the digital economy

3.1 Enable the use of digital tools and services by MSMEs and favour the emergence of a digital industry:

- Put in place specific public programmes to support MSMEs in the adoption of digital technologies and to better connect with larger companies and global value chains through the use of digital tools.
- Set up mechanisms to identify the demand for skills and, in particular, the emerging needs of the digital economy, in order to inform the development of adapted curricula and educational pathways.
- Develop specific instruments and incentives for the development of the digital industry in the Dominican Republic.

3.2 Develop a holistic digital ecosystem in order to facilitate the digital transformation of production processes by all companies in order to promote productivity growth:

 Develop a strategic plan to enhance the digital ecosystem as a catalyst for greater productivity and growth, acknowledging that this must include key complementary investments, including in R&D; infrastructure and logistics; and skills and human capital, including organisational and managerial capabilities.

Policy objective 4: Adopt a strategic, well-co-ordinated vision of the digital transformation

4.1 Ensure a coherent and holistic approach to the digital transformation, as presented in the Digital Agenda 2030, that is well connected with other national strategies and with the broader National Development Strategy 2030:

- Assign clear responsibilities and adequate implementation powers to a high-level body leading the Digital Agenda 2030 (e.g. to the Gabinete de Transformación Digital).
- Ensure effective co-ordination among government bodies (beyond ICT-related ministries); a comprehensive data governance framework; open multi-stakeholder dialogue; and an effective oversight framework.

4.2 Strengthen statistical digital capacities:

- Enhance the use of digital technologies to improve the collection and use of statistical data and to strengthen their potential to inform public policies (e.g. use of big data).
- Develop mechanisms to regularly produce digital indicators that allow monitoring of progress in the Digital Agenda 2030 and a better understanding of emerging challenges and opportunities as the digital transformation continues to advance.

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OECD Development Pathways Multi-dimensional Review of the Dominican Republic

TOWARDS GREATER WELL-BEING FOR ALL

The Dominican Republic has made strides on many socioeconomic fronts over the years. The country has been one of the leading economies in Latin America and the Caribbean in terms of GDP growth, reaching upper middle-income status in 2011. However, progress on the different dimensions of well-being has been insufficient. In particular, socioeconomic and territorial disparities are still important, and public institutions remain insufficiently solid. For the Dominican Republic to embark on a more prosperous development path, three critical dimensions must be tackled. First, providing quality jobs for all, with particular emphasis on boosting formalisation and productive transformation. Second, mobilising more public and private finance for development, with more progressive and effective taxation systems, more efficient public expenditure and deeper capital markets. Third, accelerating digital transformation to boost productivity, enhance inclusion and support job creation.



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