Increasing
FINANCIAL INCLUSION
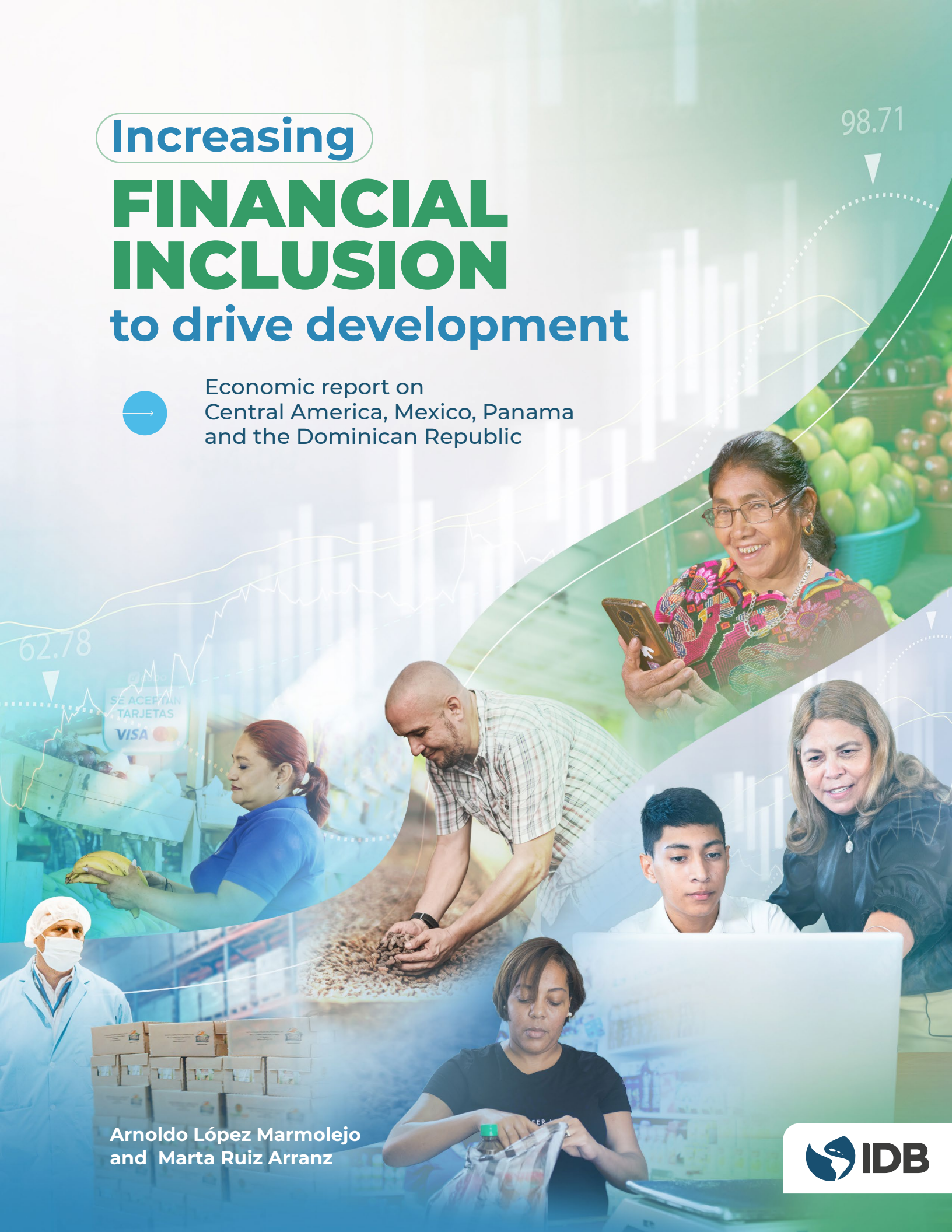## to drive development

Economic report on
Central America, Mexico, Panama
and the Dominican Republic

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Executive summary

The economic climate of the region comprising Central America, Panama, and the Dominican Republic (the CAPARD region) has been characterized by a higher-than-average growth rate relative to Latin America and the Caribbean (LAC) as a whole, and indeed to the global average, driven by sectors such as tourism and agrifood, and by private consumption fueled by remittances. However, in 2023 the economy slowed down as a result of reduced export dynamism, due in part to lower international prices for key agricultural commodities, together with slower global growth and tighter international financial conditions. On top of this was the impact of inflation, which, despite easing somewhat in 2023 following the record highs of 2022, remains above the historical average in several countries of the region. With more moderate economic growth forecast for the United States and worldwide in 2024, growth in the CAPARD region may well be subdued. In turn, such a climate represents a challenge to fiscal accounts, particularly in terms of higher international interest rates, the payment of which will add to the burden on the public budget as maturities come due and the financing of the public deficit calls for additional funds to be secured. This highlights the importance of prudent and sustainable fiscal management. In this context, the importance of the financial sector in dampening fluctuations in consumption and promoting investment becomes manifest, with financial inclusion being a prerequisite to achieving this.

Over the last decade, the countries that make up the CAPARD region have seen an increase in bank lending to the private sector. However, certain characteristics give reason to believe there is room for deepening this, as well as for achieving greater financial inclusion. For example, the banking systems of several countries of the region exhibit higher net interest margins, returns on equity, concentrations, and operating cost ratios than the LAC average. In terms of financial inclusion, an average of 35% of small and medium-sized enterprises report being financially constrained, which is higher than the LAC average. With regard to households, several indicators show a drop in the degree of financial inclusion as a result of the COVID-19 crisis; an example of this is the fall in the percentage of people with savings accounts, loans, and credit cards.

An exploration of the determinants of various financial inclusion variables at the international level enables us to identify policies to promote its expansion. Some things that are conducive to greater use of financial products and services are: the existence of a National Financial Inclusion Strategy (NFIS), a person's level of education, and lower market concentration. New digital financial technologies also allow for greater access to financial services.

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An international analysis suggests that wherever an NFIS has been implemented, this has resulted in greater penetration of deposit products. However, there is no significant change in other products and services (e.g., loans), which suggests that achieving more far-reaching results requires stronger design and implementation. More specifically, the strategies developed in the region need to provide a more robust definition of the responsibilities of the various stakeholders involved, the monitoring and evaluation mechanism employed, and the strategy for communicating the latter to the public.

As far as financial literacy in the region is concerned, the level of knowledge of concepts such as the time value of money, the relationship between risk and return, asset diversification, and inflation is similar to that found internationally. In contrast, there is a significant lag when it comes to knowing how to calculate interest rate payments (simple and compound) on products. This would suggest a need to strengthen financial education at an early age, as it has been shown that this is the time when such education can have positive long-term effects, such as opting for cheaper financial products and asset accumulation in adulthood.

With regard to market concentration and its possible relationship to interest rate levels, we evaluate the net interest margin by analyzing minimum reserve requirements, administrative costs, expected losses on loan portfolios, and profit margins, and propose measures in each of these areas aimed at achieving lower interest rates. The following are some of the measures that could be taken: adopting a regulatory framework that promotes the financial technology industry ("fintech") and digital payment platforms in order to streamline the administrative costs of the financial system; expanding the information coverage of credit bureaus and allowing them low-cost access to information, in order to better allocate the financial cost of risk; with respect to collateral, updating the details of real estate properties in the land registry, creating property collateral registries, and strengthening the judicial enforcement process, in part through alternative dispute resolution mechanisms, and to foster competition, reducing barriers to entry into the financial system, such as the minimum capital required for setting up a bank, as well as the restrictions on the activity of financial companies, and encouraging the use of financial agents.

Among the major obstacles to increased banking penetration are distance and the cost of having an account, which is why digital platforms and mobile money could help foster financial inclusion. In this report, we describe a number of policies aimed at promoting the use of these technologies. By way of example, several of the countries in the region have developed digital retail payment platforms, which are managed by their central banks and can be accessed by non-bank financial technology firms. There has been a move towards social transfers via digital media and the creation of tech hubs, a public-private collaboration that provides a forum for discussing the introduction of new technologies in the financial sector. Furthermore, a regulatory framework needs to be developed in line with new technologies.

Lastly, we present a selection of the operations that the IDB Group has been conducting to support financial inclusion in the CAPARD region, both through joint work with the public sector and through operations with the private sector, together with support for early-stage entrepreneurial innovations.

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Content

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Chapter

1

International economic climate and outlook

International economic climate and outlook

Between 2007 and 2022, the region comprising Central America, Panama, and the Dominican Republic (i.e., CAPARD) recorded an average annual economic growth rate of 4.1%, exceeding the Latin America and the Caribbean (LAC) average of 2.0% and global average of 3.3% (see Figure 1.1). This rate can be largely explained by the performance of the agrifood and foreign tourism sectors, and by private consumption fueled by remittances and population growth.

The CAPARD region is estimated to have grown by 4.0% in 2023, 0.1 percentage points lower than the earlier average. It was a year that saw private consumption bolstered by vigorous remittance activity: remittances increased by an annual rate of 7.6% (see Figure 1.3) in Guatemala, Honduras, and El Salvador, where they accounted for over 22% of GDP, substantially higher than the 17% recorded in 2019.

FIGURE 1.1.
Real GDP growth

■ 2007–2022 average ■ 2022 ■ 2023 ■ 2024

Source: IMF's World Economic Outlook (WEO) October 2023 and January 2024.
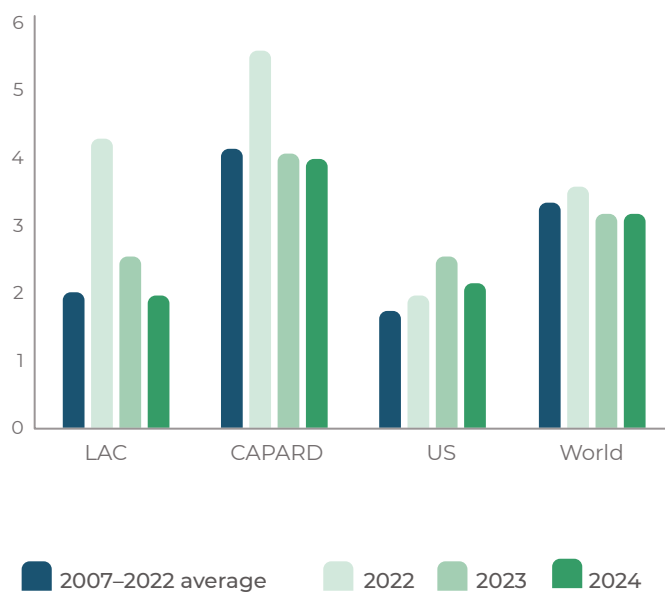
FIGURE 1.2.
Real GDP growth by CAPARD country

■ 2023 ■ 2024 — 2007–2022 average

Source: SECMCA and IMF's World Economic Outlook (WEO) October 2023.

As for the foreign sector, exports from the region were less dynamic in 2023. Only Costa Rica and Panama witnessed a year-on-year growth in exports, driven by medical products in the former and copper in the latter (see Figure 1.4).

FIGURE 1.3.
CAPARD remittances
(total growth)
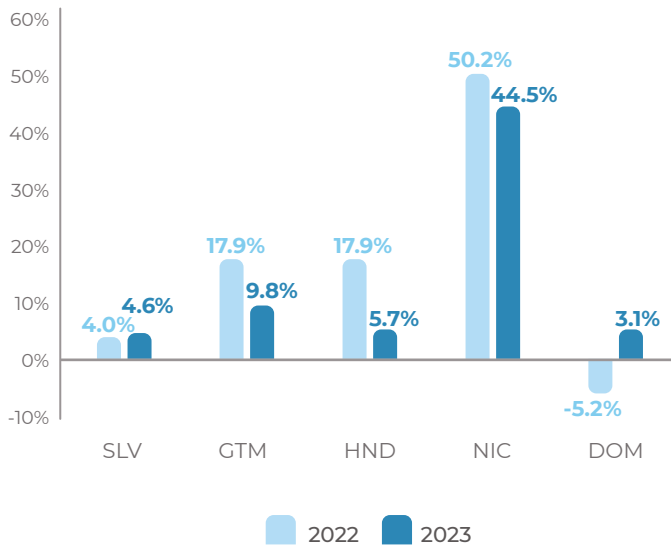
Source: SECMCA.

FIGURE 1.4.
Total export growth
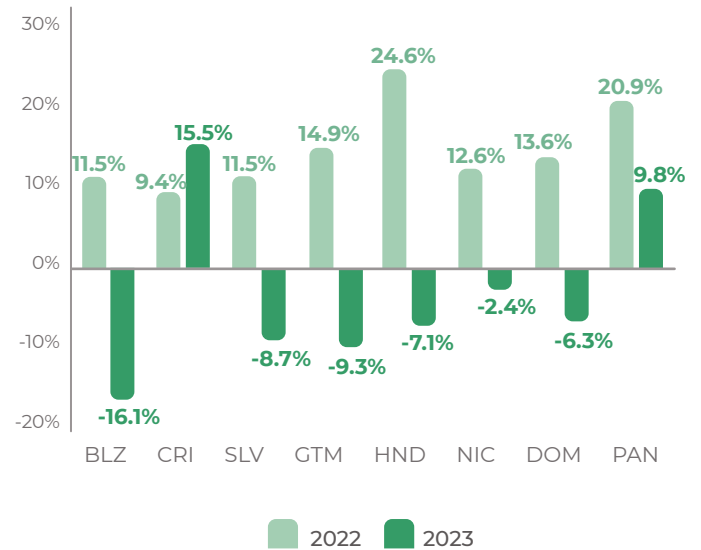
Source: SECMCA and central banks.

Note: Year-end data for BLZ, CRI, GTM, NIC, and SLV, and year-to-September data for HND, PAN, and DOM.

International prices for the region's main agricultural export products, such as coffee, bananas, and sugar, have shown a mixed trend. The international price of coffee dropped to its lowest point in the last two years in 2023, which led to a fall in the value of coffee exports, though there has been a slight recovery in the first few months of 2024. In contrast, the international price of sugar is above its 2022 levels (see Figure 1.5). According to World Bank data, the same is true for the price of bananas, which rose by an annual average of 10% in 2023, resulting in an increase in the value of banana exports.

Meanwhile, imports fell (see Figure 1.6), impacted by lower international prices for hydrocarbons and imported foodstuffs such as corn and wheat. This situation has enabled several CAPARD countries to reduce their trade deficits compared to 2022.

FIGURE 1.5.
International food and oil prices
(Index: January 2022=100)
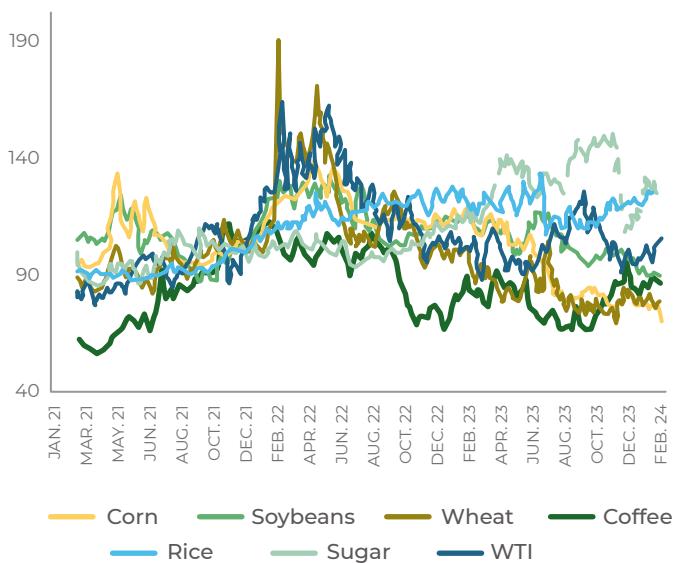
Source: Bloomberg.

FIGURE 1.6.
Total import growth
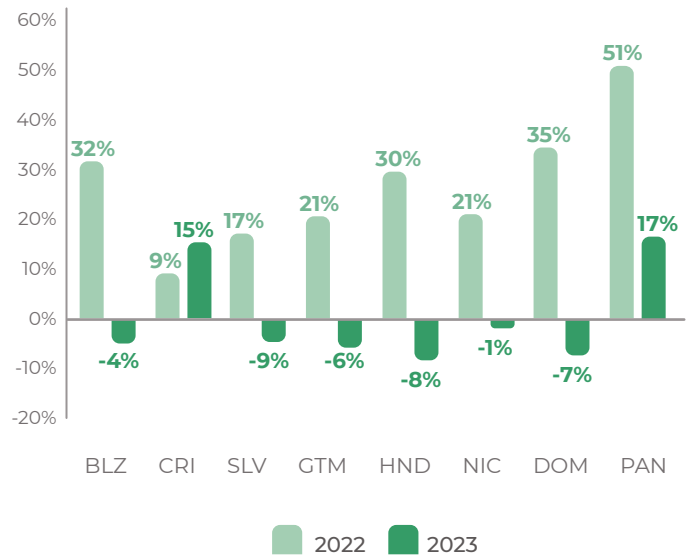
Source: SECMCA and central banks.

Note: Year-end data for BLZ, CRI, GTM, NIC, and SLV, and year-to-September data for HND, PAN, and DOM.

Global economic growth in 2024 is expected to remain at 3.1%, a rate similar to that averaged between 2007 and 2012, while the U.S. is expected to grow by 2.1%, below the 2023 growth rate of 2.5%. In the face of a global slowdown, CAPARD's links with the rest of the world through trade and financial flows will limit its growth. Overall, it is estimated that the countries of the region will experience growth similar to or below the average for the period 2007–2022 (see Figure 1.2).

Some of the external risks threatening the region's outlook include slower growth among its main trading partners, a drop in the international prices of its main export products or rise in the prices of imported products such as hydrocarbons, and increasingly frequent adverse climate events. The behavior of international commodity prices is greatly subject to the risk of geopolitical conflicts, a risk that continues to loom. Meanwhile, the phenomenon of El Niño poses short-term risks to agricultural prices and food security in the region.

There are also certain idiosyncratic risks. For example, in Panama, the ban on mining and cancellation of mining-sector contracts[1] will constrain exports and public revenues. This in turn could impact the perception of sovereign

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1 The contract with the main mining company represented tax revenues of USD 375 million a year, which helped ensure the target of 3% of GDP by 2023 was met.

risk. Moreover, due to the prolonged dry season, the Panama Canal Authority has had to gradually reduce the number of vessels passing through the canal each day, though so far there has been no drop in revenues.

Meanwhile, there are certain situations which, were they to materialize, would help improve the region's economic performance; to be specific, a generally more favorable climate for global economic activity; a faster-than-expected drop in inflation in the region (which would allow for a reduction in interest rates); a complete recovery of tourism to the region, and improvements in security that would increase investment.

Inflation in the region tended to ease in 2023 after reaching its peak levels of the last decade in several countries in 2022, though in a number of cases it remained above its 2007–2021 average.

FIGURE 1.7.
Annual inflation rate
(%)
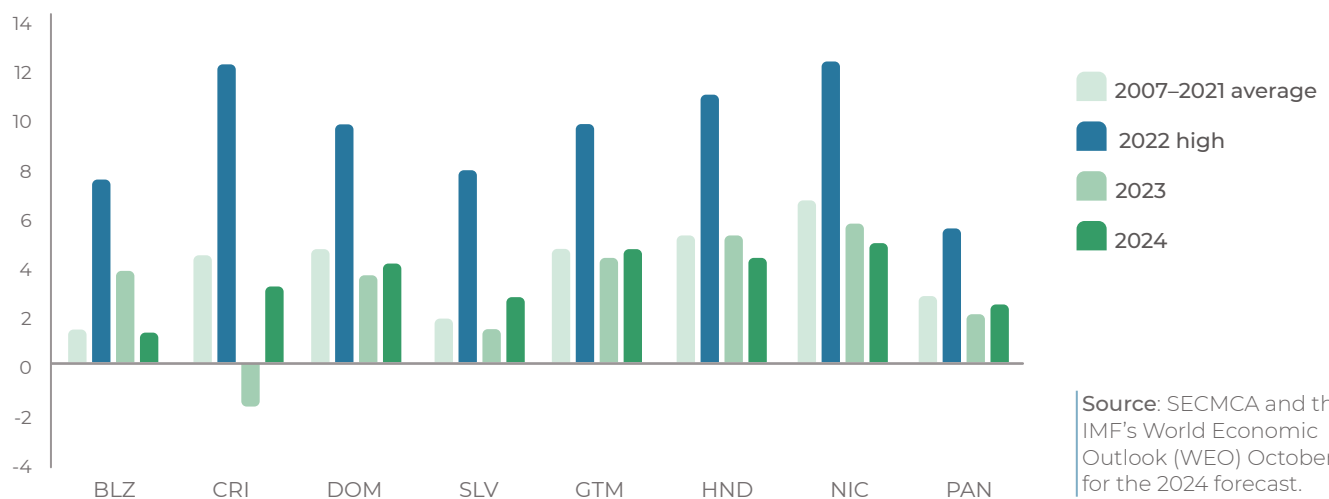
Source: SECMCA and the IMF's World Economic Outlook (WEO) October 2023 for the 2024 forecast.

Inflation in 2023 benefited from falling international energy and food prices (see Figure 1.5). Though oil and gas prices rallied in the latter part of the year as a result of the possible reduction in supply due to the conflict in the Middle East, in the last quarter they fell. It is also important to bear in mind that food prices are volatile and the potential shortages of certain foods—such as wheat, triggered by the conflict in Ukraine, or of other foods, due to climate events—represent upside risks. So while inflation is expected to continue to ease towards a level closer to its 2007–2021 average in 2024, its forecast is skewed to the upside. In Guatemala and the Dominican Republic, inflation has returned to around the midpoint of the inflation target range (at 4% ±1% in both cases), while in Costa Rica (3% ±1%) it is below the lower limit of its target, largely as a result of the base effect produced by the high level recorded in 2022 and exchange rate appreciation.

As a result of the spike in high inflation in 2022, the central banks of the region, like those in the rest of the world, raised their monetary policy target interest rates. Several countries in the region started their upward cycle in late 2021 and early 2022, prior to the U.S. Federal Reserve beginning its own (see Figure 1.8), so presumably the results of this policy have already begun to materialize. As inflation fell, some of these countries began to reduce their rates in mid-2023, including Costa Rica and the Dominican Republic. At the same time, the latter has approved liquidity provision measures for financial intermediaries equivalent to 3% of GDP in an effort to stimulate domestic demand through better credit conditions. Looking ahead, how monetary rates behave will depend on inflation, the performance of economic activity, and on interest rates in developed countries due to their effect on international financial flows. Nevertheless, the downturn in inflation and the fact that monetary rates in various countries of the region have remained unchanged for several months—and actually fallen in some others—together suggest that the upturn in rates has come to an end.

Higher target interest rates mean tighter monetary conditions. However, in open economies monetary conditions also depend on the exchange rate level due to its effect on aggregate demand. A more depreciated exchange rate boosts exports and stifles imports, which encourages local production and increases the availability of financial resources in the economy. The behavior of the exchange rate has been very varied across the countries of the region: in some it has been very stable, while in others it has experienced significant fluctuations in terms of both magnitude and trend over recent years. For example, in Costa Rica, the real effective exchange rate depreciated in 2022, then appreciated significantly in 2023. The Dominican Republic saw a depreciation in 2020 as a result of COVID-19, with a subsequent appreciation, then a slight depreciation in 2023 (see Figure 1.9).

FIGURE 1.8.
Leading monetary policy interest rate
(%)
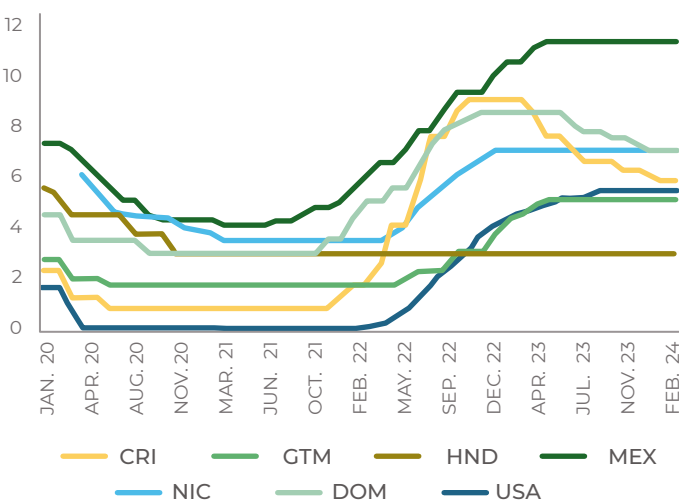
Source: Central American Monetary Council.
Note: Month-end figure.

FIGURE 1.9.
Real effective exchange rate
(Index: December 2000=100)
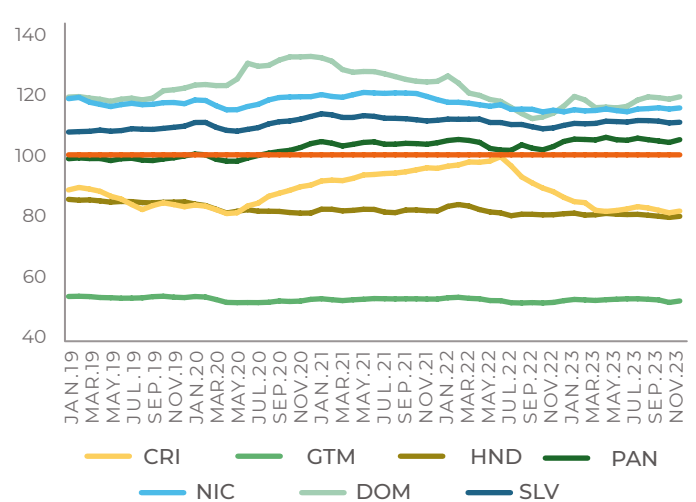
Source: Central American Monetary Council.
Note: A rise in the Index indicates a depreciation.

Short-term interest rate and exchange rate data can be used to construct a Monetary Conditions Index (MCI). Indexes of this kind are widely used—to varying degrees—by diverse central banks in pursuing their monetary policy. For example, Canada and New Zealand use the index as an operating target and the central banks of other countries usually publish it in their reports. We calculate the index for the countries of the CAPARD region as per Ericsson *et al.* (2019), who describe the method used by the central bank of Canada, and we apply the same weight to each variable (i.e., the real short-term rate and the real effective exchange rate[2]). We take January 2019 as the base month (with a value of zero) for comparison purposes with monetary conditions in the run-up to the pandemic. The MCI shows that the pandemic period was one of significant monetary policy easing, underpinned by both cuts in rates and a depreciation of the real effective exchange rate in most countries. A shift towards less relaxed monetary conditions is evident in mid-2022 and by 2023 monetary conditions in the countries of the region were close to those of January 2019, though in some it is clear that they had already become more restrictive (see Figure 1.10).

Meanwhile, the increase in local and international monetary interest rates can be expected to impact the interest rates for private and public sector financing, particularly as financial obligations mature and new financing needs have to be met.

In the private sector, this increase was carried through to the interest rates on bank loans in the region, both in local and foreign currency. Nevertheless, in CAPARD, the average rise was modest at 1.1 and 1.6 percentage points between the beginning of 2022 and September 2023 for local and foreign currencies, respectively (see Figure 1.11).

FIGURE 1.10.
CAPARD Monetary Conditions Index
(Index: January 2019=0)

FIGURE 1.11.
Average CAPARD lending rate
on bank loans
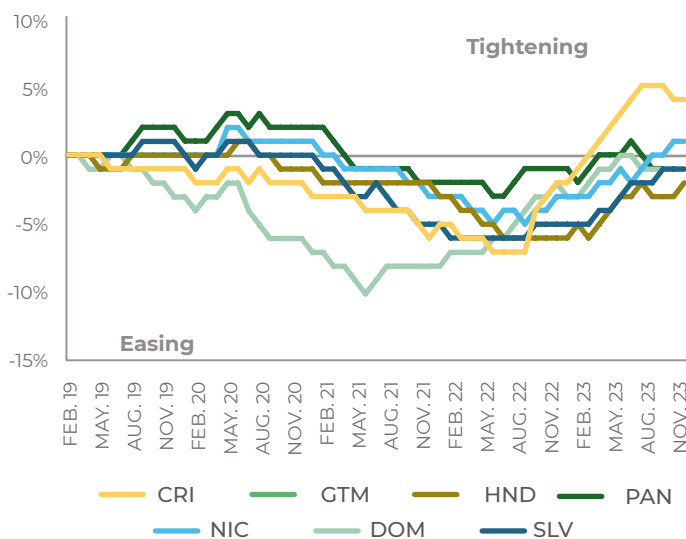
Source: Compiled by authors.
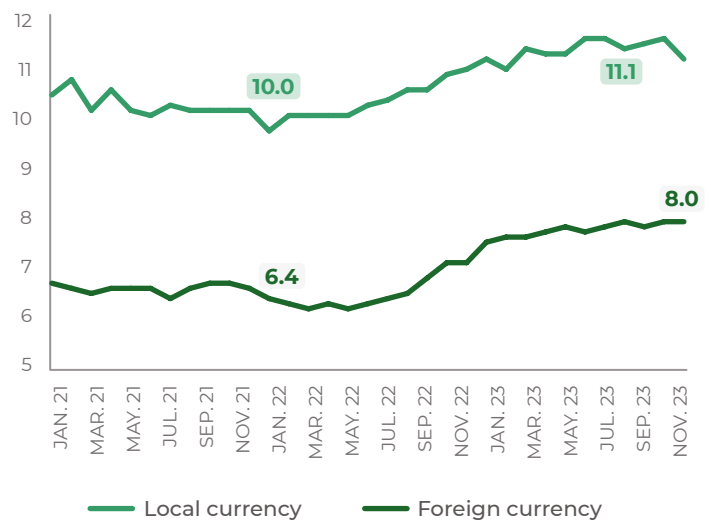
Source: Central American Monetary Council.

2 The interest rate used in the calculation is the monetary policy rate, and for dollarized countries, the average bank lending rate.

With respect to the cost of public sector financing, the interest rate on international debt in the countries of the region increased in 2022 and remained stable for the first nine months of 2023. The last quarter of 2023 saw a reduction, though in most countries it remained above its 2022 level. This pattern is similar to the average for Latin America and emerging countries (see Figure 1.12), reflecting tighter global financial conditions. The cases of El Salvador, Guatemala, and Panama are noteworthy, as all three have seen a shift in their interest rate trends, which may be related to idiosyncratic events. For example, in El Salvador there has been a downward trend since late 2022, which seems to coincide with the November 2023 repurchase of external debt maturing in 2023 and 2025. The rate dropped a total of 13 percentage points between November 2022 and December 2023. In Guatemala and Panama, the rises recorded in the interest rate for international debt (of 21 and 70 basis points, respectively, in 2023) coincide with the increase in social and political instability in both countries.

FIGURE 1.12.
Sovereign interest rate on international debt
(%)
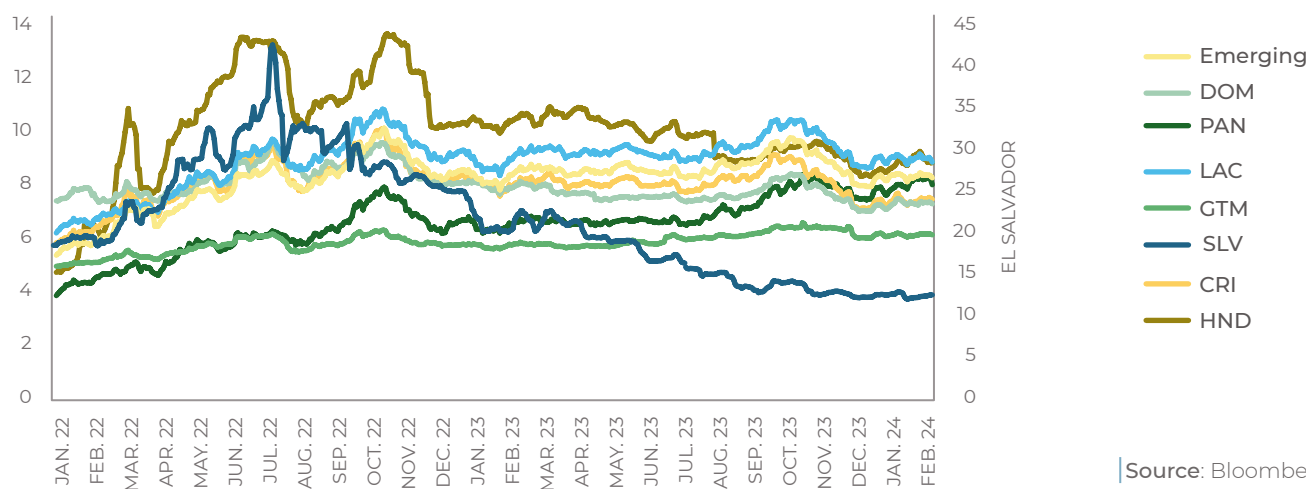
Source: Bloomberg.

In the case of domestic financing, the cost of short-term domestic-currency issues is linked to the monetary policy rate, which has risen in most countries over the last two years. In turn, the medium-term interest rate affects both the short-term rate and the perception of risk and medium-term inflation. The interest rate on medium-term issues has remained contained in the region. For example, in Guatemala it has increased slightly, while in countries such as Costa Rica and the Dominican Republic it was lower in 2023 than it was in 2022. These lower rates have been helped by a drop in the countries' monetary rates during this period (see Figure 1.13). This suggests that investors' expectations with regard to future economic conditions in the countries of the region remain stable.

FIGURE 1.13.
Cost of domestic debt placements in the primary market

Legend:
- 2022
- 2023

X-axis: CRI, GTM (5 YEARS) | CRI, DOM, GTM (10 YEARS)

Source: Own calculations based on Ministries of Finance data.
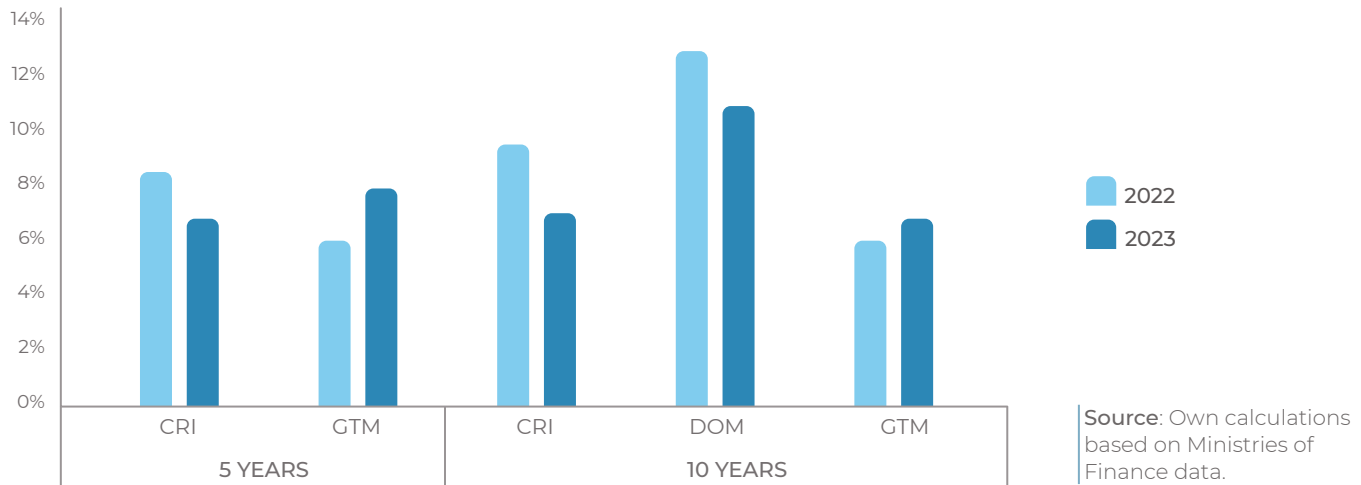
As debt reaches its maturity date and the financing of the public deficit necessitates the procurement of additional funds, the cost of debt will rise in the face of higher rates globally. Across the region, an average of 30% of government debt is due to mature in the next five years, the figure reaching around 50% in some cases (see Figure 1.14), while 20% of government debt in Costa Rica and Honduras is due to mature in the next two years (2024–2025). As a result, interest payments as a percentage of tax revenues in the region are projected to rise from a pre-pandemic level of 19% to 23% in 2024 (see Figure 1.15) and reach 15% of total government spending.

FIGURE 1.14.
Government debt maturities
(% of total)

X-axis: CRI, DOM, GTM, HND, NIC, PAN, SLV

Legend:
- 1-5 years*
- 6-10 years
- > 10 years

FIGURE 1.15.
Ratio of interest payments to tax revenues in the CAPARD region (%)

Values: 2019: 19%, 2020: 24%, 2021: 21%, 2022: 20%, 2023: 22%, 2024: 23%
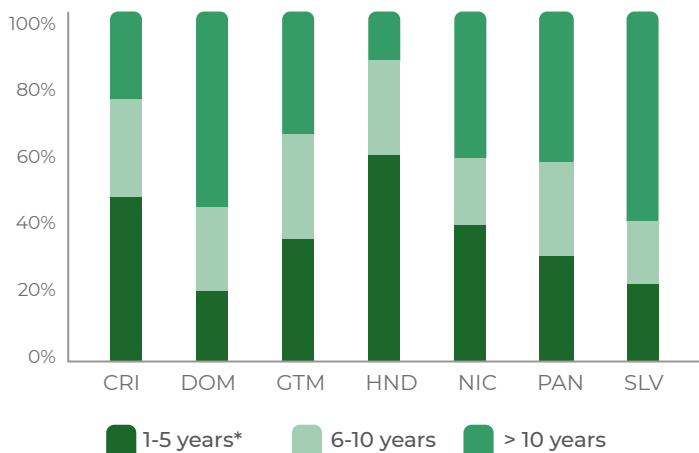
Source: Ministry of Finance of each country.

Note: *Includes debt with a maturity of <1 year. For reasons of data availability, for NIC only external debt is included.
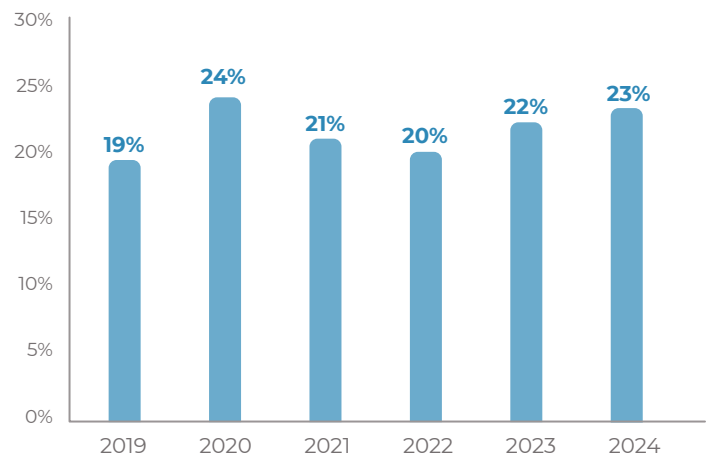
Source: IMF's World Economic Outlook October 2023.

In order to offset the negative social and economic effects of the pandemic, like most countries in the world, those of the CAPARD region increased public spending in 2020 and 2021 through both domestic and external financing. As a result, the public-debt-to-GDP ratio increased. The post-crisis recovery of economic activity, the unexpected surge in inflation, and the gradual withdrawal of the fiscal stimuli associated with the pandemic helped stabilize the ratio of public debt to GDP. Specifically, the decrease in the debt-to-GDP ratio recorded between 2023 and 2020 was the result of GDP growth and price rises in equal measure. In contrast, the main driving force behind this increase was the nominal interest rate. It is worth noting that the efforts to maintain a stable fiscal stance have resulted in a neutral contribution of the primary balance (see Figure 1.16). At the same time, it is important to bear in mind that although stimulus measures implemented in the wake of the pandemic were withdrawn, countries implemented new economic and social relief measures as inflation surged, thus increasing other spending items. Consequently, the ratio of public deficit to GDP in 2023 remained at a level similar to that of 2022 (see Figure 1.17).

FIGURE 1.16.
Breakdown of the drop in the debt-to-GDP ratio in the CAPARD region between 2023 and 2020

Nominal interest rate
Adjustment
Primary balance
Inflation
Real GDP growth
◇ Change in Debt 2020-2023, % GDP

Source: Own calculations
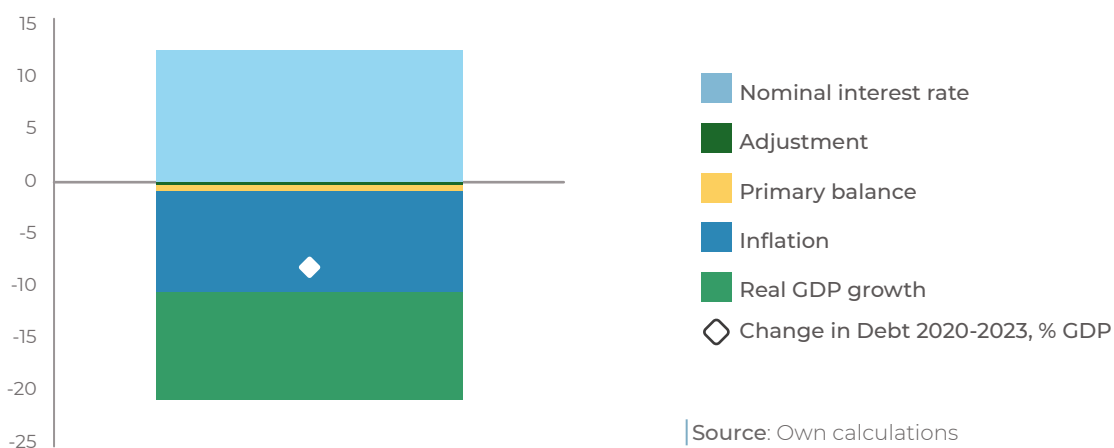
The ratio of public debt to GDP is expected to remain stable in 2024 (see Figure 1.18). Nevertheless, there are certain factors that generate upward pressure on this variable; specifically, higher interest payments, the risk of a slowdown in activity, and lower inflation. In order to ensure the ratio of debt to GDP remains unchanged, the public deficit-to-GDP ratio will need to stay at levels similar to those of 2023. Thus, if these pressures were to intensify, there would need to be an effort to restructure spending, which could limit investment in infrastructure and social spending, the alternative being to endeavor to increase tax revenues. This scenario illustrates the need to reflect on measures aimed at streamlining public spending, reducing tax evasion and avoidance, and increasing productivity.

FIGURE 1.17.
Fiscal deficit
(% of GDP)
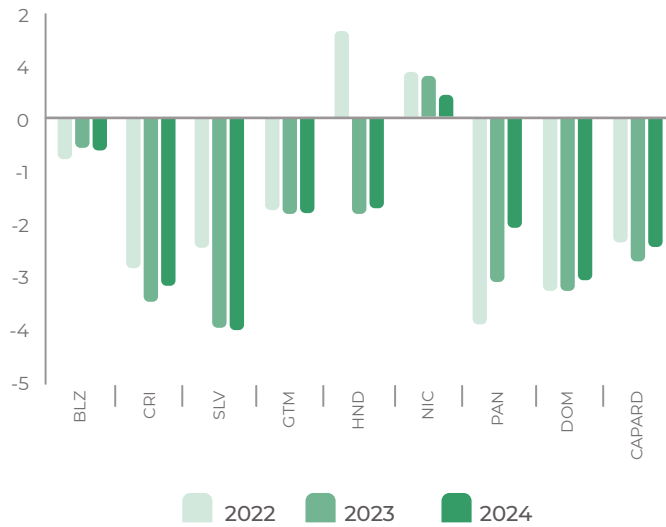
Source: IMF's World Economic Outlook (WEO) October 2023.

FIGURE 1.18.
Public debt-to-GDP ratio in the CAPARD region
(%)
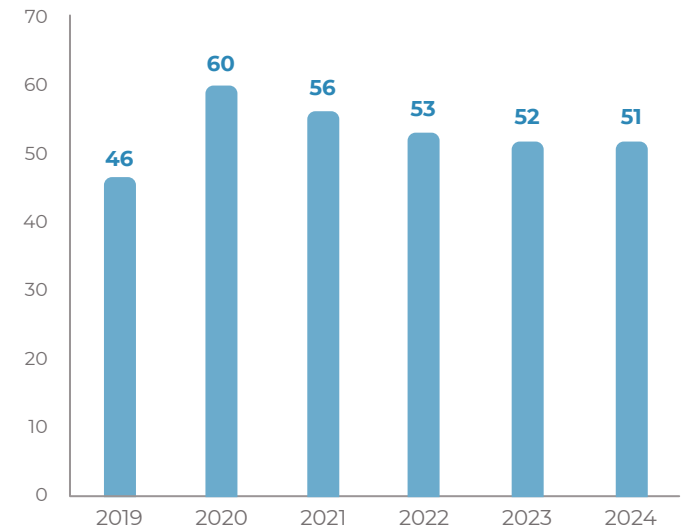
Source: IMF's World Economic Outlook (WEO) October 2023.

The improvement in economic conditions in the region was reflected to a moderate extent in its social conditions. In several countries of the region, such as Guatemala and El Salvador, the monetary poverty rate in 2022 was slightly below its pre-pandemic level, whereas in others, such as Costa Rica, Panama, and the Dominican Republic, it was still marginally higher (see Figure 1.19).

FIGURE 1.19.
Monetary poverty rate
(% of the population)
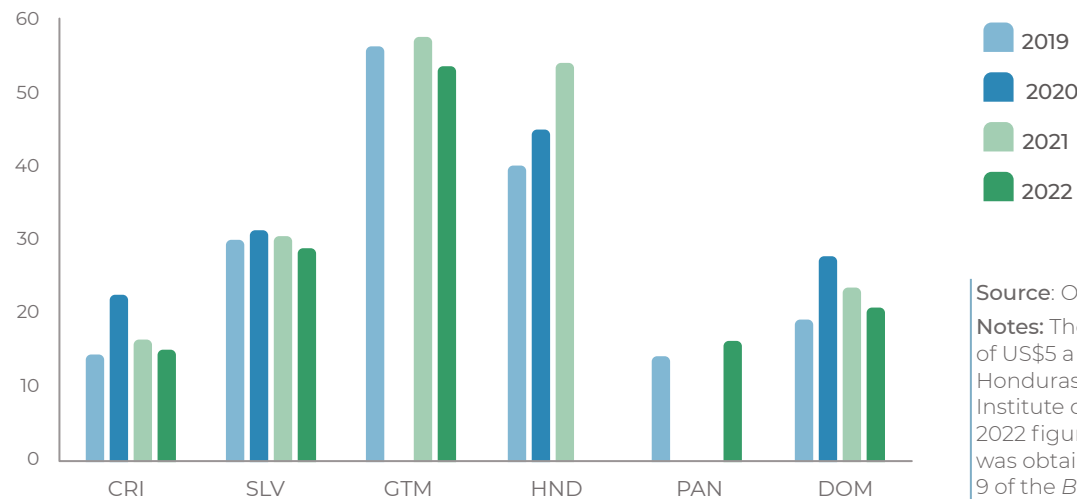
Source: Own calculations.

Notes: The poverty threshold is an income of US$5 a day (PPP 2011). The figure for Honduras is that of the country's National Institute of Statistics' poverty threshold. The 2022 figure for the Dominican Republic was obtained by extrapolating from Figure 9 of the *Boletín de Estadísticas Oficiales de Pobreza Monetaria 2022*.

The reduction in monetary poverty was partly helped by the creation of formal employment (i.e., jobs that generate social security contributions), to the extent that in 2022 the number of formal jobs in the countries of the region exceeded their pre-pandemic level. At the same time, in some cases, informal employment did not recover and in 2023 remains below its pre-pandemic level (see Figure 1.20). This difference helps explain why no significant change in the poverty rate occurred in 2022 compared to its pre-pandemic level.

FIGURE 1.20.
Percentage change in employment 2023–2019

Formal
Informal
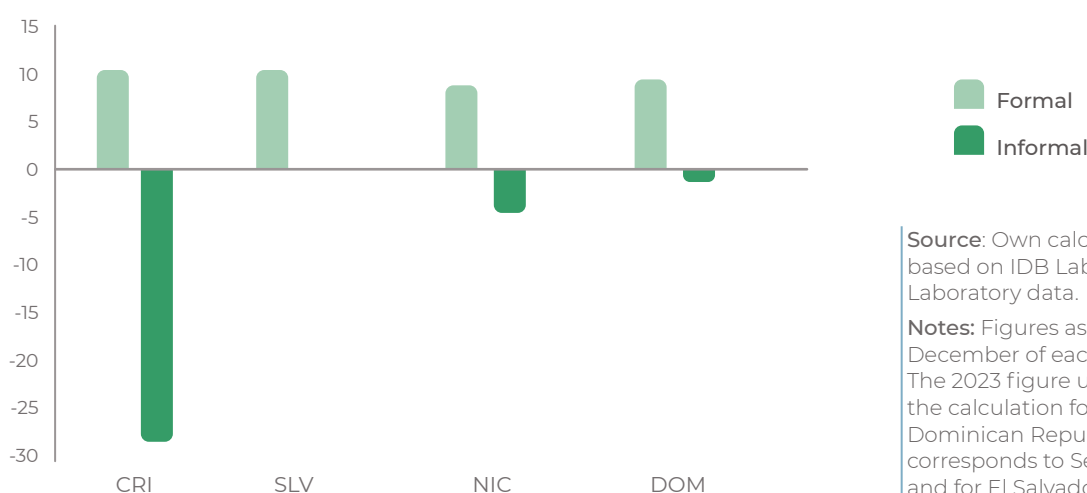
Source: Own calculations based on IDB Labor Laboratory data.

Notes: Figures as of December of each year. The 2023 figure used in the calculation for the Dominican Republic corresponds to September and for El Salvador to March.

In sum, the current economic climate in the region is characterized by what is expected to be slower growth than the historical average along with tighter financial conditions. Both will impact income and, in turn, constitute obstacles to broader access to financial products, something that could potentially mitigate the fluctuations in consumption brought about by the slowdown. Furthermore, the region already lags behind when it comes to access to financial products and services, for which reason the remainder of this report will delve deeper into financial inclusion there. Specifically, the next chapter describes the state of lending and financial inclusion. Chapter 3 looks at the determinants of financial inclusion and, based on these, proposes policies aimed at deepening it. Lastly, Chapter 4 showcases the IDB Group's involvement in promoting financial inclusion in the region by presenting a selection of its operations.

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Chapter

2

The state of credit and financial inclusion

Chapter

2

The state of credit and financial inclusion

The financial system plays a crucial role in the progress and development of an economy by serving the following functions (Merton, 1995): (i) providing a payments system for the exchange of goods and services; (ii) providing a mechanism for the pooling of funds to undertake a large-scale indivisible enterprise; (iii) providing a way to transfer economic resources through time and across regions and industries; (iv) providing a way to manage uncertainty and control risk; (v) providing price information that helps to coordinate decentralized decision-making in various sectors of the economy; and (vi) providing a way to deal with the asymmetric-information and incentive problems when one party to a financial transaction (lender and borrower) has information that the other party does not.

These functions ensure that financial development and access to credit have a positive effect on economic growth and welfare. For example, when access to credit is limited, investment tends to be lower and fails to reach the most productive projects in good time.[3] At the same time, as evidenced by Aghion *et al.* (2010), long-term investments that boost productivity become more procyclical and risky when credit is scarce, thus dampening long-term growth. As for consumption, access to credit enables households to smooth their consumption over the life cycle. Savings products enable access to credit products, while stimulating investment in human and business capital, as well as production in general.[4]

In order to get an understanding of the situation at the regional level, in this chapter we analyze a number of characteristics of the banking system[5] and the state of financial inclusion. To this end, we make an international comparison of aggregate banking variables and conclude with a description of the financial constraints on firms and financial inclusion at the household level.

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3 Studies such as Moll (2014), Midrigan and Xu (2014), and Karabarbounis and Macnamara (2021) discuss how the lack of credit to the private sector causes an inefficient allocation of capital across firms. Even when firms can self-finance projects by accumulating savings, the transition to efficient allocation is slower than when firms are able to finance their projects by borrowing.

4 For a review of the evidence on the impact of financial inclusion on development, see Demirgüç-Kunt and Singer (2017).

5 Due to variations in the availability of information, the aggregate level analysis and international comparisons focus largely on the banking system; these differences also limit the extent to which other sectors of the financial system that have fewer regulatory reporting requirements can be analyzed.

The state of bank lending

Most countries in the CAPARD region have seen a significant increase in bank credit to the private sector as a share of GDP over the last decade (see Figure 2.1). Most countries have seen an increase in this ratio, with notable cases such as Costa Rica, Guatemala, and Honduras where credit as a percentage of GDP has risen by more than 10 points over this period. The level of lending to the private sector in the countries of the region is generally within what would be expected given their levels of per capita income, as shown in Figure 2.2. This means that while the ratio of lending to GDP is substantially higher in advanced economies, the main driving force behind the difference is the development gap.

FIGURE 2.1.
Ratio of bank credit to the private sector to GDP (%)

	BLZ	CRI	DOM	GTM	HND	NIC	PAN	SLV
2010	50.0	43.7	21.7	23.7	46.9	24.3	76.1	46.9
2022	42.6	51.7	26.9	36.3	67.5	26.2	72.0	52.0
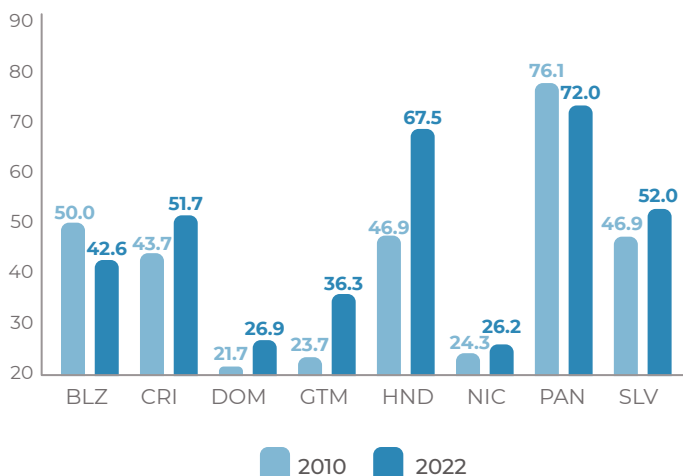
Source: World Bank.

FIGURE 2.2.
Ratio of bank credit to the private sector to GDP and GDP per capita in 2022 (%)
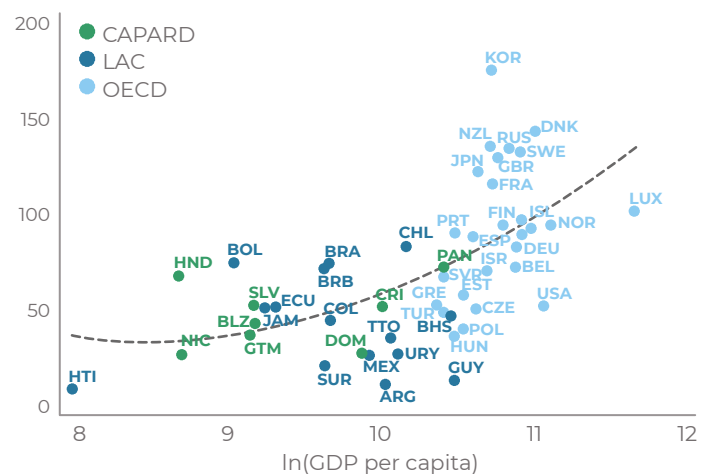
Source: World Bank.

It is worth noting that bank lending in the region tends to be financed overwhelmingly by savings deposits, which make up an average of 77% of bank credit there. Belize, Guatemala, Nicaragua, and the Dominican Republic have a loan-to-deposit ratio of close to 70% (see Figure 2.3). The difference between deposits received and credit extended usually results in a greater share of a bank's balance sheet being comprised of other types of assets. While loans account for an average of 58% of assets in the CAPARD region, in Guatemala and the Dominican Republic specifically, government securities make up a significant share; meanwhile in Belize and Nicaragua, the same can be said of cash and cash equivalents (see Figure 2.4). There are numerous reasons why banks may give preference to other assets (such as government securities), including the risk of extending credit to the private sector and the interest rate level of the asset. Reis (2022) discusses how risk considerations put a "premium" on the public sector, allowing it to issue debt at rates below those of the private sector. Banks across the countries of the region have increased their ratio of sovereign debt holdings to total assets compared to pre-pandemic levels (see Figure 2.5). With regard to the composition of the loan portfolio in the CAPARD region, an average of half is comprised of business loans, while home loans account for 23%, with significant variations between countries, ranging from 6% of the loan portfolio in Guatemala to 44% in Belize.

FIGURE 2.3.
Bank loan-to-deposit ratio
in June 2022 (%)

FIGURE 2.4.
Composition of bank assets
in June 2022 (%)
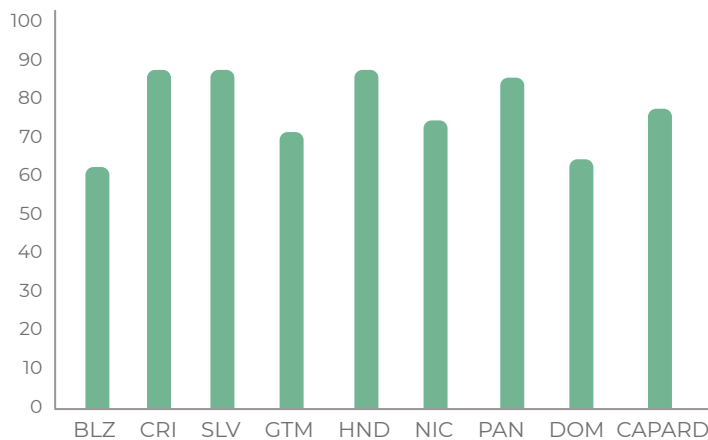
Source: SECMCA (Executive Secretariat of the Central American Monetary Council).
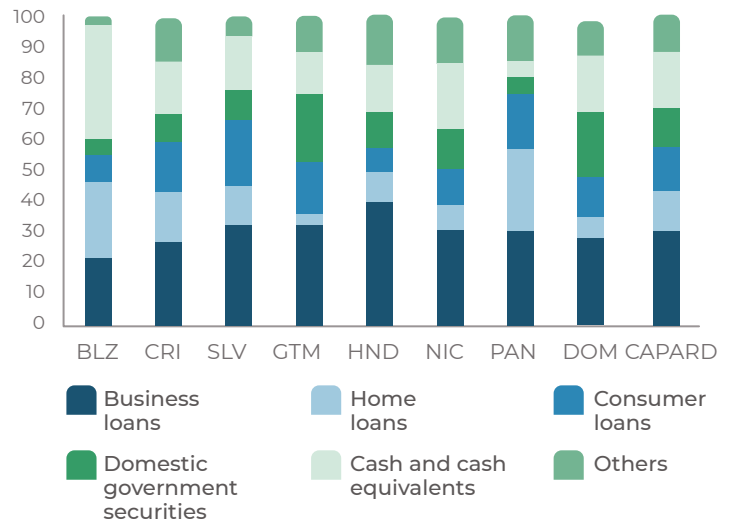
Source: SECMCA.

Note: 'Cash and cash equivalents' comprise cash on hand in local and foreign currencies or equivalent assets, as well as central bank deposits and deposits with domestic and foreign banks.

FIGURE 2.5.
Ratio of bank investments in sovereign debt to assets (%)

Legend: 2019, JUN 2023
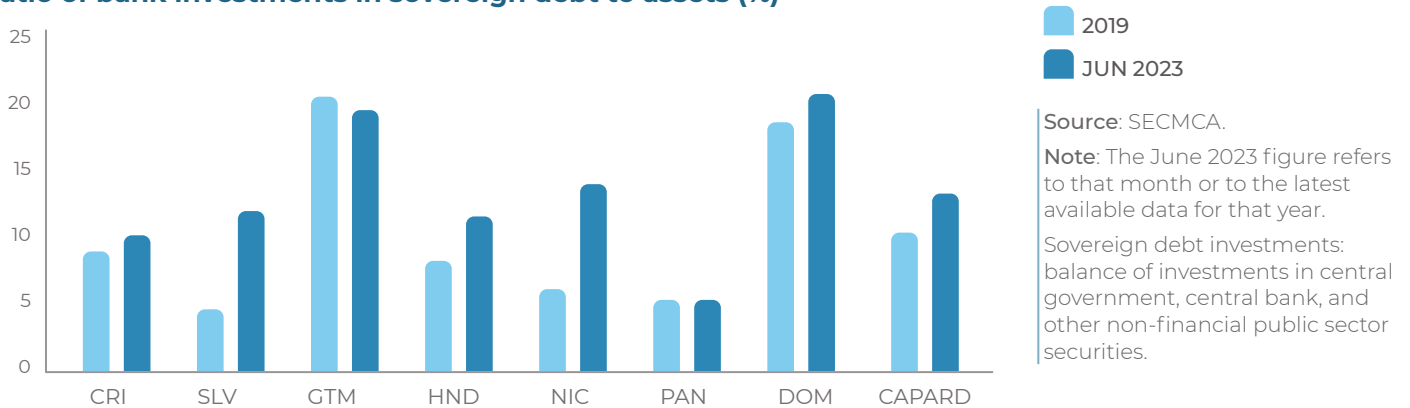
Source: SECMCA.

Note: The June 2023 figure refers to that month or to the latest available data for that year.

Sovereign debt investments: balance of investments in central government, central bank, and other non-financial public sector securities.

As mentioned previously, the countries of the CAPARD region have the expected credit-to-GDP ratios. However, an important constraint on financial inclusion is the cost of that credit. While the coverage of banking services and credit may be extensive, higher interest rates mean that the positive effects are reduced. Figure 2.6 shows that the lending-deposit spread is higher on average in CAPARD than in the rest of Latin America and the Caribbean (LAC) and the OECD. With the exception of Panama, the interest-rate spread in all CAPARD countries is higher than the LAC average. The rates are particularly high when it comes to consumer credit, particularly credit cards. Nevertheless, the difference in rates between Panama and all other CAPARD countries is noticeable for all types of loans (see Figure 2.7). Meanwhile, the significant weight of business loans in the total portfolio suggests that the cost of the latter contributes significantly to the countries' being above the LAC average.

FIGURE 2.6.
Lending-deposit spread
2015–2021 average

Legend: CAPARD, LAC, OECD
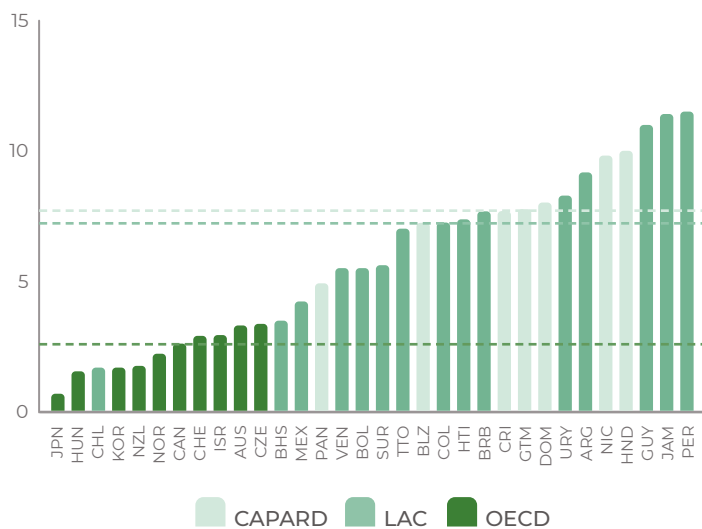
Source: World Bank.

FIGURE 2.7.
Interest rates by type of bank credit, 2022

Legend: Business, Home, Consumer, Credit card
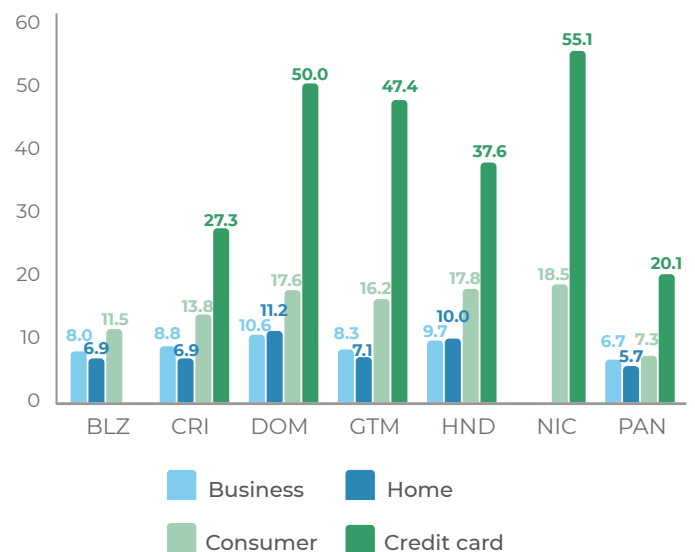
Source: SECMCA and central bank of Belize.

In the results for the banking sector, interest rates are reflected in an average regional bank interest margin above the LAC average and well above that for the OECD (see Figure 2.8). By this measure, all CAPARD countries except Panama are at the top end of the range of countries comprising LAC and the OECD. The literature is consistent in finding bank competition, operating costs, and overall credit risk to be the main determinants of interest margins (see Hawtrey and Liang, 2008; Amidu and Wolfe, 2013; Nassar *et al.,* 2017). As we shall see in Chapter 3, a series of measures are needed to improve the state of these determinants in order to make borrowing more affordable in the region and thus enhance the effect that credit can have on welfare and economic growth.

FIGURE 2.8.
Net interest margin
2015–2021 average

OECD   LAC   CAPARD

Source: World Bank.

Note: Refers to net interest income as a percentage of interest-earning assets.
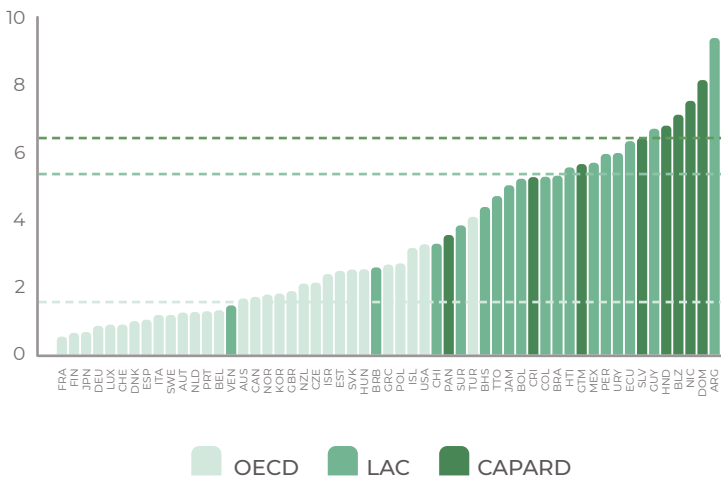
The high interest margin is, in turn, reflected in the substantial ratio of interest income to total income, averaging 70% in CAPARD (see Figure 2.9), which is above the LAC average.[6]

While almost all CAPARD countries exhibit interest margins in excess of the LAC and OECD average, this does not necessarily mean that the return on equity (ROE) is higher than the LAC average. Other costs can offset interest earnings, thereby reducing the return on all operations regardless of high interest income. Similarly, banks can have a high ROE but not necessarily high interest earnings. There are distinct cases in CAPARD, as shown in Figure 2.9. For example, while both the bank interest margins and ROE of

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6 There is debate in the literature as to the effect of non-interest income on asset risk and profitability. The studies that have been carried out generally conclude that this effect is dependent upon certain specific characteristics of both banks and countries. For example, Smith *et al*. (2003) analyze the relationship between interest income and non-interest income in E.U. banks between 1994 and 1998, and find that, overall, diversification reduces bank risk, though this depends on how independent of one another the sources of income are. In an analysis of nearly a thousand Asian banks, Lee et al. (2014) find that a bank's risk is generally reduced by non-interest income, though it does not necessarily increase its profits. However, as in the rest of the literature, these effects differ between banks, countries, specific type of other income, and so forth. With respect to income level, the authors find no increase in profits in high-income countries. With respect to the U.S., Abedifar *et al*. (2018) show that non-interest income does not increase bank risk. Moreover, they find that larger banks tend to have lower interest income ratios and lower interest rate spreads.

Guatemala, Nicaragua, and the Dominican Republic are higher than the LAC average, in other countries, such as El Salvador and Costa Rica, high interest earnings are offset by other costs, which results in an ROE close to the OECD average. At the other end of the spectrum is Panama, with an ROE close to the LAC average and level of bank interest margin similar to the OECD average. Table 2.1 provides a summary of the state of the indicators discussed for each country compared to the LAC average, as well as other indicators that are presented in detail in the coming chapters.

FIGURE 2.9.
Return on equity before tax
2015–2021 average
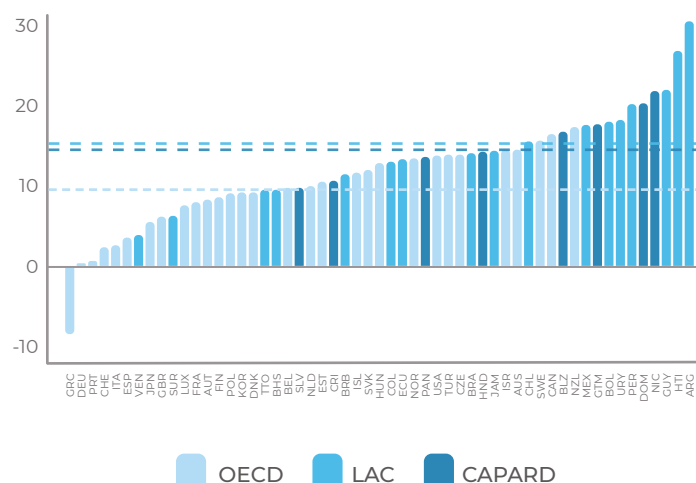
Source: World Bank.

TABLE 2.1.
Summary of the state of banking by country
X indicates that the country is above the LAC average

Country	Interest margin	ROE	Operating costs	Concentration
Belize	X	X		X
Costa Rica			X	
Dominican Republic	X	X	X	X
Guatemala	X	X		
Honduras	X		X	
Nicaragua	X	X		X
Panama				
El Salvador			X	X

Source: Own compilation based on World Bank data.

Note: 'Concentration' is the measure of the assets of the three largest banks as a percentage of the total. Operating costs are measured as a percentage of income.

Financial inclusion of businesses

When we speak of financial inclusion, we are normally referring to access to banking services at the individual rather than aggregate level. In the previous section, we looked at the diverse challenges faced within the banking sector in terms of access to credit, while in this section we take a closer look at how credit and other financial services are received by different segments of the population. We begin by focusing on the situation for businesses and then turn to households.

One of the most important functions of the financial sector is to help more productive companies to fund their investments and grow. However, according to the World Bank's Enterprise Surveys, some countries in the region are struggling in this regard. Firms in Belize, Costa Rica, El Salvador, and Honduras in particular report being financially constrained more frequently than the LAC average of 20% (see Figure 2.10). Similarly, data from the Small and Medium Enterprise Finance Forum (the SME Finance Forum) suggest that the percentage of firms facing financial constraints is higher among small and medium-sized enterprises, averaging 35% of the total in CAPARD and 30% in LAC.

At the same time, for firms of all sizes, the percentage of working capital that is financed by bank credit is somewhat lower in CAPARD than in LAC, and significantly lower in small firms, as shown in Figure 2.11. More specifically, only 13.7% of working capital is financed by bank debt (16.6% in LAC), and in the case of small firms in particular, 12.3%. It is also important to note the dominance of supplier financing, which accounts for 18.5% of working capital.

FIGURE 2.10.
Percentage of financially constrained firms
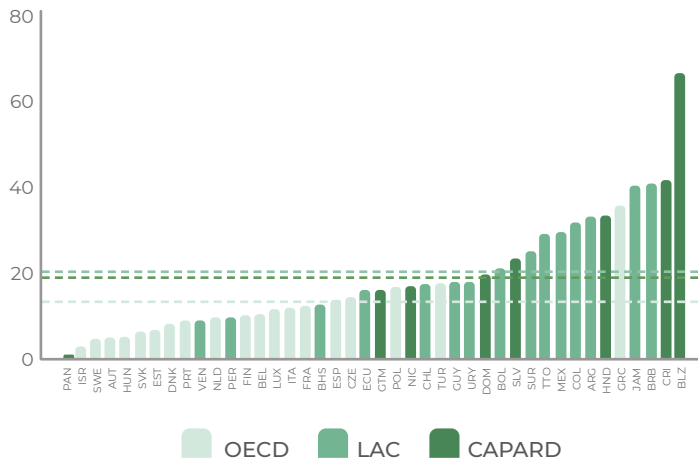
FIGURE 2.11.
Percentage of working capital financed by bank debt
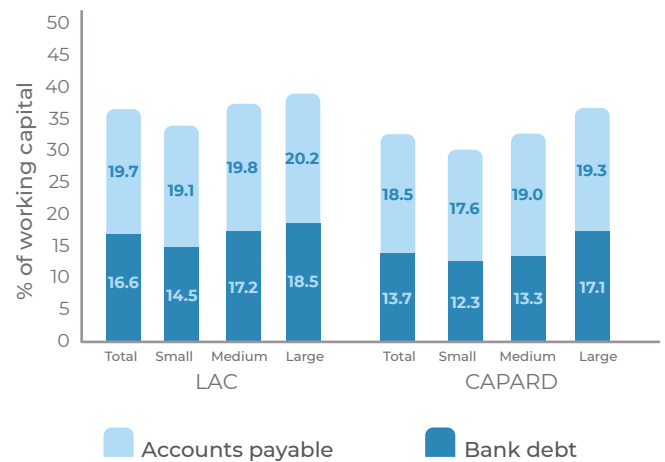
Source: World Bank Enterprise Surveys.

Note: The figure corresponds to the 2010–2021 average, though in most cases there is only one survey

By comparing the debt-to-sales ratio of firms in each country to the level of debt similar firms in developed countries would have, the SME Finance Forum estimates that the financing of CAPARD's micro, small, and medium-sized enterprises would be more than triple (see Figure 2.12). This can be seen using the MSME Finance Gap database.[7,8] In many CAPARD countries, this financing gap is greater than the LAC average. This means that the lack of working capital financing is something which, in the case of CAPARD, cannot be explained by the characteristics of its firms. Even if we break down firms by size, age, and productive sector, the financing gap compared to advanced countries is very wide.

FIGURE 2.12.
MSME financing: Observed and potential gap, % of GDP
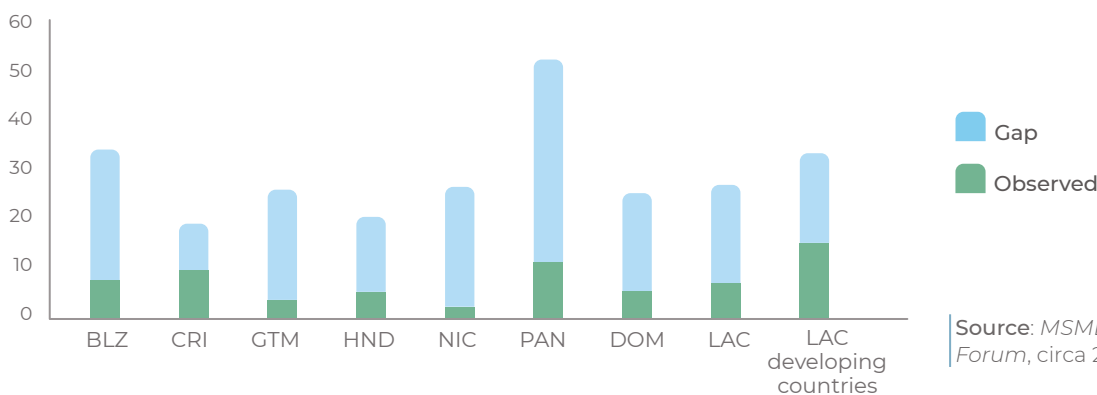
Source: *MSME Finance Forum*, circa 2019.

7 The countries chosen for comparison are Australia, Canada, Denmark, Germany, Ireland, Israel, New Zealand, Switzerland, the United Kingdom, and the United States.

8 For the methodology and data sources used in the calculation, see: https://www.smefinanceforum.org/data-sites/msme-finance-gap

→ Financial inclusion of households

In order to analyze the level of household financial inclusion, we calculate a Financial Inclusion Index (FII). The methodology followed is based on Garcimartín *et al*. (2022), who calculate the index for 2017 at an international level, while focusing their analysis on Panama and its provinces. This in turn follows the multidimensional index methodology presented in Park and Mercado (2015) and Sarma (2008). In their case, they calculate the index for the years 2011, 2014, 2017, and 2021, as these are the years for which international data on the financial inclusion variables are available.[9] The variables are listed in Table A2.1 of the Appendix and are divided into three categories, corresponding to the subindexes used. The categories are *Availability, Use*, and *Access*. The variables are weighted using a principal component analysis (PCA) as described in Cámara and Tuesta (2014). With regard to *Availability*, tangible elements such as automated teller machines (ATMs) and bank branches are considered, which serve as physical points of entry to the financial system. Meanwhile, *Access* is measured using variables that include the number of accounts, credit cards, and debit cards that a person has, which reflects their level of involvement in day-to-day financial activities. Lastly, *Use* encompasses a set of financial tools, such as loans, savings, and utility and salary payments, that an individual uses in his or her daily routine. In this way, the FII seeks to capture how people interact with the financial system through the availability of access points, the degree of participation, and the use of financial instruments in their daily lives.

9 The data are taken from the Findex database maintained by the World Bank. It includes data for the years 2011, 2014, 2017, 2021, and 2022, covering around 136 countries that have been surveyed on an ongoing basis. The data on the number of banks and ATM machines are taken from the International Monetary Fund's Financial Access Survey.

In order to establish a benchmark, the indexes for each region and country are shown relative to the average of all OECD countries, with the average of these being set to 100. This enables us to determine the difference from this group of developed countries and make a comparison between them. The overall financial inclusion index[10] for 2021[11] is presented in Figures 2.13 and 2.14. The graphs showing the differences are included in the Appendix (Figures A2.1 to A2.6).

On average, CAPARD scores below LAC in the Financial Inclusion Index in 2021 (see Figure 2.13). The countries with the highest aggregate index in the region are Costa Rica and Panama, followed by the Dominican Republic (see Figure 2.14). However, all CAPARD countries except Costa Rica score below the LAC average. Four CAPARD countries (Nicaragua, El Salvador, Honduras, and Guatemala) have a lower level of financial inclusion compared to the group of lower-middle-income countries. This shows that despite the growth of bank credit to the private sector and their having levels comparable to those of similar-income countries, their level of financial inclusion still lags behind.

Financial Inclusion Index by region in 2021
OECD high-income average=100
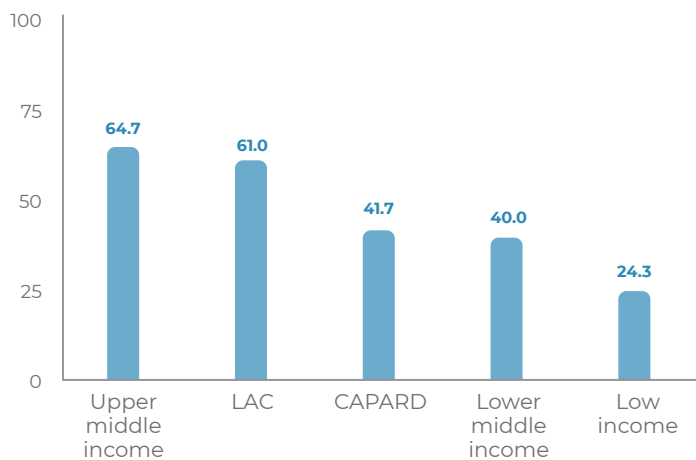
Source: Own calculations.

Financial Inclusion Index for CAPARD in 2021
OECD high-income average=100
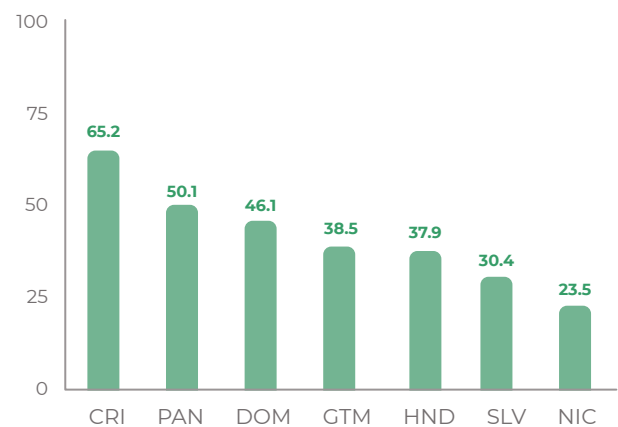
Source: Own calculations..

A similar pattern can be seen in each of the aforementioned subindexes (Figures A2.1 to A2.6 of the Appendix), albeit with some notable differences. In the *Availability* subindex, Panama has a level roughly equal to that of the OECD, which is above the rest of CAPARD, and even better than the average for the rest of LAC. All other CAPARD countries are below LAC (excluding CAPARD) in this subindex. Honduras and Guatemala exceed the average for lower-middle-income countries. In the *Use* and *Access* subindexes, only Costa Rica scores above the LAC average, as it does in

10 The regions are classified according to the Findex income group classification with LAC and CAPARD being considered separately.
11 When the figure for 2021 is not available for the country but the 2022 figure is, the latter is used.

the aggregate index (all of the subindexes as a percentage of the average for high-income OECD countries).

An analysis of the evolution of the Financial Inclusion Index between 2011 and 2021 (see Figure 2.15) shows that there has been a steady increase in CAPARD since 2011. However, in 2021, there was a backward shift. It should be noted that the region comprising Central America, Panama, and the Dominican Republic was one of the hardest hit during the pandemic due to the importance of tourism and logistics.

In terms of ranking, Costa Rica stands out among LAC countries, behind only Brazil and Chile (see Figure 2.16). It should be noted that the top positions are held by developed countries, such as Iceland and Japan, while at the bottom of the list are conflict-torn nations, such as Guinea and South Sudan.

FIGURE 2.15.
2011–2021 ranking OECD
High-income average=100
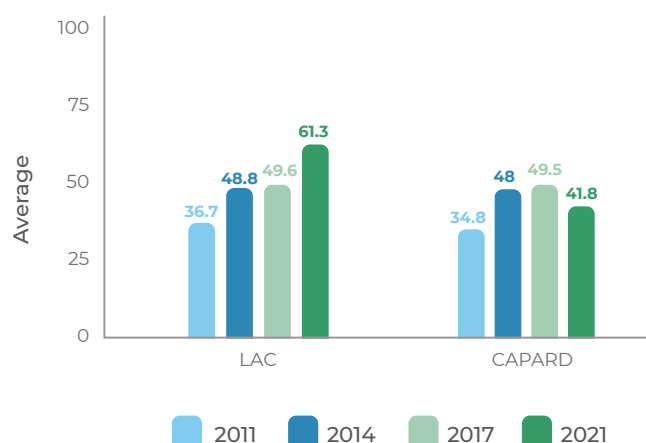
Source: Own calculations

FIGURE 2.16.
Ranking by country for 2021
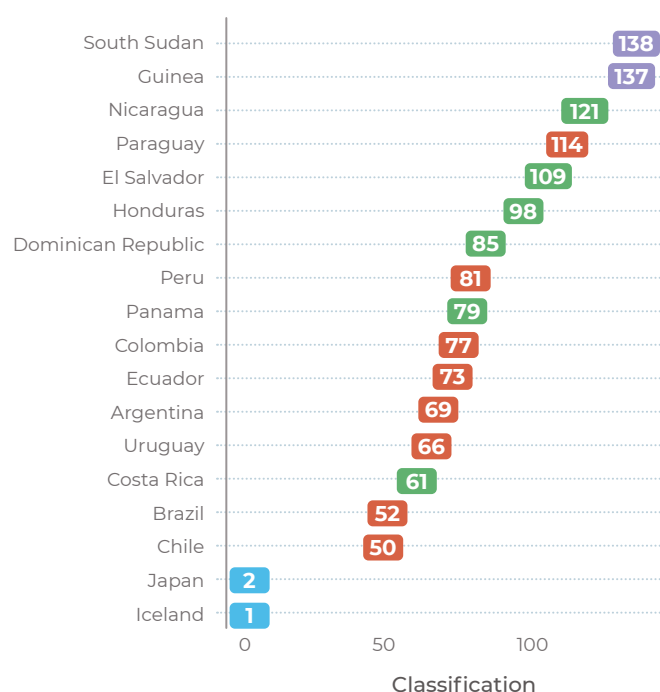
Source: Own calculations

Meanwhile, it is worth noting that LAC was the region that showed the biggest rise in the index between 2017 and 2021 (see Figure 2.17). The principal component of this increase was *Use*, which in the case of Guatemala, Honduras, the Dominican Republic, and Nicaragua, actually fell during the same period. The variables responsible for this drop in *Use* are the percentage of people with a savings account and with loans at a financial institution. At the same time, all the other subindexes decreased in almost all countries of the CAPARD region. This change is in contrast not only to LAC, but also to low-income, lower-middle-income, and OECD countries.

FIGURE 2.17.
Change in FII between 2017 and 2021 broken down by subindex

Availability
Access
Use
Overall Index
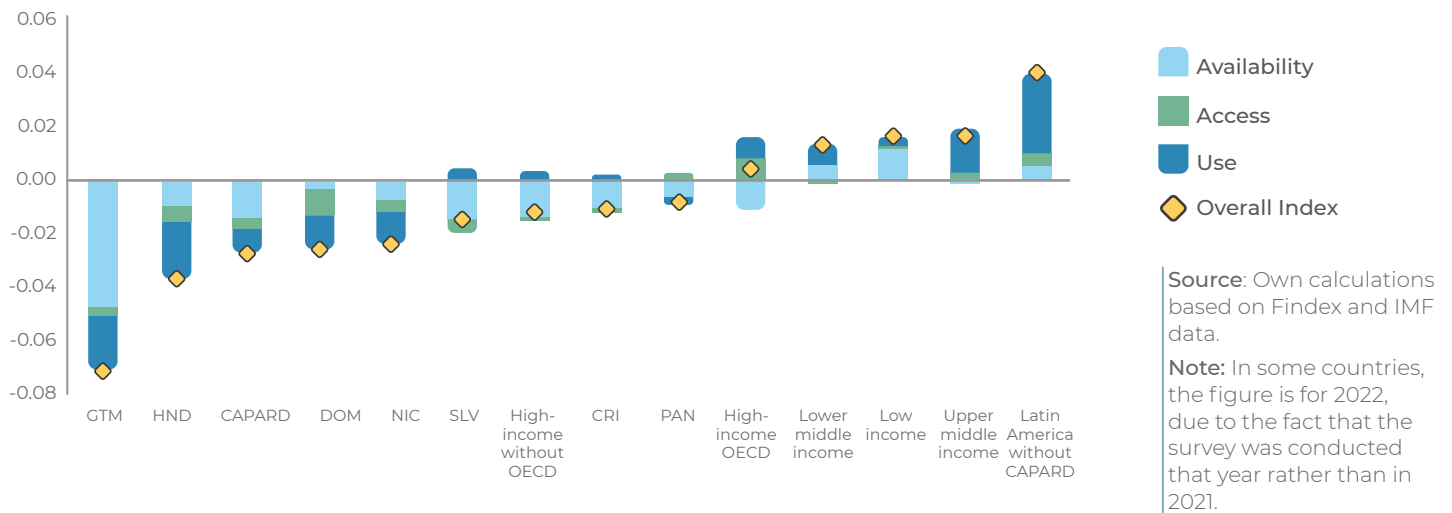
With regard to the decrease in debit cards and accounts at financial institutions in 2021, this has been partially offset by the rise in the number of mobile money accounts. More specifically, mobile money account holders as a percentage of the population over the age of 15 jumped from 4 to 8 between 2017 and 2021 (see Figure 3.10 in Chapter 3).

Meanwhile, the fall in the number of branches and ATMs and the reduction in access to the banking network may be partially offset by the use of bank agents. In several LAC countries and other countries of the region, these new entities have increased substantially in number (see Figure 2.18).

FIGURE 2.18.
Number of non-branch retail agent outlets of commercial banks per 100 thousand adults

Dominican Republic
Guatemala
LAC
Panama
Honduras
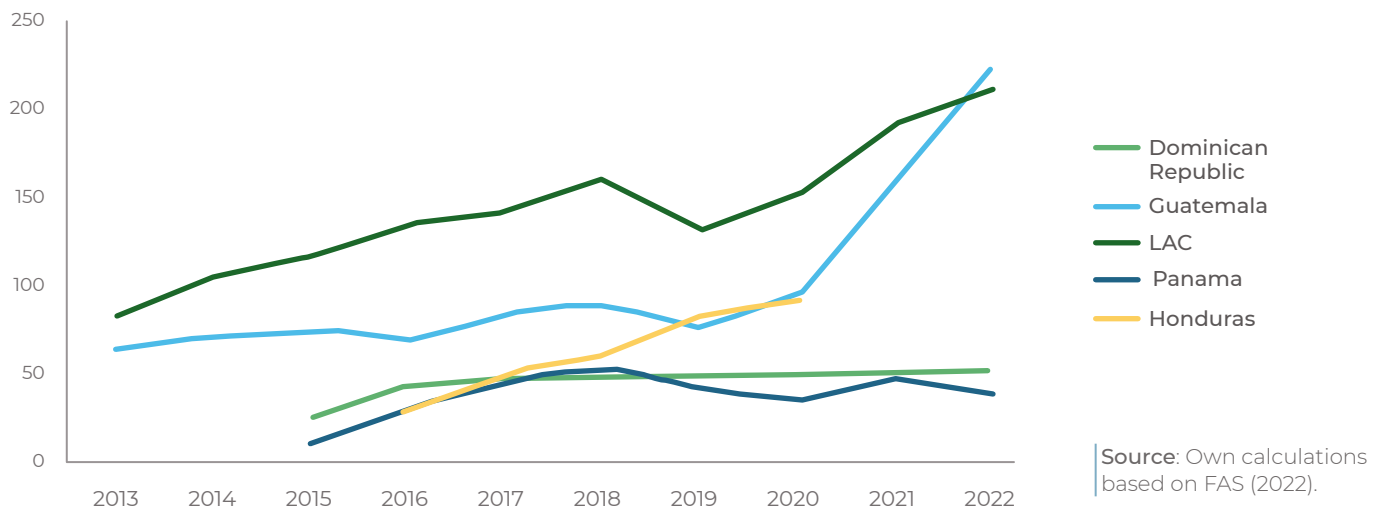
→ Conclusions

The banking sector in the CAPARD region shows a high degree of heterogeneity in its operating results. However, most countries of the region have interest margins above the LAC and OECD average, and, in some cases, a higher return on equity. The ratio of operating costs to income in certain countries is higher than the LAC average, which suggests there is potential for gains in efficiency.

At the same time, firms in various countries of the region report being financially constrained more frequently than the LAC average. The region's businesses finance a lower percentage of their working capital through bank debt than the LAC average. All this is more marked in small and medium-sized enterprises.

At the household level, while the region is very similar to LAC in terms of its degree of financial inclusion, it remains far below the OECD average and the average for upper-middle-income countries. Meanwhile, financial inclusion decreased in CAPARD between 2017 and 2021, in contrast to LAC, where there was an increase. This fall is evident across all the variables used to measure financial inclusion, particularly when it comes to the number of bank branches. The latter could be influenced by the fact that the countries may be evolving towards an alternative form of financial organization, as exemplified by the presence of bank agents, which may be taking over the role of physical branches (as noted in FAS, 2022; and CNBS, 2021), and by purely online financial services. This phenomenon may be reflecting an ongoing shift in the way people access financial services.

Bank agent outlets are formal entry points to the financial system, which is consistent with the formal definitions previously discussed. However, the challenge lies in the dearth of available data on such access points, which hampers the analysis of financial inclusion. Therefore, it would be helpful if the monitoring of these facilities were improved, and an assessment undertaken of the extent to which they are achieving the desired effects in promoting financial inclusion.

→ **Appendix**

Definition of subindexes and weights in the FII

	Standardized weight
Availability **subindex**	**41.58%**
ATMs - Number of automated teller machines (ATMs) per 100 thousand adults Origin: IMF	33.20%
Bank branches - Number of bank branches per 100 thousand adults Origin: IMF	66.80%
Use **subindex**	**28.21%**
Savings - Has savings at a financial institution Origin: Findex	24.31%
Loan(s) - Has a loan or loans from a financial institution Origin: Findex	23.51%
Payments - Has made utility payments (water, gas, etc.) through a financial institution (% of those who have made utility payments) Origin: Findex	23.68%
Wages - Has had his/her wages or salary paid into an account at a financial institution (% of those receiving their wages/salary) Origin: Findex	28.50%
Access **subindex**	**30.21%**
Accounts at a financial institution - Holds an account at a financial institution Origin: Findex	32.39%
Debit card - Has a debit card Origin: Findex	31.37%
Credit card - Has a credit card Origin: Findex	36.24%

Source: Own calculations.

Note: Variables defined as percentage of adults aged 15 and over, except in the *Availability* subindex. Calculation based on 2017 data.

FIGURE A2.1.
Use subindex in 2021
OECD high-income average=100
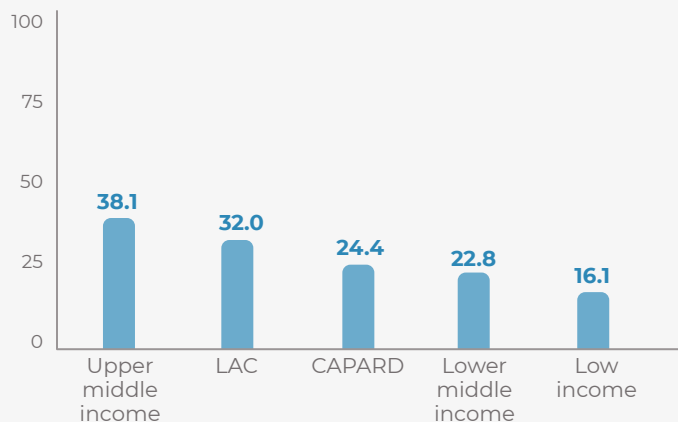
FIGURE A2.2.
Use subindex for CAPARD in 2021
OECD high-income average=100
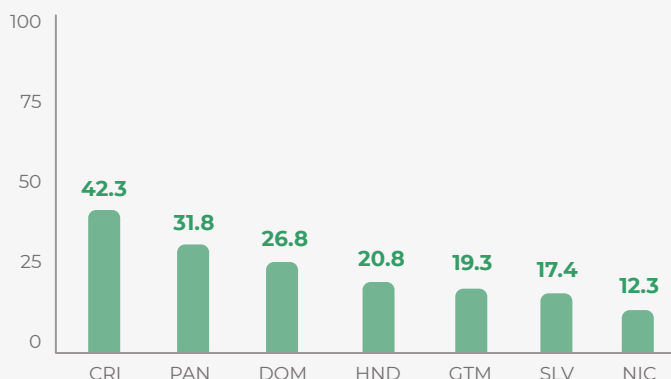
FIGURE A2.3.
Access subindex in 2021
OECD high-income average=100
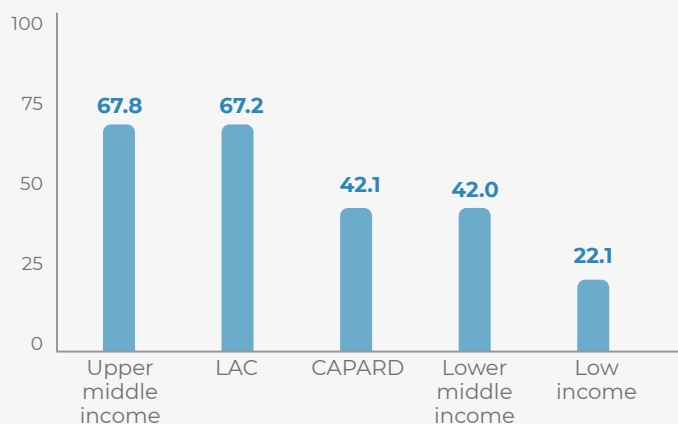
FIGURE A2.4.
Access subindex for CAPARD in 2021
OECD high-income average=100
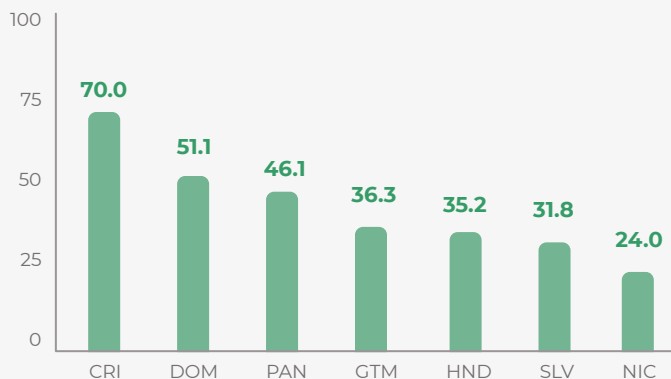
FIGURE A2.5.
Availability subindex in 2021
OECD high-income average=100
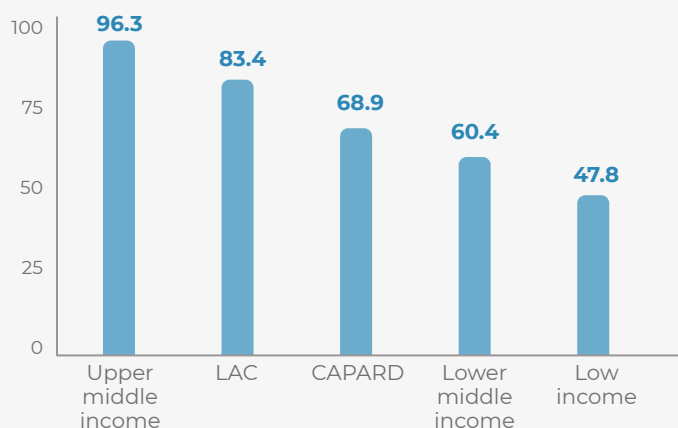
FIGURE A2.6.
Availability subindex for CAPARD in 2021
OECD high-income average=100
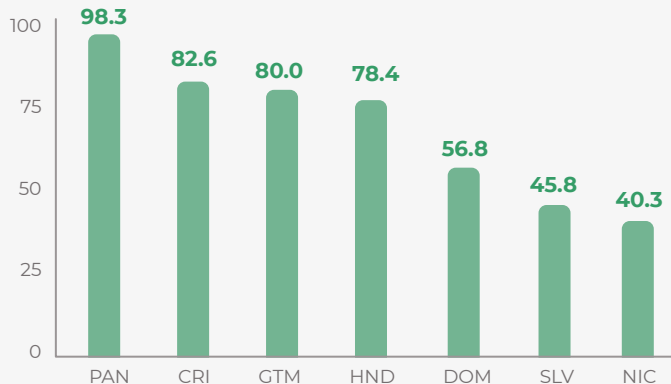
Source: Own calculations based on Findex and IMF data.

Note: In some countries, the figure is for 2022, due to the fact that the survey was conducted that year rather than in 2021.

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Chapter
3

Determinants of financial inclusion and a selection of policies to promote it

Chapter
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Determinants of Financial Inclusion and a Selection of Policies to Promote It

In order to promote financial inclusion, we first need to understand its determinants so that we can then proceed to find ways to help improve them.

Therefore, in this chapter we present an analysis of the determinants of a series of financial inclusion variables and, on that basis, make a series of proposals on how to deepen that inclusion.

We estimate the determinants based on a global panel according to the following model:

$$\Delta y_{f,i,t} = \alpha + \gamma' \Delta x_{i,t} + \varepsilon_{i,t} \quad (1)$$

where $y_{f,i,t}$ is financial inclusion variable f in country i, and period, t. La $x_{i,t}$ is a vector of the explanatory variables of financial inclusion and ε_{i,t_i} the estimation error. The determinants of financial inclusion are: GDP, consumer prices, real bank interest rate, bank concentration, return on equity (ROE), education, World Bank enforcement index, Internet access rate, and a dummy variable with a value of 1 in 2021 to indicate the presence of after-effects of COVID-19 and 0 in all other years. There is also an additional variable to indicate whether the country has a National Financial Inclusion Strategy (NFIS), which has a value of 1 if country i had an active strategy of this type during the year (divided into a first and a second strategy). The variables are measured as log differences, with the exception of the real interest rate and ROE, which are measured as differences.

The variables chosen for the purpose of capturing financial inclusion are: deposit account, credit card, debit card, mobile money account, make digital payments, receive digital payments, and loan from a formal financial institution (each measured as the percentage of all people aged 15 and over who use/make/have the variable in question). These variables are the ones identified by the G20 as metrics for financial inclusion targets (GPFI, 2021) and are available in the Findex database (2021). We use a global country-level panel for the periods 2011, 2014, 2017, and 2021.

The choice of determinants is based on the economic literature. Country-level studies seek to incorporate both demand and supply-side variables

(Abel *et al.,* 2018). On the demand side, we find macroeconomic variables related to income, such as GDP per capita, GDP growth rate, inflation, and also to education, such as the literacy rate (Uddin *et al.*, 2017; Tam Le *et al.,* 2019). On the supply side, the panel includes characteristics of the banking system, such as concentration, deposits, and interest rates, as well as external factors, such as Internet access (Olaniyi and Adeoye, 2016; Demirgüç-Kunt *et al.,* 2018; Islam *et al.*, 2016) and the legal framework, usually related to the enforceability of contracts (Guiso *et al.,* 2000; Rojas-Suárez, 2007).

The estimation is performed using the Generalized Estimating Equations (GEE) method, which calculates the average effect on the population and incorporates the correlation structure of the errors within the group, in this case the country.[12] Table 3.1 contains the results of the estimation.

TABLE 3.1.
Determinants of the financial inclusion variables

Variables	(1) Deposit account	(2) Credit card	(3) Debit card	(4) Mobile money account	(5) Made digital payments	(6) Received digital payments	(7) Loans
First NFIS$_t$	0.072*	0.166	0.112*	0.287	0.106	0.043	0.0881
	(0.043)	(0.116)	(0.067)	(0.200)	(0.085)	(0.067)	(0.0992)
Second NFIS$_t$	0.008	-0.147	-0.139**	0.583**	0.024	0.169	-0.0479
	(0.077)	(0.151)	(0.065)	(0.262)	(0.112)	(0.177)	(0.216)
GDP	1.039**	0.538	0.806**	1.996*	1.289**	0.846**	1.188**
	(0.260)	(0.402)	(0.359)	(1.119)	(0.448)	(0.391)	(0.418)
Price index	0.097*	-0.167*	-0.036	0.388	0.079	0.067	-0.014
		(0.095)	(0.061)	(0.274)	(0.076)	(0.101)	(0.089)
Real interest rates	0.001	0.007	-0.007	0.014	0.000	-0.001	-0.007
	(0.003)	(0.007)	(0.004)	(0.011)	(0.005)	(0.006)	(0.005)
Bank concentration	-0.184*	-0.011	-0.154	-1.473**	-0.253	-0.452**	0.18
	(0.100)	(0.349)	(0.124)	(0.483)	(0.214)	(0.184)	(0.179)
ROE	-0.001	0.000	-0.004	0.004	0.002	0.006	0.0003
	(0.002)	(0.006)	(0.003)	(0.010)	(0.004)	(0.004)	(0.005)
Education	1.236**	1.119	1.321**	2.734*	2.468**	2.356**	0.716
	(0.376)	(0.726)	(0.611)	(1.619)	(0.875)	(0.834)	(0.869)
Enforcement of law	-0.012	0.068	0.106	0.647	0.111	0.231	0.421*
	(0.251)	(0.181)	(0.404)	(0.197)	(0.209)	(0.236)	
Internet access	0.096	0.040	0.243**	0.275	0.192**	0.133	0.159
	(0.069)	(0.135)	(0.116)	(0.339)	(0.097)	(0.086)	(0.133)
Covid-19 dummy	-0.081**	0.018	-0.152**	0.355*	-0.035	-0.058	-0.529**
	(0.031)	(0.104)	(0.046)	(0.201)	(0.047)	(0.056)	(0.084)
Observations	211	209	211	79	131	131	199

Source: Compiled by Josué Sibaja Morales and Arnoldo López-Marmolejo.

Note: The variables are expressed as log differences except in the case of the NFIS and COVID-19 dummies, the ROE, and the real interest rate, all of which are expressed in percentage point differences to avoid the loss of these observations as a result of log transformation of negative values. Estimation by GEE allowing for autocorrelation within country-level errors and correcting for heteroscedasticity where applicable. Model (4) is estimated taking into account its homoscedasticity. Standard errors in parentheses, ** p<0.05, * p<0.1.

12 This model estimates a coefficient corresponding to the average effect of each country. GEE provides robust estimates for panels with many groups (countries) N and few periods (years) T, which are consistent and efficient even in the presence of heteroscedasticity, whenever it is present (Fitzmaurice *et al.,* 2011, 359, and Hardin and Hilbe, 2013, 92). The variance inflation tests show no evidence of multicollinearity

Overall, we see that the explanatory variables that have a positive effect on the various financial inclusion variables are: GDP growth, Internet access, years of schooling, having a National Financial Inclusion Strategy, and, in the case of loans, the law enforcement index. The existence of a first NFIS is associated with increases in the percentage of the population who have deposit accounts and debit cards, though there is no effect on loans, digital payments, or mobile money accounts. Where there is a second NFIS, we see an increase in the number of mobile money accounts. The second strategies are more recent and may still need time to mature and deliver results with respect to other variables. Meanwhile, various countries have promoted greater access to and use of these digital transaction accounts in order to foster inclusion (World Bank, 2014), which, according to our calculations, has actually increased.

Bank concentration has a negative effect on financial inclusion. While there appears to be no multicollinearity between concentration and real interest rate and ROE in this global panel, one would expect these variables to follow the same pattern, so any one of them could be capturing a greater share of the explanatory power; in this case, it appears to be concentration. The presence of high ROEs, concentration, and interest rates may be symptomatic of markets with limited competition and other inefficiencies. In the case of the COVID-19 dummy, we see that it is associated with a fall in financial inclusion, except in the case of mobile money accounts, where it has a positive effect. It is important to remember that this variable is only included in 2021, i.e., the year after that in which the pandemic had the greatest impact. The reason for this was that it was the closest year to the pandemic that was available in the financial inclusion variables.

Based on the previous estimation, we are able to identify policies that could contribute to deepening financial inclusion and will focus on these in the sections to come. We place particular focus on having a National Financial Inclusion Strategy, education (in our analysis we look specifically at financial literacy), the competitive environment and interest rates, and, lastly, on digital financial inclusion. In the exercise, financial inclusion is captured based on not only traditional financial products but also digital products and services, in this case measured on the basis of digital payments and mobile money accounts. Furthermore, having a greater number of digital providers can help foster competition and reduce concentration in the financial sector.

3.1 National Financial Inclusion Strategies

As shown in the section on the determinants of financial inclusion, there is a link between having an NFIS and certain inclusion variables, though this is not true for the majority of the variables analyzed. The fact that these strategies have a positive effect on a larger number of financial inclusion variables would suggest that robust strategies are needed in order for them to be effective.

The countries of the region have viewed national strategies as a way of boosting financial inclusion. Most of them already have such a strategy (i.e., Belize, El Salvador, Guatemala, Haiti, Honduras, and the Dominican Republic), while Costa Rica is in the process of developing one,[13] Panama has drafted a proposal for one, and Nicaragua is looking to develop one after it has assessed the current degree of financial inclusion there based on a new survey. Those countries that already have an NFIS launched them between 2014 and 2022, with implementation periods or time horizons ranging from three to eight years (see Figure 3.1).

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13 Costa Rica's financial inclusion policy targets women in particular with its "Guidelines for Closing the Financial Gaps between Men and Women" (launched in 2020).

FIGURE 3.1.
Timeline of NFIS launches
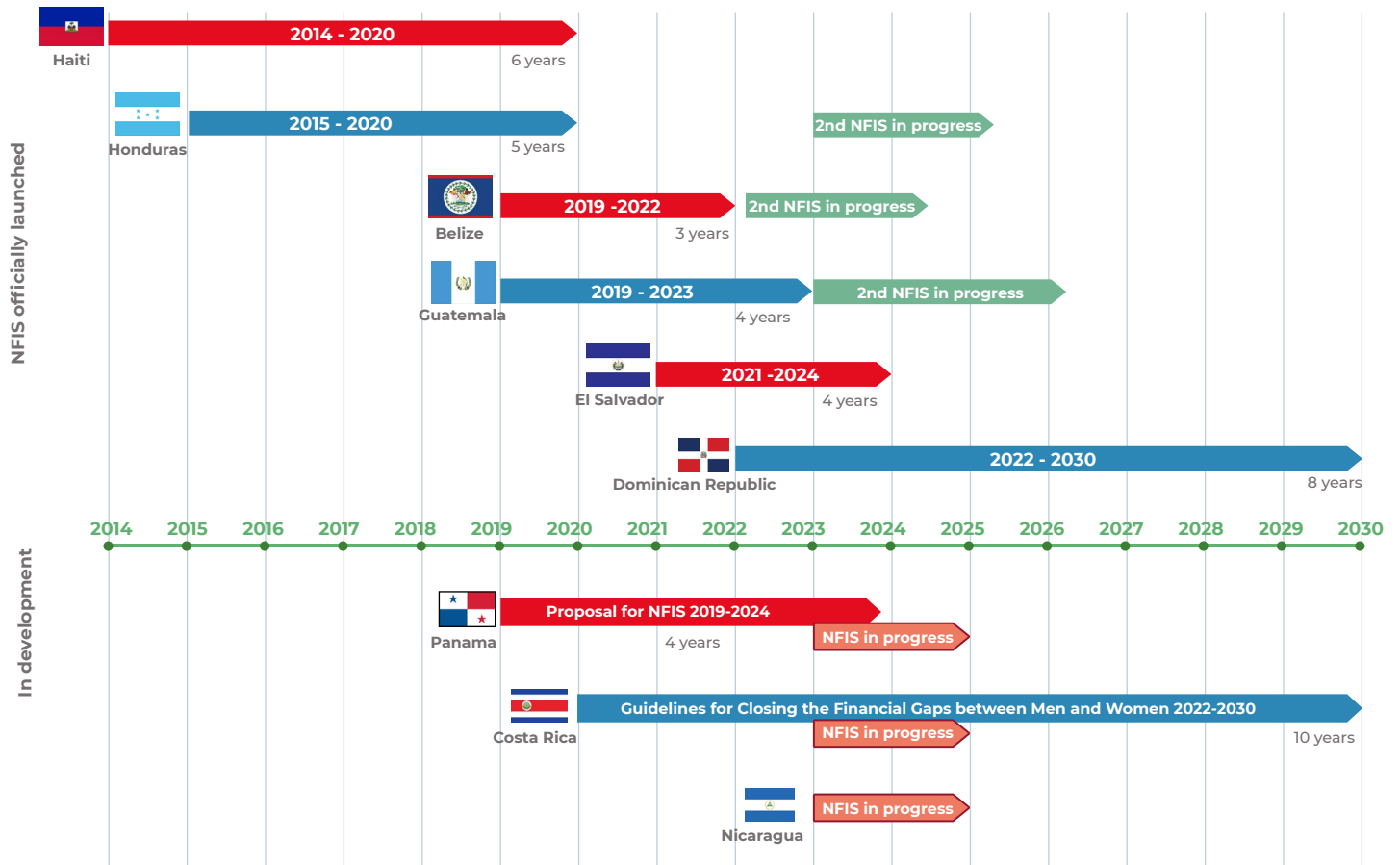
Source: Graf et al. (2023).

Components of an NFIS

The analysis of the proposed methodologies for the processes of designing and implementing a multi-agency NFIS (World Bank, 2018; AFI, 2016; OECD/CAF, 2020), and the strategies adopted by countries such as Mexico, shows that their implementation can be broken down into four phases: (i) Preformulation, (ii) Formulation, (iii) Implementation, and (iv) Monitoring and Evaluation. The Preformulation stage serves to identify the (public and private sector) stakeholders needed for the strategy to succeed and also to conduct a diagnostic assessment of the state of financial inclusion. Formulation involves developing the work plan (priority axes, stakeholders, activities, responsibilities, timeline, and risk map), governance structure (leadership, structures), risk map, and development of a monitoring and evaluation strategy. Implementation involves the assignment of specific functions to personnel and setting the work plan in motion. Lastly, the Monitoring and Evaluation stage, which entails monitoring progress and, if necessary, identifying where corrective measures are required and applying these, as well as publicizing the actions undertaken and the results.

The component elements of each of these phases are shown in Table 3.2.[14] Based on these, we conducted a review of the national strategies of CAPARD countries and Haiti in order to help identify those components that could potentially be reinforced before launching a new strategy. It is common for countries to implement a second and even third financial inclusion strategy in order to drive the issue forward as new governments take office. In turn, where room for improvement in the region's strategies is identified, this constitutes a series of lessons learned for those countries that decide to proceed with developing such a strategy. Based on publicly available information and surveys conducted by the relevant authorities to clarify certain details, the table marks those components included in each country's strategy in green and those not in red; u/a indicates that no evidence was available and n/a means not applicable, e.g., when there is no NFIS. This does not necessarily mean that no strategy exists, simply that there is no publicly available information, which would be one aspect that needs to be improved.

TABLE 3.2.
Summary of compliance with the components of an NFIS by stage

Preformulation									
Item / Country	El Salvador	Guatemala	Belize	Honduras	Dominican Republic	Haiti	Panama	Costa Rica	Nicaragua
Make the NFIS a national priority	●	●	●	●	●	●	n/a	n/a	n/a
Identify key stakeholders and establish the institutional coordination structure	●	●	●	●	●	●	●	n/a	n/a
Review recent surveys and reliable data in order to draw up a diagnostic analysis and problem tree	●	●	●	●	●	●	●	●	n/a
Review the literature on financial inclusion specifically focused on the gender gap	●	●	●	●	●	●	●	●	n/a
Propose a structure for the NFIS framework document and identify the contribution to be made by the various stakeholders or interest groups	●	●	●	●	●	●	●	●	n/a

14 Due to space constraints, we do not discuss every single element; for more details, see Graf *et al.* (2023).

Formulation										
Item / Country	Specifics	El Salvador	Guatemala	Belize	Honduras	Dominican Republic	Haiti	Panama	Costa Rica	Nicaragua
Completion of a diagnostic assessment and drawing up a problem tree	Diagnosis	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
	Tree	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	n/a
Objectives	Overall Objective	🟢	🟢	🟢	🟢	🟢	🟢	🔴	🟢	n/a
	Specific objectives/area	🟢	🔴	🟢	🟢	🟢	🟢	🔴	🟢	n/a
	Gender focus	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🟢	n/a
Develop strategic framework	Vision	🟢	🟢	🟢	🔴	🟢	🟢	🔴	🔴	n/a
	Definition	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	n/a
	Legal basis	🔴	🟢	🟢	🔴	🔴	🔴	🔴	🟢	n/a
	Lines of action	🟢	🟢	🟢	🟢	🟢	🟢	🔴	🟢	n/a
	Goals	🔴	🔴	🟢	🔴	🟢	🟢	🔴	🔴	n/a
	Timeframes	🟢	🔴	🟢	🔴	🟢	🟢	🔴	🟢	n/a
Long-term planning to try to shield the NFIS from the political cycle	n/a	🔴	🔴	🔴	🔴	🟢	🔴	🔴	🟢	n/a
Institutionalize governance	n/a	🟢	🟢	🟢	🟤 [1/]	🟢	🟢	🟢	🟢	🟢
Work plan	n/a	🟢	🟢	🟢	🟢	🔴	🟢	🔴	🔴	n/a
Oversight mechanisms	n/a	🔴	🔴	🔴	🔴	🟢	🔴	🔴	🔴	n/a
Communications strategy	n/a	🔴	🔴	🟢	🟢	🟢	🔴	🔴	🟢	n/a
Risk map	n/a	🟢	🔴	🟢	🟢	🟢	🔴	🔴	🔴	n/a
Implementation monitoring and evaluation strategy	n/a	🔴	🔴	🟢	🟢	🔴	🟢	🔴	🔴	n/a
Governance monitoring and evaluation strategy	n/a	🟢	🔴	🟢	🔴	🔴	🔴	🔴	🟢	n/a
Review of the NFIS project	n/a	u/a	u/a	u/a	u/a	u/a	u/a	u/a	u/a	n/a
Consultation process	n/a	🟢	🟢	🟢	🟢	🟢	🔴	🟢	🔴	n/a

Implementation									
Item / Country	El Salvador	Guatemala	Belize	Honduras	Dominican Republic	Haiti	Panama	Costa Rica	Nicaragua
Official launch of the NFIS	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	n/a
Official appointment of members of governing bodies	🟢	🟢	🟢	🔴	🟢	🟢	u/a	🔴	n/a
Establishment of a technical secretariat	🟢	🟢	🟢	🔴	🟢	🟢	🔴	🔴	n/a
Assignment of specific functions of the technical secretariat	🔴	🔴	🟢	🔴	🟢	🔴	🔴	🔴	n/a
Rules of operation of NFIS governing bodies and working groups	🟢	u/a	u/a	u/a	u/a	u/a	u/a	u/a	n/a
Setting up and approval of governing bodies and working groups and adoption of resolutions thereby	🟢	u/a	🟢	u/a	u/a	u/a	u/a	u/a	n/a
Implementation of the work plan	🟢	🟢	u/a	u/a	🟢	u/a	u/a	🟢	n/a
Development of the data infrastructure	🟢	🟢	🟢	🟢	🟢	🟢	u/a	🟢	n/a[4]
Procurement of funding and/or technical assistance	🔴	🔴	🔴	🟢	🟢	🔴	🟢	🟢	🟢
Oversight and promotion of spending for social programs via deposits	🟢	🟢	u/a	u/a	🔴	🟢	🟢	n/a	u/a

Monitoring and evaluation										
Item / Country	Specific objectives/area	El Salvador	Guatemala	Belize	Honduras	Dominican Republic	Haiti	Panama	Costa Rica	Nicaragua
Monitoring of work plan advances	n/a	🟢	u/a	🟢	u/a	🟢	u/a	n/a	🟢	n/a
Monitoring of risk map	n/a	🟢	u/a	🟢	u/a	🟢	u/a	n/a	n/a	n/a
Reporting of advances, next steps and, if necessary, work plan adjustments	n/a	🟢	u/a	🟢	u/a	🟢	u/a	n/a	🟢	n/a
Calculation of indicators and comparison against defined targets	Outcome indicators	🟢	u/a	🟢	u/a	n/a	u/a	n/a	🟢	n/a
	Goals	u/a	u/a	🟢	u/a	n/a	u/a	n/a	n/a	n/a
	Timeframes	u/a	u/a	🟢	u/a	n/a	u/a	n/a	n/a	n/a
Evaluation of the fulfillment of commitments by each level of governance	n/a	🟢	u/a	🟢	u/a	n/a	u/a	n/a	n/a	n/a
Drafting of the Progress and Results Report	n/a	🟢	u/a	🟢	u/a	n/a	u/a	n/a	🟢	n/a
Submission/ publication of Progress and Results Report	n/a	🟢	u/a	🟢	u/a	n/a	u/a	n/a	🟢	n/a

Source: Graf *et al.* (2023), which is based on publicly available NFIS documents, press conferences held at NFIS launches, and responses from the authorities.

Note: Since there is no record of an official NFIS there, the comparison for Panama is made based on its National Financial Inclusion Strategy Project, though this is still in development. In Costa Rica, the comparison is based on public policy documents relating to closing the financial gaps between men and women. Though it lacks an NFIS, Nicaragua has carried out a diagnostic assessment and has a Financial Governance and Inclusion. **Project**. n/a= not applicable, u/a= unavailable.

Based on the analysis of the strategies for each stage, we are able to draw the conclusions outlined below.

Preformulation

All of the countries in the region with an NFIS defined it as a national priority, which makes it easier for it to align the institutions involved. The data source most commonly used in diagnosing inclusion was the World Bank's Global Findex, though some countries (El Salvador, Belize, and Honduras) reported using national financial inclusion surveys. In addition, various countries reported having used administrative records of financial institutions that are held by oversight bodies for the purpose of analyzing supply conditions. Their information can be very valuable because of its timeliness and depth of detail, and the ability of the oversight authority to request it.

It should be noted that these strategies do not typically include a review of the literature on financial inclusion and gender, and only a few of them single out women as an underserved group (El Salvador, Belize, and Haiti). In the Dominican Republic, the survey results showed no significant gender gap, whereas Costa Rica has specific guidelines for closing the gender gap in financial inclusion.

Formulation

Every country with an NFIS has completed a diagnostic assessment of the state of financial exclusion, though none has drawn up a problem tree to clarify the causes and consequences of that exclusion. All of the countries have established a definition and general objective, which address issues relating to access to and use of financial products and services in a secure, affordable, and transparent manner with a high degree of quality. The objectives typically include a focus on priority groups, such as people on low incomes, farmers, people living in remote areas, migrants, micro and small enterprises, and, in some cases, women. In addition to the general objective, countries also have more specific aims and lines of action. Most countries have established a time frame for evaluating the results of their strategies, one linked to the period during which these are in effect.

All countries have some type of competent body to follow up on their strategies. However, there is little long-term planning in place to ensure continuity in the event of changes of administration.

Implementation

Most countries have set up a governing body responsible for implementing and monitoring the strategy through a technical secretariat, though information on the rules of operation of those governing bodies and working groups is not publicly available. A number of the bodies stipulate the frequency of their sessions, e.g., in Belize, El Salvador and Honduras, the governing body meets four times a year, and in the Dominican Republic, three. Though some countries have published work or action plans for the strategy, we found no public reports on the activities actually undertaken. The NFISs were implemented primarily with funding from the budgets of the institutions involved, though some countries received technical assistance from international organizations, mainly for the development of their national surveys and policy design.

Monitoring and evaluation

Most countries do not make enough information available to the public on the process of implementing the system for monitoring and following up on the progress of the work plan. In the countries that implemented risk monitoring mapping, the COVID-19 crisis was found to have caused a shortage of funds for implementation. Countries may already have a monitoring and evaluation system in place, yet no mention of it is made in the NFIS documents. This lack of public access to such information demonstrates the need to strengthen the external communication strategy. The case of Belize is particularly noteworthy, as it defines evaluation indicators and sets aligned goals, and also includes a report at the end of its first strategy period which shows the progress made in terms of actions, sets out the tasks still to be carried out, and defines who is responsible for getting them done. Box 3.1 details this experience, the lessons learned, and the progress towards the development of a second phase. The Dominican Republic has begun to release progress reports on the status of its initiatives.

Public policy

Based on the above, it is possible to identify a number of proposals aimed at bolstering the development of new NFISs in the region:

Preformulation

- National surveys should be conducted during the diagnostic process in order to gain a more detailed picture of the state of financial inclusion in the country and the causes underlying this. One tool that is often used is the so-called "problem tree."

- A review of specialized literature on gender and financial inclusion should be carried out in order to assess whether this question needs to be considered a priority.

- The causes of exclusion in terms of access to and use of financial services, both on the supply and demand side, need to be clearly identified.

Formulation

- A regulatory or governance structure that allows for long-term planning features in order to ensure continuity should be established.

- A work plan that sets out the activities to be carried out in relation to each objective should be developed, in each case identifying those responsible, the targets, and the deadlines for completion.

Implementation

- Reports on the activities carried out by the various governing bodies should be published, with a view to fulfilling the work plan and making adjustments to it.

- The rules of operation of the governing bodies and working groups should be made public.

Monitoring and evaluation

- Progress reports on NFIS actions and targets should be published, as well as a final evaluation report that sets out how much progress was made in terms of actions, together with the tasks that are still pending.

BOX 3.1.
Belize's National Financial Inclusion Strategy (NFIS)

Belize's National Financial Inclusion Strategy was born out of a comprehensive process of reflection and consultation with relevant public and private sector stakeholders that began in 2017. Launched in 2019, the NFIS was spearheaded by Belize's Central Bank and its Ministry of Finance with technical assistance from the World Bank. The first phase of the NFIS covered the three-year period from 2019 to 2022 and was directed by the Technical Secretariat with the involvement of relevant ministries, including the Prime Minister's Office, the Ministry of Economic Development, and the Ministry of Education.

Though its specific aim was to expand financial inclusion in Belize, the NFIS was aligned with current national development policies, such as *Horizon 2030: National Development Framework for Belize* 2010–2030 and the *Growth and Sustainable Development Strategy (GSDS)* 2016–2019.

At the end of the first phase (2022), the Technical Secretariat reported significant progress in achieving NFIS objectives. Thirty-eight percent of the actions had been completed, while 54% remain ongoing. Most indicators showed improvement, with some even exceeding the 2022 targets, such as those for the number of access points per 100,000 adults (2023: 82.31; 2022 target: 80) and the percentage of adults who made or received digital payments in the last year (2023: 68.68%; 2022 target: 65%).

One of the main challenges that affected the implementation of the NFIS was the failure to set up a National Financial Inclusion Council. However, the Technical Secretariat *was* set up and four issue-specific Financial Inclusion Working Groups (FIWGs) were formed to work on the following objectives: (i) to incorporate Information and Communication Technologies (ICT) and a financial infrastructure to support financial inclusion, (ii) to develop tailor-made financial products and introduce innovation, (iii) to promote financial consumer protection and financial literacy, and (iv) to carry out data collection, analysis, and reporting. The framework for monitoring and evaluation included quarterly meetings of the FIWGs, quarterly progress reports, and an annual report.

Constraints on human and financial resources were also identified as challenges to the accomplishment of the NFIS vision. Many stakeholders had to contend with having a limited staff, who were tasked with multiple duties. Stakeholders also cited a lack of funding as one of the factors affecting the actions meant to be taken under the NFIS, particularly during the COVID-19 pandemic when funds were diverted to other priority areas.

The following are lessons learned from the implementation of Belize's NFIS: (i) there needs to be robust participation and engagement from a broad and diverse pool of public and private stakeholders; (ii) there needs to be a comprehensive monitoring and evaluation framework to track the progress and impact of initiatives; (iii) the lack of disaggregated data is an impediment to the delivery of targeted interventions; (iv) spurred by the pandemic, the development of innovative digital solutions makes the adoption of legal frameworks to support financial digitization a priority; and (v) financial literacy and education programs empower people to make informed financial decisions and to make effective use of financial services.

In order to further pursue Belize's NFIS vision, the Technical Secretariat is working on a second phase with technical support from the IDB, with a focus on closing outstanding gaps (e.g., in access to finance in rural areas), consumer protection legislation, financial literacy, and better data collection, particularly in the agricultural sector. This phase also seeks to address new issues, such as fostering the development and use of fintech, the adoption of infrastructures that will enable swift payments and cross-border payments, and advances in the deposit insurance system and credit information system.

3.2 Financial literacy

As noted previously, there is a link between financial literacy and greater financial inclusion. Before promoting policies aimed at improving financial inclusion, there first needs to be a diagnosis of the current state of financial literacy. This, in turn, is needed to assess the benefit of any policies implemented, as well as to prioritize the topics to be taught or to track changes in this regard over time.

The following is an analysis of the state of financial literacy in Mexico, the Dominican Republic, Panama, and the other countries of Central America. The method used to measure this is based on Atkinson and Messy (2012) of the OECD, in order to allow an international comparison (OECD, 2017).[15]

Table 3.3 contains the results and a comparison with the G20 average. We can see that the level of correct answers from respondents is similar to the G20 average when it comes to awareness of the existence of interest payments on loans (column 3 of Table 3.3) and slightly above the G20 average when it comes to the concept of inflation in the questions on its definition and the time value of money (columns 8 and 2).

In contrast, the respondents score very low when it comes to knowing how to calculate simple and compound interest (columns 4 and 5). In the question on simple interest (shown as the calculation of interest plus principal in column 4), the average number of correct answers in the countries studied was 12%, compared to the G20 average of 51%. There is less of a difference when it comes to compound interest, with 32% answering correctly compared to 42% for G20 countries (column 5). However, the fact that the percentage of respondents who correctly answered both the simple and compound interest questions (column 6) is only 4% (compared to 27% for the G20) and the fact that the compound interest question can be answered correctly by simply guessing from among the

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15 CID Gallup provided support during the interview process. Some 1,200 citizens were interviewed in each country (margin of error ±2.8 points in their overall results, 95% confidence level). Fieldwork was conducted on a national level in May 2023 in Mexico, Honduras, Guatemala, Nicaragua, El Salvador, Costa Rica, Panama, and the Dominican Republic by means of a telephone sampling of adult citizens in each country.

options provided (see question 5 in the Appendix) suggests that respondents lack the necessary knowledge to calculate simple and compound interest.

On average, the countries of the region are also slightly below the G20 average in their understanding of the risk-return relationship and diversification.

In sum, the countries of the region show a limited understanding of how the cost of borrowing is calculated: simple and compound interest and, to a lesser extent, the concepts of risk-return and diversification, whereas they are more knowledgeable when it comes to inflation.

TABLE 3.3.
Percentage who answered each question correctly

Category	Value of money over time	Payment of interest on loans	Calculation of interest plus principal	Compound interest over 5 years	Correct answer for both simple interest and compound interest	Risk and return	Definition of inflation	Diversification
Related question.	You have to wait a year to get your share of $1,000, during which the inflation rate stays at 5 percent. How much will you be able to buy in one year's time compared to now?	You lend $25 to a friend one evening and he gives you $25 back the next day. How much interest has your friend paid on this loan?	Someone puts $100 into a savings account with a guaranteed interest rate of 2% per year. They make no further payments into this account and no money is withdrawn. How much would be in the account at the end of the first year, once the interest payment is made.	And how much would be in the account at the end of five years?	Percentage of respondents who correctly calculated the interest plus principal and compound interest over 5 years	True or false: An investment with a high return is likely to be high risk.	True or false: High inflation means the cost of living is rising fast.	True or false: You are less likely to lose all of your money if you save it in more than one place.
G20 average	53	80	51	42	27	78	77	59
Guatemala	59	81	10	31	--	61	78	52
El Salvador	56	78	9	38	--	62	89	55
Honduras	66	81	7	23	2	62	82	58
Nicaragua	65	77	15	36	3	76	85	65
Costa Rica	77	86	17	42	8	71	93	52
Panama	76	88	7	29	2	71	92	58
Mexico	57	88	24	34	8	65	85	47
Dominican Republic	60	90	4	22	1	72	86	55
Average	65	84	12	32	4	68	86	55

Source: Based on the IDB-CID Gallup survey.

Note: The question on compound interest was answered correctly more frequently than the one on simple interest, seemingly due to the fact that the first is a multiple-choice question in which respondents appear to have answered correctly by chance, whereas the question on simple interest is an open-ended question. Respondents perform better on true/false questions as there is a better chance of correctly guessing the answer.

The fact that people's understanding of the time value of money and the definition of inflation in the region is above the G20 average may be due to the fact that the survey was conducted at a time of high inflation there and across the world (May 2023). It is an empirical fact that households and firms pay more attention to inflation during periods of high inflation (Bracha and Tang, 2022, Pfäuti, 2021, and Meyer and Sheng, 2022).

Given the likelihood of getting a significant number of right answers to the inflation question by guessing between true and false and also to check the respondents' understanding of inflation, an extra question was added to those asked by the OECD. The respondents were asked to indicate whether inflation refers to increasing production, prices, or crime, or to specify that they did not know the answer. The result shows that in most countries, more than 50% of the respondents said that it referred to prices, with a top score of 73% in Mexico and bottom score of 43% in the Dominican Republic.

FIGURE 3.2.
Statement: High inflation means the cost of living is rising fast
(%)
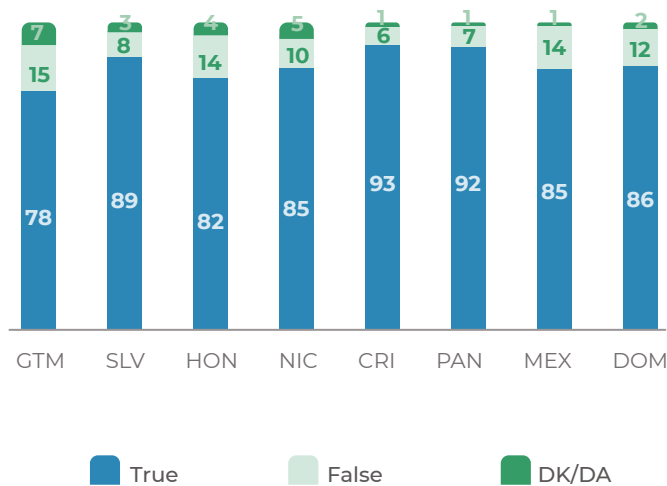
FIGURE 3.3.
Inflation refers to increasing:
(%)
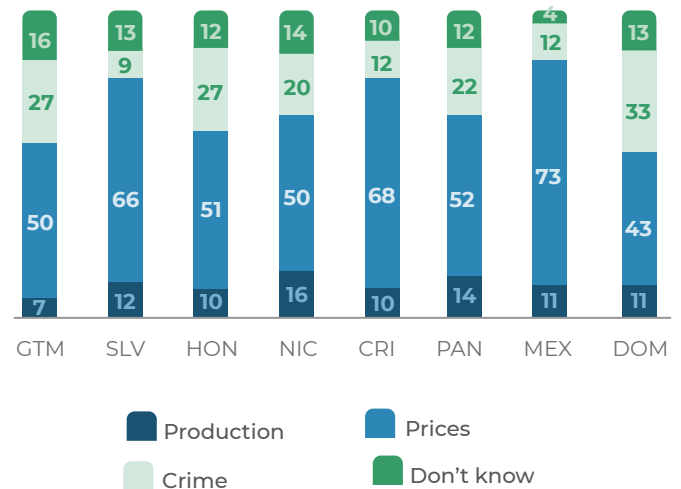
Source: Based on the IDB-CID Gallup survey.

Source: Based on the IDB-CID Gallup survey.

In order to summarize overall financial knowledge in a single score and make a comparison across countries, we calculate the percentage of respondents who answered five or more questions correctly. Figure 3.4 shows the results. The countries included in the study score below the G20 average, with the percentage answering five or more questions correctly ranging from 31% (Guatemala) to 46% (Costa Rica, Nicaragua, and Panama).

If we break down the results by gender (see Figure 3.5), we see that the percentage of men who answered five or more questions correctly is higher than that of women on average, with Panama being the country where the gap is narrowest with a difference of just one percentage point. In most countries, the difference between the genders is smaller than the G20 average.

FIGURE 3.4.
Percentage who answered five or more questions correctly
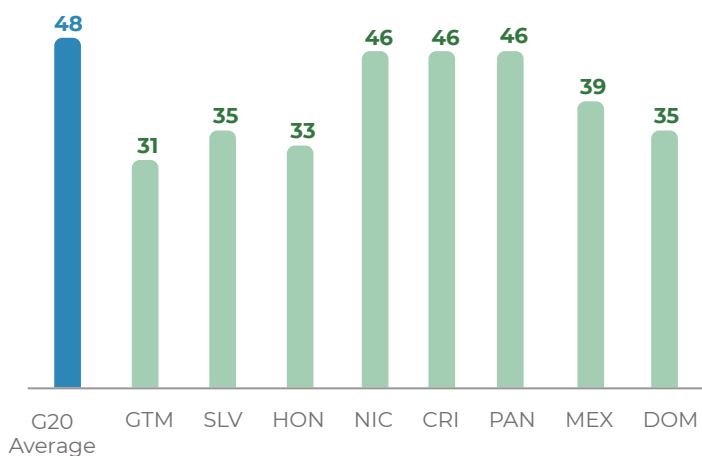
Source: Based on the IDB-CID Gallup survey.

FIGURE 3.5.
Percentage who answered five or more questions correctly by gender
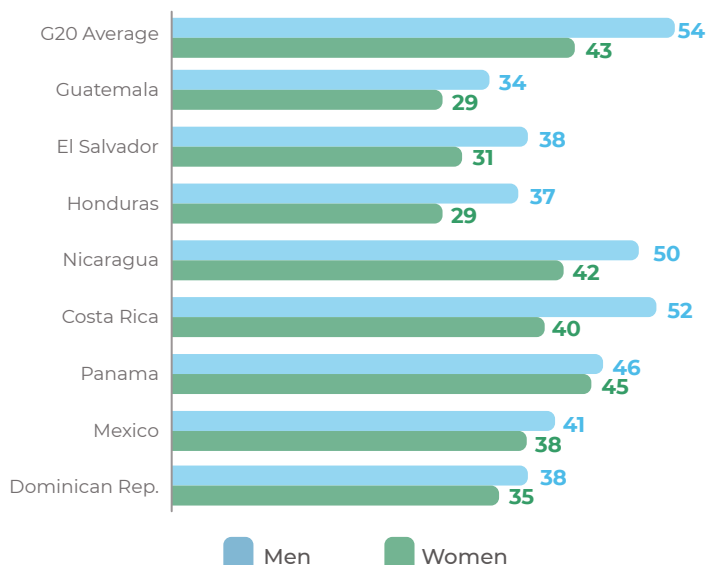
Source: Based on the IDB-CID Gallup survey.

Public policy

The positive effects of financial literacy on the use of financial products and the lack of financial literacy in the region prompt us to reflect on policy actions to improve it.

International evidence has shown the positive impact of providing school-based financial education from an early age. In particular, financial education in public high schools improves credit behavior later in life. For example, (i) it improves loan repayments (for Peru, Frisancho, 2023, finds a 20% reduction in loan arrears three years later); (ii) it contributes to individuals' choosing cheaper financing alternatives (Stoddard and Urban, 2019; Brown *et al.,* 2016), and (iii) there is a greater accumulation of assets upon reaching adulthood (Bernheim *et al.*, 2001).

It is worth noting that it is still important to conduct a more in-depth assessment of the long-term effects of virtual media programs, the analysis of which has been scant and shows limited results (e.g., Gartner and Todd, 2005, find no conclusive impact on credit card use). We should also bear in mind that several studies have shown there to be little interest in attending voluntary courses (see Willis, 2011; and Bruhn *et al.,* 2014), which is why it is even more important for financial inclusion to be included in the classroom-based academic curriculum.

3.3 Interest rates and competitive climate

The comparison of banking market conditions in Chapter 2 shows interest margins, ROE, and operating costs as a percentage of income in various CAPARD countries, and indeed the regional average, to be above both the LAC and the OECD average. For analysis purposes, the interest margin can be divided into four elements: (i) minimum legal reserve requirement, (ii) administrative costs, (iii) expected loan portfolio loss, and (iv) profit margin. At the same time, this breakdown allows us to explore the characteristics of the banking market in greater detail and to think about policies to improve its supply conditions, which is the focus of this section.

i. **Minimum reserve requirement.** The minimum reserve requirement rates in those countries of the region with their own monetary policy are much higher than in comparable OECD countries (i.e., in terms of population), differing by approximately 10 percentage points. Since the central bank does not pay interest on the funds subject to reserve requirements, these reserve requirement ratios constitute an implicit tax on intermediation. It is not surprising that this may result in lower deposit interest rates or, more likely, in higher lending rates, which increases the cost of financial products.

ii. **Administrative costs.** Administrative costs as a percentage of assets average 2.5 percentage points higher than the OECD average (averaging 4.2% and 1.7% respectively for the period 2016–2020). Operating costs, in turn, are the result of: ii.1 The regulatory costs of the banking industry, such as fee payments to banking regulators and overseers, plus regulatory compliance expenses. Bank oversight costs as a percentage of lending are higher in several countries of the region than they are in countries such as Chile, Colombia, and Mexico. The fixed cost of regulation and oversight is restrictive for small countries, which makes regulatory efficiency all the more important.ii.2 The general costs of operating in the country, such as taxes, costs of basic utilities, and so on. For example, the cost of electricity and Internet is often higher than the OECD average.

ii.3 Incentives in the search for savings and efficiency. There will be little incentive if there is a high level of market concentration and a low probability of new entrants, which would maintain the state of competition in the market.

iii. Expected loan portfolio loss. The greater the loss that a financial institution estimates could be incurred on a loan in the event of default, the higher the interest rate it will charge on the loan. The expected loss (EL) of a loan is equal to:

$$EL = PD * PLD * E = PD * (1 - RR) * E$$

where:

PD: probability of default
PLD: percentage loss given default = $1 - RR$ (recovery rate).
E: exposure at default (loan balance at default, net of specific provisions).

The factors that can affect the components of the expected loss estimate are detailed below.

iii.1 Probability of default. The probability of default depends on the type of loan and the quality of the risk analysis. A particularly important factor with respect to the type of loan is whether or not it is collateralized, in which case the debtor will pay a lower cost in the event of default. Effectively assessing the risk of a loan requires access to a prospective borrower's payment history and overall level of indebtedness. If there is uncertainty as to the risk profile, the loan application will be rejected or it will be subject to a higher rate of interest (and other less favorable conditions, such as a shorter term). Therefore, in order to improve financing conditions, information hubs that compile information provided by every credit provider are needed. According to the World Bank's depth of credit information index, the availability of credit information on borrowers in the CAPARD region is relatively good, albeit piecemeal. Information is typically available within the regulated banking sector, but information on lending activity involving non-regulated entities (e.g., commercial providers, informal lenders) is not generally available. In some cases, data-gathering firms exist that provide incomplete information at a high cost.

Meanwhile, when the necessary information is available, intermediaries need to have the human and IT capacity to conduct an analysis that allows them to give each debtor an individualized score that can be updated as new information is obtained.

iii.2 Percentage loss given default. As noted previously, the percentage loss depends inversely on the percentage of the loan amount that can be recovered. A rough indicator of the recovery rate is the percentage recovered by creditors in insolvency proceedings, which at 30% in CAPARD countries is much lower than the 67% for the OECD. Another related aspect of the same issue is the time it takes to resolve these insolvency processes and the cost. In the CAPARD region, they take an average of three years to complete and cost 20% of the value of the debtor's assets, whereas in the OECD they

take two years and cost 10% of the debtor's assets. The loan recovery rate is impacted by the availability of good collateral, such as clearly assigned property rights and a land registry of real estate or secured transactions. Another important factor is the time and cost of enforcing collateral rights in or out of court. Efficient recovery requires alternative dispute resolution mechanisms and an impartial and effective justice system, both of which, according to the Global Justice Project's Law Enforcement Index, are lacking in the CAPARD region.

iv. **Profit margin.** Once its costs have been covered, the profit margin of an industry may be higher in one country compared to others if it has a less mature market, i.e., if it has companies that entered the industry early, have newly developed and superior technology, or have less competition. Technology in the financial sector tends to be fairly standardized, the region focusing on traditional savings and loan products. Furthermore, let us not forget that the administrative costs of banks in the region are high by international standards. If the number of participants in a market is yet to expand, new stakeholders should be encouraged to enter in order to create a competitive landscape in the industry.

According to the Herfindahl-Hirschman Index (HHI)[16] for assets (see Figures 3.6 and 3.7), CAPARD has a higher level of concentration in the banking sector compared to other Latin American and OECD countries. The region's HHI has fallen, though there are differences between countries. In Costa Rica and Nicaragua, there has been a clear reduction in concentration, whereas in Belize and Honduras, there has been a slight increase. Meanwhile, Panama's HHI is actually well below the average for OECD countries.

FIGURE 3.6.
Herfindahl-Hirschman Index for loans
Average by group
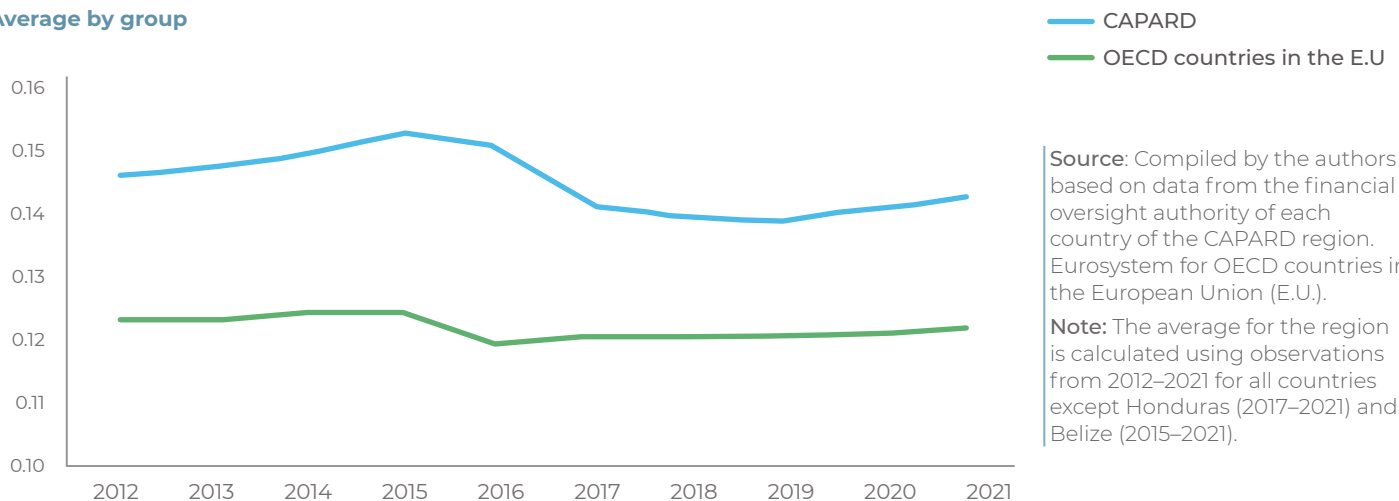
Source: Compiled by the authors based on data from the financial oversight authority of each country of the CAPARD region. Eurosystem for OECD countries in the European Union (E.U.).

Note: The average for the region is calculated using observations from 2012–2021 for all countries except Honduras (2017–2021) and Belize (2015–2021).

16 The HHI measures the size of firms relative to the size of the industry in which they operate and the level of competitiveness. The HHI is calculated by squaring the market share of each firm competing in a market and then adding the resulting figures. Lower values indicate a less concentrated market. Overall, the HHI is more informative and reliable than the share indicators of the three or five largest banks, as it computes the entire structure of an industry.

FIGURE 3.7.
Herfindahl-Hirschman Index for loans for countries of the CAPARD region
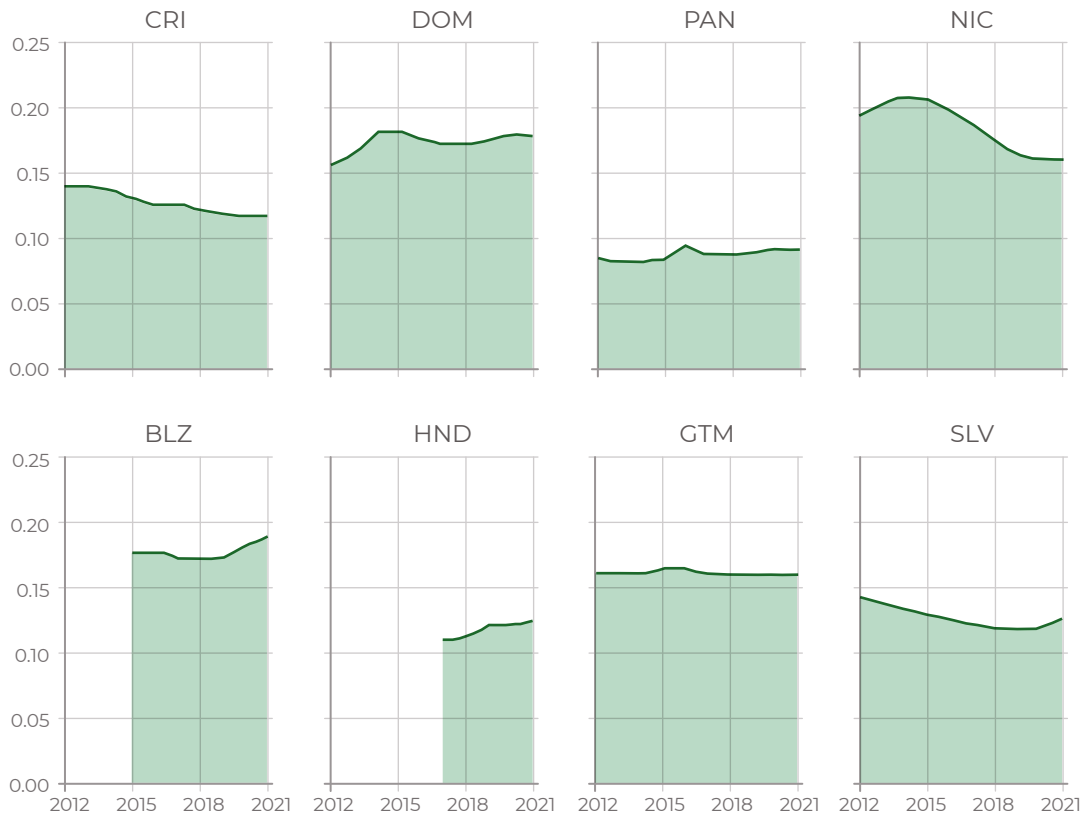
Source: Compiled by the authors based on data from the financial oversight authority of each country.

Economic theory suggests that higher levels of concentration in the banking system may imply greater market power, which could lead to rent extraction. Meanwhile, higher levels of concentration would also make it possible to achieve efficiencies where economies of scale exist (Kasman and Carballo, 2014; Jarmuzek and Lybek, 2018). Consequently, the impact of higher levels of concentration on profit margins is initially somewhat ambiguous.

The evidence for the CAPARD region is consistent with the hypothesis that higher levels of concentration are associated with (i) a higher return on assets (ROA)[17] and (ii) higher levels of financial intermediation profitability, as measured by net intermediation income as a percentage of interest-earning assets (see Figures 3.8 and 3.9). In contrast, as shown in the graphs, there is no positive relationship between concentration and profitability in OECD countries.

17 The same shape graph is obtained when using the ROE.

FIGURE 3.8.
Credit market concentration vs. ROA

CAPARD countries

R² = 0.40

ROA (%)

Herfindahl-Hirschman Index

- BLZ
- DOM
- HND
- PAN
- CRI
- GTM
- NIC
- SLV

OECD countries in the European Union

R² = 0.01

ROA (%)

Herfindahl-Hirschman Index

- HUN
- SVK
- FIN
- CZE
- NLD
- AUT
- BEL
- IRL
- PRT
- SWE
- DNK
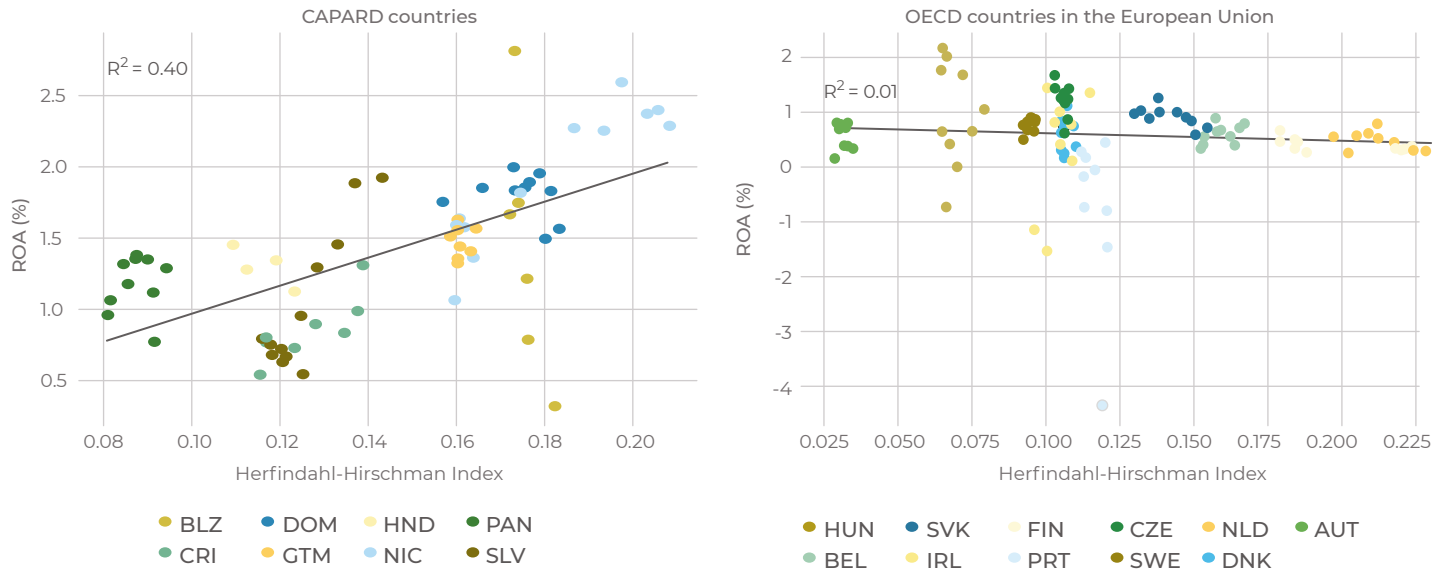
Source: Compiled by the authors based on data from the World Bank and the financial oversight authority of each country.

Note: Observations from 2012–2021 for all countries except Honduras (2017–2021) and Belize (2015–2020).

Source: World Bank and Eurosystem.

Note: Observations from 2012–2021 for all countries.

FIGURE 3.9.
Credit market concentration vs. Profitability of financial intermediation

CAPARD countries

R² = 0.49

Profitability of intermediation (%)

Herfindahl-Hirschman Index

- BLZ
- DOM
- HND
- PAN
- CRI
- GTM
- NIC
- SLV

OECD countries in the European Union

R² = 0.09

Profitability of intermediation (%)

Herfindahl-Hirschman Index

- HUN
- SVK
- FIN
- CZE
- NLD
- AUT
- BEL
- IRL
- PRT
- SWE
- DNK
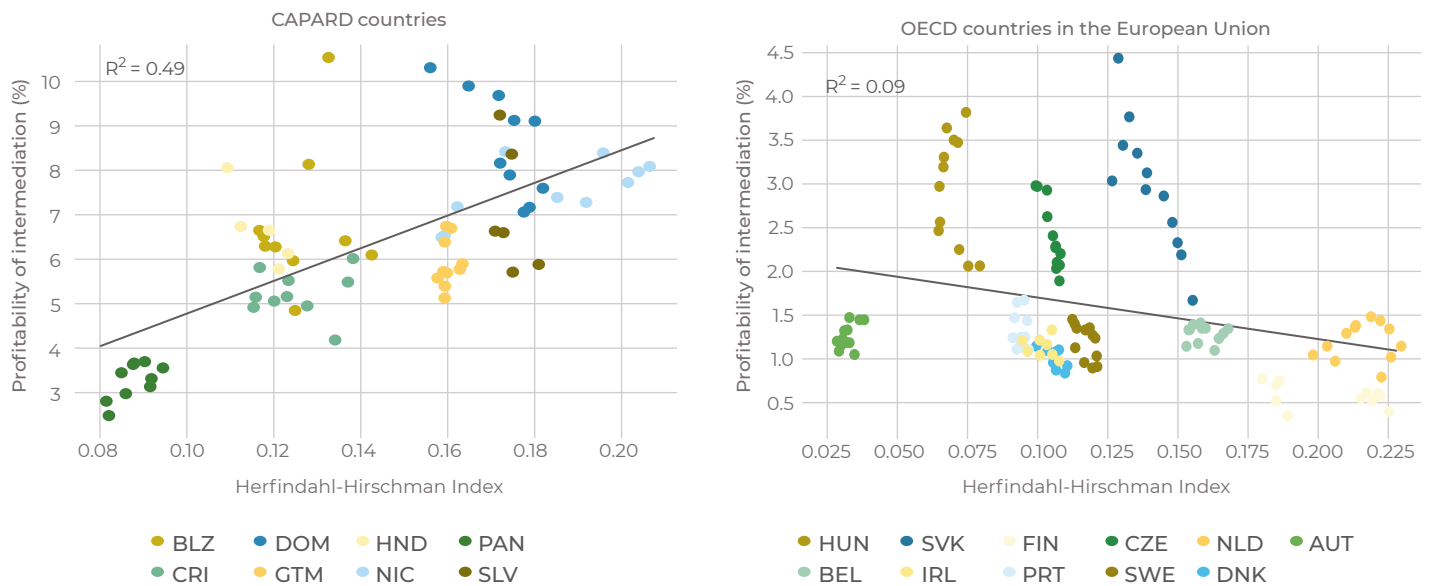
Source: Compiled by the authors based on data from the World Bank and financial oversight authority of each country.

Note: Observations from 2012–2021 for all countries except Honduras (2017–2021) and Belize (2015–2020).

OECD countries in the European Union.

Source: World Bank and Eurosystem.

Note: Observations from 2012–2021 for all countries.

The international literature concludes that barriers to market entry may create a positive relationship between concentration and market power in the banking sector and, as a consequence, enable rent extraction (OECD, 2006, Claessens and Laeven, 2004). One example of a formal barrier to market entry is the minimum capital requirement for establishing a bank. The minimum levels of capital required by several CAPARD countries are higher than the OECD average of USD 13 million, despite the fact that the latter countries have larger markets. In 2013, the European Union reduced the minimum capital required to found a bank to €5 million.[18] Among the countries with the lowest minimum entry capital requirements in the region are Belize, Dominican Republic, and Panama, at USD 5 million in the first two and USD 10 million in the last.

Besides formal barriers to entry, something else that limits competition is switching costs, i.e., the costs that existing customers incur when they switch suppliers. These include transaction costs, either explicit or opportunity costs (e.g., in the search to find a new supplier, closing the account, entering into a new contract, and so on).

Therefore, in order to reduce the interest spread and promote financial inclusion, it would be beneficial to explore the following policy options:

1. **Reduce the minimum reserve requirement ratio**
   The reserve requirement ratio is a product of monetary policy considerations and should not respond either solely or primarily to financial inclusion considerations. However, where possible, there should be an effort to gradually reduce the reserve requirement ratio and reabsorb the resulting liquidity through open market operations. This is a measure that encompasses both prudential and monetary policy aspects, and should therefore be adopted gradually, in line with the strengthening of central banks' monetary policy frameworks.

2. **Streamline bank administrative costs**
   2.1 The following options could be evaluated with respect to the banking sector,: (i) setting a reasonable ceiling on the rise in the cost of financial regulation, (ii) increasing the efficiency of state-owned banks, (iii) adopting regulations to promote the development of the fintech industry and digital payment platforms, and (iv) adopting measures to promote greater competition in the sector, which should incentivize the pursuit of efficiencies.

   2.2 To reduce the cost of running businesses in general, it would be beneficial to: (i) work on reducing utility costs (see Weiss *et al.,* 2021 on regulatory policies and improvements in electricity provision) and (ii) reduce regulation costs and red tape in general (see Roseth *et al.,* 2018 for a road map for cutting red tape, see Libby, 2011 on the implementation of one-stop service counters, and Castro *et al.,* 2013 for an example of a business climate improvement program).

3. **Reduce the probability of default by borrowers**
   It would be a good idea to: (i) expand the coverage of credit records on borrowers inside and outside the regulated system; (ii) ensure there is a centralized information system (credit bureau) that allows low-cost access to credit providers while guaranteeing the protection of personal and confidential data, and (iii) use technological tools (e.g., machine learning, artificial intelligence) to analyze credit risk and assign credit ratings.

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18 https://www.eba.europa.eu/regulation-and-policy/single-rulebook/interactive-single-rulebook/100848

4. Improve the loan recovery rate

4.1 Improving the availability and quality of collateral requires the granting of clearly defined property rights (see Conroy *et al.,* 2014 for an example of land regularization projects). There is an important gender dimension to this action, as property rights tend to be more precarious for women in many Latin American countries. Similarly, it would be advisable to update the real estate information in the land registry in order to make it easier to locate and appraise properties, and to draft legislation on and create a registry of secured collateral (Guerrero *et al.,* 2010). These measures would not only reduce banks' operating costs but also yield tax benefits.

4.2 In order to expedite the enforcement of collateral rights, it is important to strengthen alternative dispute resolution mechanisms. In the event no agreement is reached, it is important for there to be swift judicial processes for the enforcement of collateral rights and to reduce the cost and duration of bankruptcy proceedings. Adalet and Andrews (2018) describe the design and effectiveness of different insolvency regimes that could be useful for policy development.

Lastly, it is important to note that the implementation of prudential regulations should be maintained in order to limit loan concentration and improve specific provisions. The region is moving in that direction with the implementation of Basel III.

5. Reduce market power

5.1 In order to reduce the formal barriers to market entry, it might be worth considering lowering the minimum initial capital required to set up a bank as well as other entry requirements, and reducing the restrictions on activity (e.g., non-bank entities being allowed to extend loans).

5.2 The use of non-branch retail agent outlets (aka banking agents) should be encouraged, as these enable more financial institutions to reach the customer, and also reduce bank operating costs by eliminating the need to invest in branches.

5.3 Measures aimed at reducing the costs that a customer incurs when switching banks could be introduced, such as: (i) improving financial literacy and product transparency (e.g., by providing cover pages summarizing the conditions of the product and loan calculators for public use), so as to increase customers' willingness to compare between institutions; and (ii) simplifying the administrative steps customers need to go through when switching from one bank to another, such as porting their account number or loan balance.

5.4 Measures could be taken to reduce the barriers to entry for potential customers, such as formalization requirements or age requirements beyond that of their involvement in economic activities. Nevertheless, policies aimed at encouraging formalization should continue to be promoted.

3.4 Digital financial inclusion

Digital technologies, particularly in the fintech industry,[19] have the potential to boost financial inclusion by reducing costs and facilitating access to financial services for low-income households and small businesses. These digital platforms can attract customers who previously had no access to traditional banking services (nearly three-quarters of digital banking customers were previously unbanked).

There has been rapid growth in the use of digital financial services, particularly in the wake of the COVID-19 pandemic. Nevertheless, the countries of the CAPARD region face a number of challenges in their efforts to close the gap with other parts of the world in terms of adopting digital financial tools. This chapter analyzes the principal barriers to the adoption of digital financial technologies in the CAPARD region and offers specific recommendations for overcoming these.

Advantages of digital platforms

There are several ways in which digital technologies drive financial inclusion:

• Digital platforms make it possible to create savings vehicles that are not dependent on being located close to a physical branch or even on having an account at a banking institution. They also make it possible to develop potentially faster, cheaper, and more secure payment solutions than using cash, checks or bank cards, whether debit or credit.

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19 Fintech is a sector made up of firms that use technology to optimize and develop automated processes within this sector's services.

- They can help traditional financial firms and fintechs meet regulatory requirements more cheaply and efficiently (RegTech), which in turn translates into lower interest spreads.

- Fintech lenders use technologies such as big data and machine learning to assess the credit risk of people with no credit history, thus making it easier for them to access credit. Furthermore, e-payment methods complement online lending by increasing traceability and providing valuable information for the granting of loans. These synergies between digital payment systems and online lending have given rise to the emergence of digital banks.

- The use of mobile money and other means of digital payments enhances security, improves speed, and reduces the costs associated with domestic payments and international remittances. This is especially significant in regions such as CAPARD, where the most vulnerable sectors of the population are highly dependent on remittances. Facilitating local and international digital payments promotes financial inclusion by providing direct opportunities for people to use money transfer services, as well as indirect incentives for recipients of funds to save.

- Digital platforms have the potential to close gender gaps by improving women's access to financial services. However, there is a risk of these gaps widening if women have less access to digital resources and lower levels of financial literacy.

- The fintech industry drives competition in the financial sector by offering a variety of financial services in direct competition with traditional banks. This has led banks to invest more in digital technologies in order to innovate and compete.

- As well as competing with banks, digital fintech platforms offer services that complement traditional banking, which results in a positive impact for existing financial institutions. Many fintech services require a back-up bank account and offer diverse solutions such as payments, data analytics, risk scoring, chatbots, and anti-fraud technologies. This reduces the barriers that prevent access to traditional financial services. Furthermore, digital platforms can fill gaps in areas where banking is inefficient or underdeveloped, and they will grow faster in these areas.

At the same time, digital platforms and the fintech industry entail risks with respect to:

- financial stability, as they are subject to laxer regulations and are highly interconnected with other financial institutions (contagion risks), and, moreover, the high speed of digital transactions increases the risk and the effects of runs;

- financial integrity, as digital platforms may facilitate fraudulent activity, money laundering, and the financing of terrorism;

- cybersecurity, as digital platforms are particularly vulnerable to cyberattacks, which could affect the financial assets under guardianship and the reputation of the industry; and

- the privacy of their users' data.

Digital financial technologies

The following is an overview of the main digital financial technologies:

- **Digital payments.** Methods for transferring money from one account to another electronically, including mobile money transactions, digital wallets (on devices such as cell phones, watches or wristbands), transfers via specialized apps (such as PayPal or Venmo), and online purchases (using digital wallets or credit cards), instead of using cash.

- **Digital banks.** Rely exclusively on digital technologies for the provision of intermediation and other financial services. They have no physical presence (i.e., no branches or ATMs).

- **Alternative digital finance.** Includes financial services provided by non-traditional sources, such as crowdsourcing and crowdfunding for fundraising, online investments and peer-to-peer (P2P) lending.

- **Information technology.** Includes data analysis using AI, particularly machine learning, which provides support to financial institutions in various areas, such as payment solutions, data analysis, customer service via digital platforms, and fraud detection technologies.

- **Insurtech.** Includes individualized policy design, the use of smart contracts, and data analytics for the insurance industry.

- **Regulation and oversight.** Includes technologies designed to facilitate regulatory compliance by regulated entities (RegTech) and the performance of financial oversight functions by the authorities (SupTech).

The surge in mobile money usage and digital payments during the pandemic

The COVID-19 pandemic fueled a surge in demand for digital platforms in the countries of the CAPARD region, where the most popular services of this kind are digital payments via mobile money transactions. There has also been an expansion in the use of IT to support the financial industry. In contrast, alternative finance—particularly online credit and digital capital raising—is in its infancy in the region. While there has been a significant rise in digital banking in Latin America's largest countries, such as Brazil, Mexico, and Colombia, it has yet to make an impact in the CAPARD region.

Mobile telephony penetration in the region has created opportunities for innovation in the world of monetary transactions. Though still a fledgling concept, mobile money—defined as payments and transfers made from a mobile device without using a bank account but instead agents (individuals) who are responsible for receiving and delivering the corresponding cash[20]—has gained traction as a tool for financial inclusion.

By being less reliant on traditional banking infrastructure and the potential barriers to access associated with it, mobile money offers a number of advantages with regard to promoting financial inclusion. It can be accessed through an array of service providers,

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20 Mobile money has the following characteristics: (i) it is stored in an electronic medium, typically known as a mobile wallet; (ii) transactions are mainly carried out via instant messaging or text messaging; (iii) it is accepted as a means of payment by entities or persons other than the issuer; (iv) it is issued for a value equal to and in the same currency as the funds received; and (v) it is automatically convertible into cash in the same currency and with the same nominal value as when it was issued.

such as cell phone operators, financial institutions, and mobile money companies. It offers similar functions to traditional bank accounts, such as the ability to make and receive payments, check balances, and make deposits and transfers between users. Moreover, the interfaces involved are user-friendly and may not require either access to the Internet or credit on your phone. These services are user-friendly and guarantee secure transparent transactions, making them an effective alternative option for reducing transaction costs and increasing financial inclusion.

According to the Findex database, between 2017 and 2021, the proportion of adults in the region who had mobile money accounts doubled from 4% to 8%, compared to the modest growth of one percentage point recorded in the preceding three years. Despite this progress, the CAPARD region lags significantly behind others when it comes to the uptake of mobile money. For example, in high-income countries, the proportion of mobile money account holders reached 22% in 2021, compared to 19% in LAC.

The surge in demand for mobile money helped offset somewhat the decline in the number of bank account holders during the pandemic. Between 2017 and 2021, the proportion of adults having a bank account fell by 6%, after having risen by 63% between 2011 and 2014. This downturn is in contrast to the trend in high-income economies and the rest of LAC, where there was still a decline, but continued growth in financial inclusion with regard to bank accounts. This may be a reflection of the destruction of formal jobs, business closures, and limited social protection afforded during the pandemic (see Figures 3.10 and 3.11).

FIGURE 3.10.
High-income countries, Latin America, CAPARD: Mobile money account holders
(percentage of the population aged 15 and over)
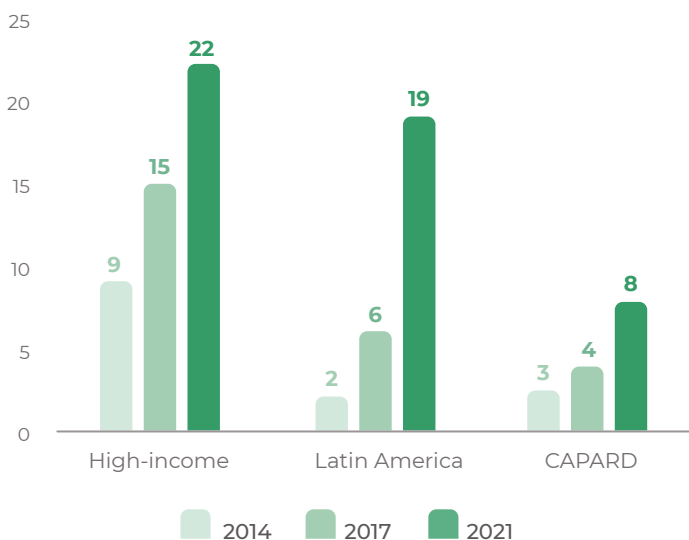
FIGURE 3.11.
CAPARD: Account holders by account type
(percentage of the population aged 15 and over)
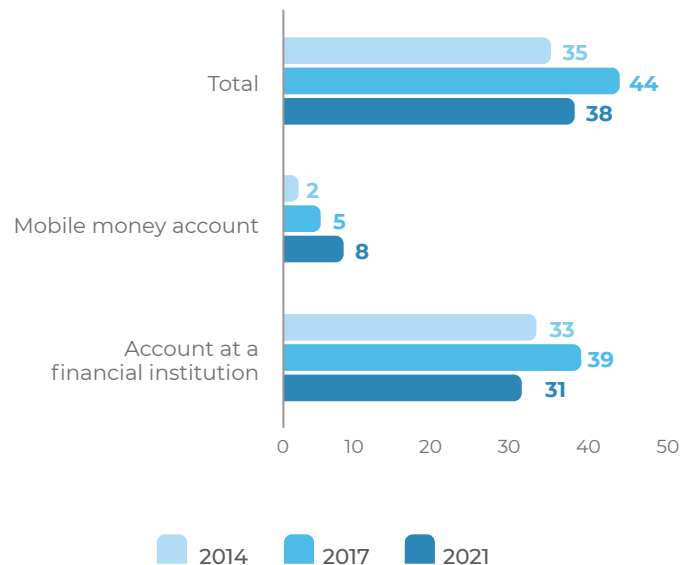
Source: Compiled by the authors based on Findex data.
Note: Countries with the average percentage include El Salvador, Honduras, Dominican Republic, Nicaragua, and Guatemala. The figure for the latter is for 2022.

Source: Compiled by the authors based on Findex data.
Note: Countries with the average percentage include El Salvador, Honduras, Dominican Republic, and Nicaragua.

The pandemic and social distancing rules spurred a rise in the adoption of digital financial services in CAPARD. For example, between 2017 and 2021, there was a significant rise in the number of people with mobile money accounts. Of all the countries of the region, El Salvador, which has been at the forefront of mobile banking penetration for over a decade, leads the way with 10.9% of adults having an account of this kind. This process has been helped by the fact that all electronic money in circulation is required to be backed by the country's Central Reserve Bank, ensuring greater security for consumers.[21] This is interesting, given that El Salvador has a lower proportion of bank account holders (36% of the population aged 15 and over) than other countries in the region, such as Costa Rica, the Dominican Republic, and Panama. This phenomenon would suggest that mobile devices could serve to complement traditional bank accounts (see Figures 3.12 and 3.13).

FIGURE 3.12.
CAPARD: Mobile money account holders
(percentage of the population aged 15 and over)
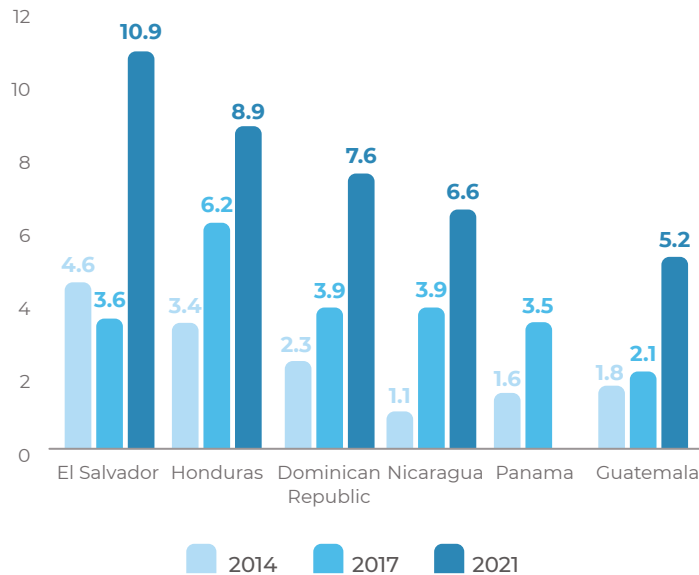
FIGURE 3.13.
**CAPARD: Proportion of adults
with a bank account**
(percentage of the population aged 15 and over)

Source: Compiled by the authors based on Findex data..
Note: The figure for Guatemala corresponds to 2022.
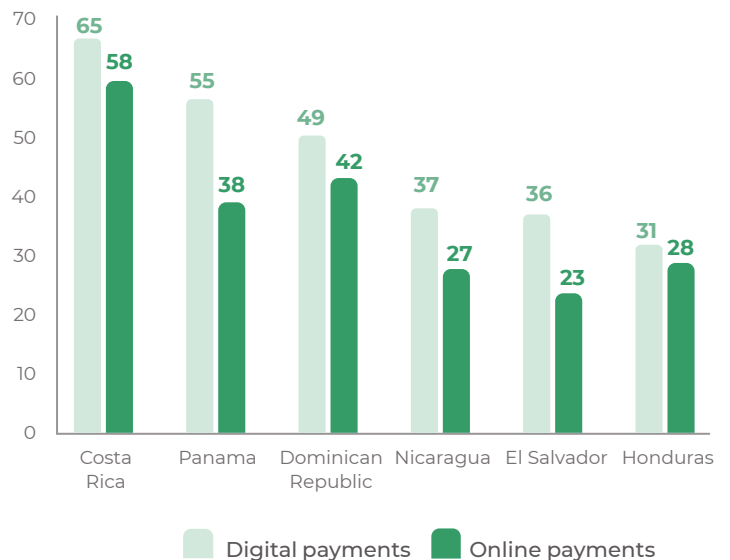
Source: Compiled by the authors based on Findex data.

Mobile money services were created for the purpose of sending money to friends and family. However, their adoption and use has expanded beyond their original purpose. In the CAPARD region, 32% of mobile money account holders have used the account to store money,[22] 17% have used it for savings purposes, 14% to send domestic remittances, 13% to receive government transfers, and 12% to lend money (see Figure 3.14). This suggests that mobile money has not only served as a gateway to financial inclusion but has also enabled access to a range of financial services.

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21 Reforms included in the Financial Inclusion Facilitation Act (*Ley para Facilitar la Inclusión Financiera*) in 2016–2017.
22 Keeping money in the account for various purposes, such as contingencies.

This shows that governments have a crucial role to play in driving demand for digital platforms. In response to the constraints imposed by the pandemic, some CAPARD countries have adopted innovative approaches that could represent a shift in paradigm with respect to government transfers to citizens. Public transfers via digital means are not only cost-effective, but also offer other significant benefits, such as greater transparency and accountability, as well as greater control over funds by the beneficiaries, which particularly favors groups with financial inclusion gaps, such as women.

In 2021, the economies of El Salvador, the Dominican Republic, Honduras, and Nicaragua launched remittance programs for medical expenses, education, subsidies, and unemployment benefits, all channeled through mobile devices. Of these countries, El Salvador ranked top in the adoption of mobile money as an effective means of distributing government transfers, with 26% of those who use this method claiming to have received a transfer from the government (see Figure 3.15). Furthermore, some CAPARD countries have also started to make pension payments via cell phones, though the share of recipients is very low, with El Salvador leading the region with 0.5%.

FIGURE 3.14.
CAPARD: Use of mobile money, cell phones, and the Internet for financial transactions
(as a percentage of the total number of respondents who have mobile money)
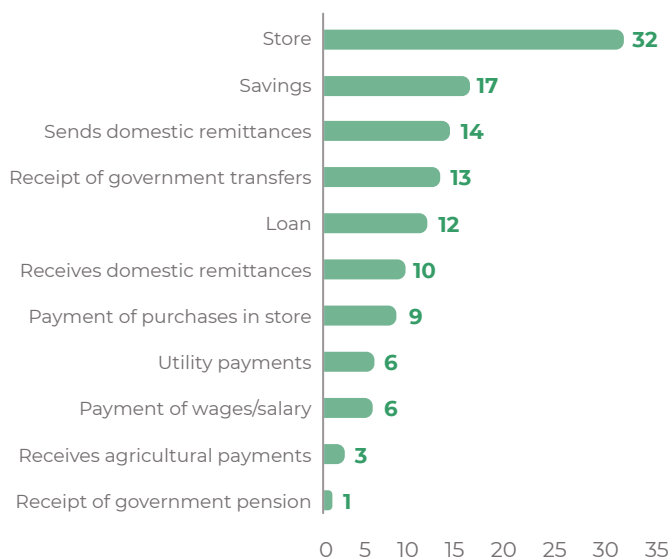
FIGURE 3.15.
Receipt of government transfers, 2021
(as a percentage of the total number of respondents who have mobile money)

Source: Compiled by the authors based on Findex data.
Note: The figure for Guatemala corresponds to 2022.
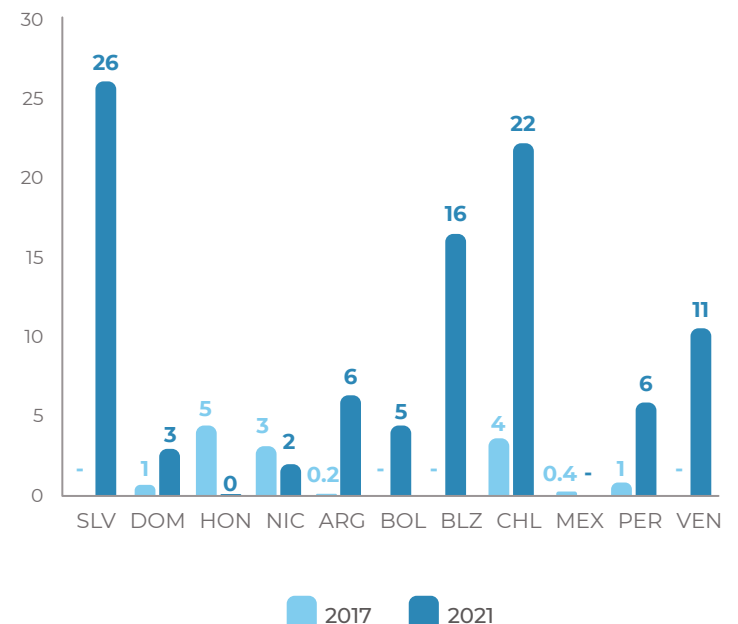
Source: Compiled by the authors based on Findex data.

Digital platforms as a means of addressing the obstacles to financial inclusion

The main things that stop customers from being banked in CAPARD are: (i) lack of money, (ii) high cost of having an account, (iii) lack of documentation, (iv) distance, and (v) trust (see Figure 3.16).

Therefore, one possible way to reach the third of those in the CAPARD region who cited distance as one of the main obstacles to financial inclusion is to structure initiatives that allow access to connectivity and mobile devices. This policy is far more cost-effective than installing physical infrastructure to overcome the distance barrier.

Another example of overcoming the obstacles to financial inclusion is the push towards fintechs, which can offer faster, lower-cost loans to a larger percentage of the population, including people with no credit history or on low incomes. For example, Bazarbash (2019) describes several success stories of fintech companies that have made it possible to grant loans tailored to the characteristics and populations in question by using machine-learning techniques, big data, and detecting behavioral patterns based on social networks.

FIGURE 3.16.
Reasons for not having a bank account
(percentage, 2021)
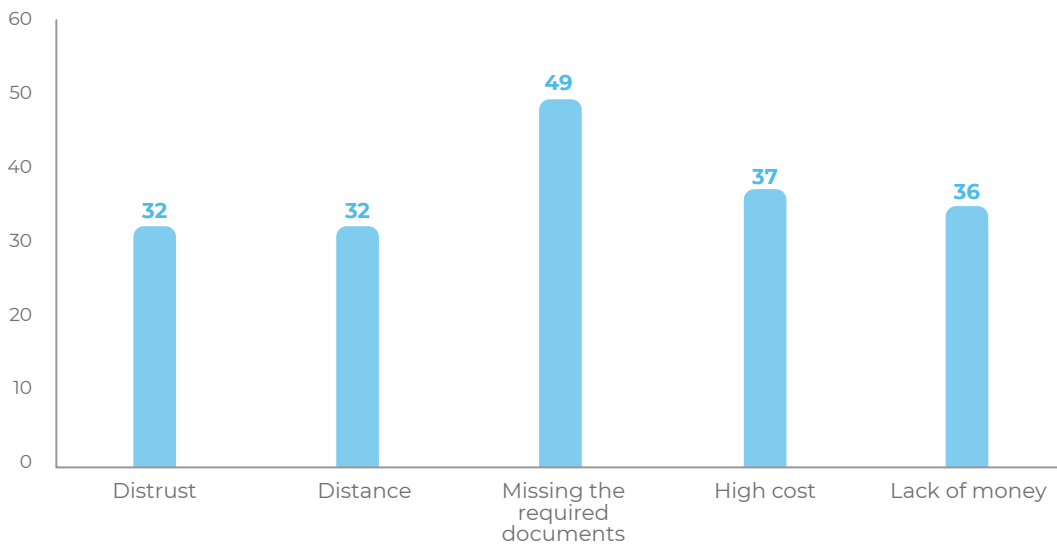
Source: Compiled by the authors based on Findex data.

While the demand for digital platforms for financial services largely corresponds to people who are already banked (e.g., the additive model of mobile money[23]), policy measures used to advance transformational models[24] may enable more people, particularly women, to become banked.

23 The additive model of mobile money adds to an institution's range of financial products, i.e., it is aimed at those who are already banked.
24 The transformational mobile money model is geared to the needs of the unbanked.

Determinants of mobile money use

After conducting an econometric exercise,[25] we found that among the main determinants of a person's using mobile money in CAPARD countries are: keeping money in a bank account; having the ability to pay for utilities such as telephone, water, and electricity through a bank or financial institution; the person's level of education; Internet access; and government transfers via a financial institution. The variables predictive of mobile money use are similar across countries, though there are some differences with respect to their relative importance.

TABLE 3.4.
Top five determinants of mobile money use

Costa Rica	El Salvador	Honduras	Nicaragua	Panama	Dom. Rep.
Keeping money in a bank account	Keeping money in a bank account	Keeping money in a bank account	Keeping money in a bank account	Keeping money in a bank account	Receiving wages at a financial institution
Receiving wages at a financial institution	Receiving wages at a financial institution	Making utility payments at a financial institution	Saving at a financial institution	Receiving wages at a financial institution	Keeping money in a bank account
Making utility payments at a financial institution	Saving at a financial institution	Receiving wages at a financial institution	Making utility payments at a financial institution	Internet access	Making utility payments at a financial institution
Saving at a financial institution	Government transfer to a financial institution	Income quintile five	Internet access	Saving at a financial institution	Saving at a financial institution
Completed elementary school	Completed elementary school	Saving at a financial institution	Receiving wages at a financial institution	Making utility payments at a financial institution	Completed tertiary-level education

Source: Compiled by the authors based on Findex data.

If we take into account all the determinants of mobile money use in these countries, they can be grouped into five dimensions:

1. User interactions with a banking or financial institution: (i) receiving money, (ii) saving money, (iii) making utility payments.

2. Facilitating factors: (i) level of education, (ii) Internet access, (iii) cell phone user.

3. Receiving money: (i) receiving cash.

4. Life cycle: (i) age group corresponding to young people (aged 15-29 years).

5. Place of residence: (i) urban area.

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25 Using the Boruta algorithm that is used to identify the most relevant features in a dataset. This algorithm is based on a technique known as *random forests* and its purpose is to capture all of the features that are important for predicting a specific variable in the dataset. In simple terms, the algorithm operates by duplicating the original database and then randomly switching the values in each column containing the independent variables.

Barriers to mobile money use

The adoption of mobile money in the region has been relatively limited. According to data from the Global System for Mobile Communications Association (GSMA), in 2022, the Dominican Republic and Guatemala ranked very low with respect to mobile money penetration, while Mexico, Nicaragua, and El Salvador ranked low, and Belize, Haiti, and Honduras average.

Greater choice of providers and services in the region could be underpinned by regulatory changes. The regulatory index developed by the GSMA assesses six dimensions of regulation in a sample of 92 countries. All the countries of the region rank low, except for Mexico and Honduras (see Table 3.5).

TABLE 3.5.
Mobile Money Regulatory Index, 2021

Country	Position	Score	Dimensions					
			Authorization	Consumer protection	Know Your Customer	Transaction limit	Agent network	Infrastructure and investment climate
Dominican Republic	86	65.8	60.0	100.0	0.0	100.0	70.0	68.8
El Salvador	74	73.2	100.0	100.0	32.0	33.3	100.0	56.3
Guatemala	80	70.9	60.0	100.0	0.0	94.4	100.0	78.1
Haiti	90	60.2	84.0	80.0	0.0	33.3	94.0	53.8
Honduras	57	75.4	90.0	80.0	52.0	55.6	94.0	71.3
Mexico	59	75.4	100.0	40.0	60.0	77.8	100.0	58.0
Nicaragua	83	68.0	100.0	40.0	0.0	100.0	94.0	52.5

Source: GSMA.

The characteristics of demand can be analyzed by looking at the examples of Mexico and Guatemala, which have available data provided by the GSMA. The barriers affecting the demand for mobile money center on two dimensions: relevance, and security and trust. With regard to limited relevance, cell phone users show a preference for cash, particularly in Guatemala. Furthermore, other factors cited as influencing the use of mobile money are the other options available for transferring money and the scarcity of cash (see Figure 3.17). This is linked to the high degree of informality in the labor market and the underground economy, where transactions are carried out without any involvement of the formal financial system.

A comparison of Guatemala and Mexico with other middle-income countries, such as India, Indonesia, and Senegal, shows the latter to have higher scores in several subdimensions. Some of the actions implemented by these countries may be relevant to the region. For example, since 2013, Indonesia has had an interoperability agreement between its three main mobile carriers that allows users to send money using the network of all three. Senegal is notable for its high penetration of carriers that facilitate transfers from abroad, which might be a suitable option for Guatemala.

FIGURE 3.17.
Barriers stopping cell phone users from having a mobile money account in Guatemala and Mexico
(2021)

Source: GSMA.
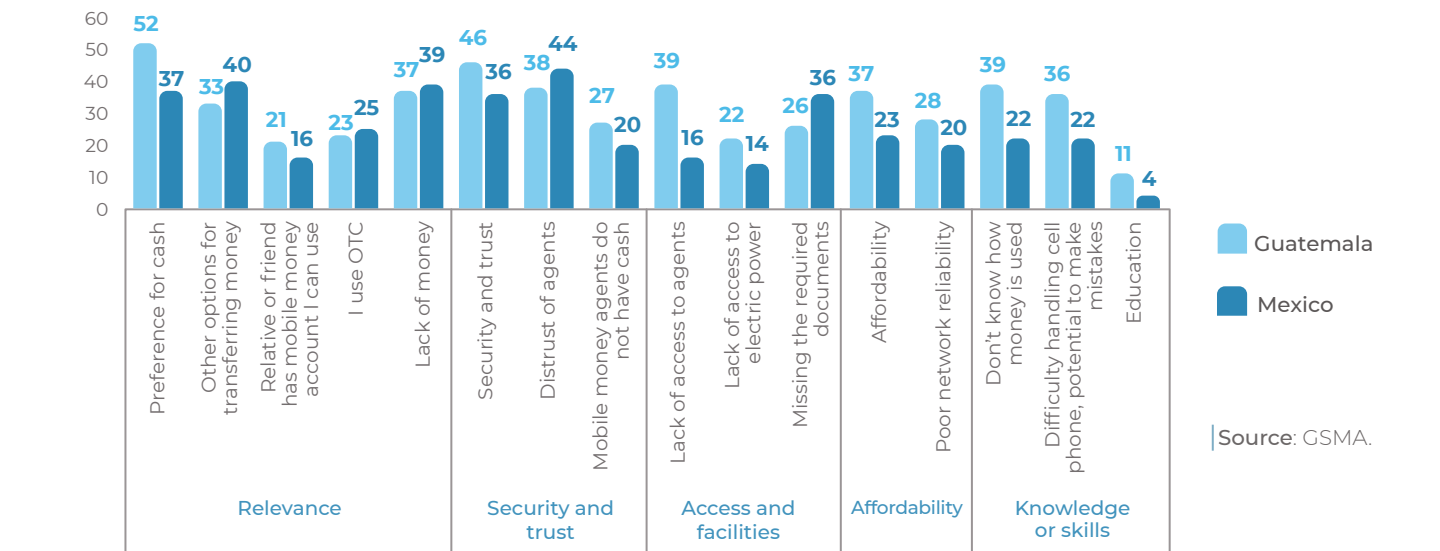
Policy recommendations to promote financial inclusion via digital technologies in the CAPARD region

1. Proper and sufficient identification of users is a fundamental prerequisite for the secure operation of digital platforms and the fintech industry. It guarantees security, prevents fraud, and complies with regulations such as Know Your Customer (KYC) and Anti-Money Laundering and Combating the Financing of Terrorism (AML/CFT). Public policies need to facilitate this process and consider options such as e-signatures (e.g., in Costa Rica) or portable digital identities (e.g., in India).

2. Another necessary condition for the effective functioning of digital platforms and the fintech industry is reliable digital connectivity, including high-speed Internet and cell phone networks with a good level of coverage. Public policies need to prioritize investment in this infrastructure, particularly in remote regions. This would also encourage the use of credit or debit cards as a method of payment by making it easier to use mobile payments or mPoS terminals.

3. Central banks can play a crucial role in promoting digital payments by developing electronic retail payment platforms. These platforms enable customers to make secure low-cost payments in real time, reducing the risk of excessive concentration and the abuse of market power that network externalities can generate, as well as providing for easier cross-border interoperability of e-payment platforms.

a. Notable in the CAPARD region are Costa Rica's National System of Electronic Payments (SINPE) and its associated mobile app (SINPE Móvil), developed by the country's central bank. SINPE Móvil has enjoyed extraordinary growth, going from 1 million users in 2019 to over 3.5 million today, with a significant increase in the number and value of transactions.[26] Another example is the Transfer365 and Transfer365 Móvil mass payment system that the Central Reserve Bank of El Salvador launched in 2021, which facilitates fund transfers and instant payments. Other similar systems include Pix in Brazil and CoDi in Mexico. The Central American Monetary Council has promoted the development of a Payment Interconnection System (SIPA) in the CAPARD region, aimed at facilitating cross-border wire transfers.

4. Fiscal policy can play a crucial role in promoting digital financial inclusion by encouraging the government to make payments such as pensions and unemployment benefits electronically. This particularly benefits people in the informal sector and women, empowering them and making them more financially independent. Furthermore, from a tax perspective, using digital payment methods can help reduce costs and provide greater traceability and transparency.

5. Public policies for digital financial inclusion should prioritize the promotion of financial literacy, with a special focus on digital technologies. Though the relative youth of the population in the CAPARD region may be an advantage, close to one-third of the population still needs support in managing their electronic payment or savings accounts. Financial education can help: (i) spread information on the benefits, savings, and security of digital platforms by means of widespread campaigns; (ii) promote digital skills and practical expertise in the use of digital platforms; and (iii) reduce public distrust towards digital financial services. It is crucial that there be a financial literacy campaign targeted at specific groups, such as people over 30 years of age, those living in rural areas, and women, who are less digitally and financially literate.

6. Regulatory frameworks that encourage the use of digital platforms and mobile money are needed, along with prudent regulation and risk controls, and effective and proportionate KYC and AML/CFT requirements. This requires financial regulation of the operations of mobile telephone service providers. As of July 2021, the CAPARD region had made progress in certain aspects such as digital banking, data protection, and electronic payments, whereas in others it was still in a learning process and few countries had adopted special regulations (see Table 3.6).

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26 Which increased from 0.3% of GDP in 2019 to 18.2% in 2023.

TABLE 3.6.
Mobile Money Regulatory Index, 2021

Country	Legislation							
	Crowdfunding	**CBDC**	**P2P**	**E-money**	**Electronic payments and transactions**	**Data protection**	**Innovation facilitation**	**Digital banking**
Belize	No legislation	No legislation	No legislation	No legislation	Electronic Transactions Act	Belize Data Protection Act 2021	No legislation	Operates under a traditional banking license
Costa Rica	Unregulated but not prohibited	No legislation	No legislation	No legislation	Law No. 8454	Law No. 8968	Financial Innovation Center	Operates under a traditional banking license
Dominican Republic	Regulated under pre-existing legislation	No legislation	Unregulated but not prohibited	No legislation	Law No. 126-02	Law No. 172.13	Financial Innovation Center	Operates under a traditional banking license
El Salvador	No legislation	No legislation	No legislation	Financial Inclusion Facilitation Act	Electronic Signature Law	Personal Data Protection and Habeas Data Law	No legislation*	Operates under a traditional banking license
Guatemala	No legislation	Preliminary research has been carried out	No legislation	Government Agreement 118-2002*	Decree No. 47-2008 of the Congress of the Republic of Guatemala	Decree No. 57-2008 of the Congress of the Republic of Guatemala	Financial Innovation Center	Operates under a traditional banking license
Honduras	Unregulated but not prohibited	Preliminary research has been carried out	Unregulated but not prohibited	No legislation	Decree No. 149-2013	Decree No. 170-2006	Regulatory Sandbox*	Operates under a traditional banking license
Nicaragua	Unregulated but not prohibited	No legislation	Unregulated but not prohibited	No legislation	Law No. 729/2010	Law No. 787/2012	No legislation	Operates under a traditional banking license
Panama	Regulated under pre-existing legislation	No legislation	Unregulated but not prohibited	No legislation	Law No. 43-2001	Law No. 81-2019	No legislation	Operates under a traditional banking license

Source: World Bank's Global Fintech-enabling regulations database.

Nota 1: *Crowdfunding* refers to raising capital in small amounts given by a large number of people, usually via digital platforms. CBDC refers to a 'Central Bank Digital Currency', i.e., a digital currency issued by a Central Bank. P2P refers to the ability to make peer-to-peer loans and transactions. E-money is an electronic medium that serves as a store of monetary value. Innovation facilitation refers to whether there is any institution or agency that promotes or regulates the fintech industry.

Nota 2 [*]: Reflects legislation in effect as of July 2021 according to World Bank collation and classification. According to Bakker (2023), some countries, such as El Salvador, have introduced Financial Innovation Centers that are not included in the World Bank's data. Furthermore, the Regulatory Sandbox in the Honduras region refers to the one that was implemented by RFSA decree in the Prospera ZEDE region, for which there is no evidence that it is currently operating. In the case of e-money regulation in Guatemala, the World Bank's database makes reference to the Anti-Money Laundering Act of 2002, though it is not clear how the regulation applies to the classification.

Financial regulation

1. Financial regulation needs to strike a balance between promoting financial inclusion through digital platforms and ensuring the stability of the system.[27] Though fintech technologies can boost financial inclusion, they also pose a risk to stability due to the incipient regulation, which needs to be commensurate with the financial risks.[28] Regulatory authorities have tended to embrace two types of tools in their efforts to achieve this:

   (i) Financial innovation hubs. These are forums where regulatory authorities and financial institutions openly discuss the introduction of new technologies in the financial sector. These hubs foster a constructive dialog in order to gain a better understanding of the impact and risks of technological innovation, and thus enable an appropriate regulatory approach to be adopted. Some CAPARD countries, such as Guatemala, El Salvador, Costa Rica, and the Dominican Republic, have already implemented these initiatives and it would be wise for others to consider doing the same, although they require investment in resources and institutional support.

   (ii) Regulatory sandboxes. These are spaces where innovators can test out new ideas that are subject to regulatory oversight. They help identify the potential benefits and risks of new technologies and business models. Though there are currently none in the CAPARD region, they could potentially be a valuable addition, particularly in countries with significant growth in the fintech industry.

2. As well as providing platforms for digital payments at the end-user level, regulatory authorities can promote financial inclusion through various policy tools:

   (i) Alignment of national KYC requirements with international standards for the purposes of AML/CFT in order to facilitate cross-border digital remittance transactions.

   (ii) Smart regulation of the payment card system and other digital media to ensure the efficiency, security, and availability of payment terminals.

   (iii) Promoting the use of electronic payment systems in sectors where cash is predominant (e.g., public transport) through initiatives such as setting up payment terminals on buses and trains (for instance, those launched by the Central Bank of Costa Rica).

3. The issue of regulating cryptoassets and other digital assets is crucial and one closely linked to digital platforms. Cryptoassets were introduced in 2009 to facilitate money transfers, for example, in El Salvador, which adopted bitcoin

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27 One example of these efforts in the CAPARD region is the official launch by the Central Reserve Bank of El Salvador in 2023 of the Estrategia Nacional Fintech (or ENF), the national fintech strategy. Among the main expected benefits for the population as a result of the NFS and the technical standards are: formal access to the use of payment gateways that allow businesses and consumers to streamline their purchases and sales; time savings in transactions by eliminating the need for face-to-face interactions; access to online financial education for users; and a wider range of quality financial products and services.

28 For example, the various ways in which information technologies facilitate the granting of loans could lead to an excessive increase in indebtedness and a financial crisis. Regulators may prove reluctant to make room for new technologies, typically because of their strong aversion to risk.

as legal tender in 2021. However, their use as a means of payment is limited,[29] since they are mainly used as speculative investment instruments. This limits their capacity to advance financial inclusion. It is vital that methods of swift secure digital payments and transfers be promoted, whether they involve legal tender or cryptoassets, and that these methods are properly regulated to ensure user identification and compliance with AML/CFT regulations. It is also important that the public be informed of the potential uses and risks of cryptoassets, especially their high volatility.

4. In regions where there is a high level of informality (such as in CAPARD), it should not be a financial regulation requirement that income come from the formal sector in order for access to banking services or loans to be permitted, as this would restrict financial inclusion and the adoption of digital payment methods by vulnerable segments of the population.

5. Financial regulation should allow crowdfunding by non-bank entities, either through debt or equity, with prudential requirements to protect the public's money. This includes liquidity and capital requirements, though exercising caution to prevent them from being too stringent and hampering market entry, and with guidelines on asset management.

6. Regulation should allow mobile money accounts and other digital financial services to be offered by non-bank entities and to be subject to liquidity, minimum capital (adjusted to avoid barriers to entry), and asset management requirements. In Costa Rica, current legislation limits public fundraising to authorized financial intermediaries only. This needs to be amended in order to distinguish between different types of financial activities and implement regulations tailored to each.[30]

7. It is vital that identity verification processes and anti-money laundering and counter-terrorist financing (KYC/AML/CFT) controls be simplified and digitized in order to make them more effective and to reduce costs, especially for fintech startups. Digitization can reduce identity verification costs from USD 15 to USD 0.5. Limiting the number of accounts per customer and placing restrictions on transactions can be a cost-effective way to prevent fraud and illegal activity in digital transactions.

8. It is essential that access to full and affordable credit information be made available to all providers, regardless of their regulatory status. The availability of such information affects the frequency, size, cost, and interest rates of loans granted via digital platforms. Furthermore, effective mechanisms are needed to protect the rights of creditors, both in judicial and extrajudicial proceedings.

9. Financial consumer protection laws that cover the use of digital financial services should be promoted.

10. Protecting the privacy of user data in the digital financial arena is of the essence and requires clear rules and minimum standards of confidentiality. However, this should be done in a reasonable enough way so as to enable users to consent to the use of their information in certain contexts. This can foster competition,

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29 Only 12% of the population used bitcoin in 2023.
30 Only in the case of financial intermediation activities should stricter regulation be imposed.

innovation, and interoperability among financial service providers, in a model known as "open banking" or "open finance." Currently only Brazil and Mexico have specific regulations on open finance, though Chile and Colombia are making headway in adopting regulatory frameworks along these lines. Exploring the regulation of open finance could be a promising option for the CAPARD region.

11. Financial regulators need to tackle the issue of cybersecurity by ensuring minimum standards for the protection of user data and the financial assets of users and by developing the capacity to monitor compliance with such standards.

12. Securities and exchange regulations should facilitate the financing of fintech firms through venture capital and institutional investor investment in order to address the financing challenges these firms face.

13. Adopting digital technologies for regulatory and oversight processes (RegTech and SupTech) enables more efficient and risk-based regulation by allowing large datasets to be analyzed using machine learning. This significantly reduces regulatory and compliance costs for the financial industry. Financial authorities could implement these technologies[31] and adapt regulatory frameworks so as to facilitate compliance via digital platforms. However, this will require significant investment in technological infrastructure and staff training.

Regulation of Internet and mobile telephone service providers

1. User registration processes for mobile telephone services and digital platforms in general need to be streamlined.

2. Regulation should simplify the licensing and operation of mobile money agents, who play a crucial role in the expansion of digital financial services, particularly in rural and remote areas where connectivity is limited.

3. It is vital that the tax treatment of mobile money and digital platforms be addressed in order to avoid imposing taxes that discourage their use and promote financial exclusion and a preference for cash.

4. It is imperative that policies to ensure competition in the digital financial services industry be implemented preemptively to avoid excessive concentration and the abuse of the market power resulting from the strong network externalities in the industry. These policies need to promote the interoperability of platforms in order to reduce transaction costs and avoid potential abuses of power.

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31 For example, tools for detecting errors or suspicious patterns in the data provided by regulated entities or errors in the expected loss estimates for their portfolios, as well as machine learning and data mining to identify possible cases of fraud.

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→ **Appendix**

Financial literacy module for CID surveys

Question	Options	Comments
1. Imagine that five brothers are given a gift of 1,000 (local currency) in total. If they have to share the money equally, how much does each one get?	a) Record response numerically: b) Don't know c) Didn't answer	Change to local currency of country concerned: Costa Rica: colones Mexico: pesos Guatemala: quetzales Honduras: lempiras DR: pesos Nicaragua: córdobas Panama and El Salvador: dollars
2. Now imagine that the brothers have to wait one year to get their share of the 1,000 (local currency) and inflation stays at 5 percent. In one year's time, each brother will be able to buy with his share:	[Give options a), b) and c) only] a) More than he can buy today b) The same as he can buy today c) Less than he can buy today d) Depends on the type of things he wants to buy (or some other phrase with the same meaning) **Do not give option (d) when you ask the question.** e) Don't know f) Didn't answer	Read only a), b), and c). Change to local currency of country concerned: Costa Rica: colones Mexico: pesos Guatemala: quetzales Honduras: lempiras Dom. Rep.: pesos Nicaragua: córdobas Panama and El Salvador: dollars
3. You lend 25 (local currency) to a friend one evening and he gives you 25 (local currency symbol) back the next day. How much interest has your friend paid on this loan?	a) Zero/nothing/none/didn't pay any b) Gives another number. Record it: c) Don't know d) Didn't answer	Wait for an answer Change to local currency of country concerned: Costa Rica: colones Mexico: pesos Guatemala: quetzales Honduras: lempiras Dom. Rep.: pesos Nicaragua: córdobas Panama and El Salvador: dollars
4. Imagine someone puts 100 (local currency) into a savings account with a guaranteed interest rate of 2% per year. They make no further payments into this account and no money is withdrawn. How much would be in the account at the end of the first year, once the interest payment is made?	a) Record response numerically: b) Don't know c) Didn't answer	Change to local currency of country concerned: Costa Rica: colones Mexico: pesos Guatemala: quetzales Honduras: lempiras Dom. Rep.: pesos Nicaragua: córdobas Panama and El Salvador: dollars
5. And how much would be in the account at the end of five years? Would it be:	a) More than 110 **local currency** b) Exactly 110 **local currency** c) Less than 110 **local currency** d) Impossible to tell based on the information given e) Don't know f) Didn't answer	Change to local currency of country concerned: Costa Rica: colones Mexico: pesos Guatemala: quetzales Honduras: lempiras Dom. Rep.: pesos Nicaragua: córdobas Panama and El Salvador: dollars

6. Inflation refers to increasing:	a. Production b. Prices c. Crime d. Don't know e. Didn't answer	Read the options
Please tell me if you think the following statements are true or false. [*Read out each statement and wait for a response.*]		
7. An investment with a high return is likely to be high risk.	1. True 2. False 3. Don't know 4. Didn't answer	
8. You are less likely to lose all of your money if you save it in more than one place.	1. True 2. False 3. Don't know 4. Didn't answer	
9. High inflation means the cost of living is rising fast.	1. True 2. False 3. Don't know 4. Didn't answer	

Chapter

4

→ A selection of IDB Group
operations to promote
financial inclusion
in the region

A selection of IDB Group operations to promote financial inclusion in the region

The Inter-American Development Bank Group has a long history of supporting financial inclusion in the region comprising Central America, Panama, and the Dominican Republic (CAPARD), which it has fostered through technical cooperation operations, loans, and investments. In this chapter, we showcase a representative sample of operations across the Group's three windows: the Inter-American Development Bank (IDB), which works as a partner of government entities; IDB Invest, which focuses on interventions through the private sector; and IDB Lab, the innovation laboratory that supports early-stage entrepreneurial innovations.

→ **| Inter-American Development Bank (IDB)**

The IDB works to promote financial inclusion as a tool to stimulate economic development in vulnerable parts of the region. The following sample of operations serve to illustrate this endeavor at a national level.

Access to financing for micro, small, and medium-sized enterprises (MSMEs) in the wake of the pandemic

An additional project was implemented— one more heavily oriented towards the resumption of activities which aimed to boost the working capital needed to purchase intermediate goods and services for production.

The IDB also helped develop a Guarantee Fund in the country to further facilitate MSME access to credit to help MSMEs with insufficient credit history to obtain loans backed by IDB guarantees.

In Panama, three projects stand out. The first is the "Credit program for safeguarding the productive fabric and employment." The aim of this initiative was to provide access to financing for micro, small, and medium-sized enterprises (MSMEs) in the wake of the pandemic, given the complex conditions to which these types of companies could be subject to secure new financing. These funds were necessary to ensure that business owners had the liquidity needed to cover their fixed costs and keep their businesses up and running. It is important to note that MSMEs make up the bulk of the country's business sector and were severely affected by the pandemic due to the tight restrictions on movement imposed in an effort to limit the spread of the disease. In response to the considerable financing needs of this sector, an additional project was implemented—one more heavily oriented towards the resumption of activities—, which aimed to boost the working capital needed to purchase intermediate goods and services for production. This productive financing program was given the title the Global Credit Program for Promoting the Sustainability and Economic Recovery of Panama. The IDB also helped develop a Guarantee Fund in the country to further facilitate MSME access to credit. A system is also being developed within the framework of this Guarantee Fund to help MSMEs with insufficient credit history to obtain loans backed by IDB guarantees. The fund has the potential to revolutionize access to financing for MSMEs by providing them with greater credit opportunities, as well as the possibility of applying to the fund itself. By investing in MSMEs, the IDB is helping to promote the financial inclusion of the most vulnerable firms in the country, improving their development opportunities.

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The Global Credit Program for the Defense of the Productive Fabric and Employment to mitigate the effects of the pandemic on small businesses by granting loans

The Access to Credit Program for Micro, Small, and Medium-Sized Enterprises seeks to promote access to medium- and long-term productive credit

In an effort to support the sustainability of MSMEs **in Honduras and El Salvador**, there has also been investment to promote their financial inclusion. In 2020 in Honduras, the Global Credit Program for the Defense of the Productive Fabric and Employment was implemented. As in Panama, this program sought to mitigate the effects of the pandemic on small businesses by granting loans, given the difficulty they have traditionally faced in finding sources of financing, a situation that became even worse during the pandemic. In 2021, another project, Increased Investment Mobilization for Green and Resilient Recovery with Micro, Small, and Medium Enterprises (MSMEs), was implemented, targeting the same group. Its aim is to contribute to the institutional and technical strengthening of public entities that channel funding to this sector, which in turn helps streamline the support they provide to it, while simultaneously incorporating elements of environmental sustainability. **In El Salvador**, the Access to Credit Program for Micro, Small, and Medium-Sized Enterprises (MSMEs) seeks to promote access to medium- and long-term productive credit with the support of BANDESAL (the Development Bank of the Republic of El Salvador). Long-term credit helps investments to mature and so grow in scale. In the case of small companies, access to such credit tends to be very limited. In addition, the Institutional Strengthening of BANDESAL program provides support to the institution in its efforts to improve the financing program

Qüilo - Financial Inclusion through Technology that comprises life insurance, medical insurance coverage for illness and accidents, and maternity insurance, as well as a pension fund scheme with varying levels of coverage depending on a person's ability to pay.

In 2020, two projects aimed at improving financial inclusion and living conditions were implemented in Guatemala. The first, entitled Qüilo - Financial Inclusion through Technology for Informal Workers, focused on the development and testing of a private social security program for women working in the informal economy. The informal economy accounts for around 54% of the country's production and some seventy percent of the country's workers are employed in it; in the case of women, the figure is even higher at 73%, which shows the potential major impact of the project. The program developed comprises life insurance, medical insurance coverage for illness and accidents, and maternity insurance, as well as a pension fund scheme with varying levels of coverage depending on a person's ability to pay. In addition, the Qüilo - Multichannel WorkerTech Platform and Digital Financial Inclusion program was created to broaden the implementation of the first project. These projects have the potential to dramatically improve people's quality of life in Guatemala by directly promoting the financial inclusion of women within the informal economy, and projects like these could potentially be extended to other countries in the region.

Access to financing to individuals and businesses in Bilwi-Prinzapolka, one of the lowest-income areas in the country: 71% of its inhabitants (i.e., around 315,000 people) live in extreme poverty.

In Nicaragua, financial inclusion is being advanced by providing access to financing to individuals and businesses that would otherwise not have it in the Bilwi-Prinzapolka area, one of the lowest-income areas in the country. It is located in the North Caribbean Coast Autonomous Region (or RACCN). The RACCN is one of the poorest regions: 71% of its inhabitants (i.e., around 315,000 people) live in extreme poverty. The aim of the program is to identify infrastructure and productive development projects that require financing, thereby contributing not only to financial inclusion, but also to improving socioeconomic conditions.

A selection of IDB Group operations
to promote financial inclusion
in the region

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IDB Invest

A major component of IDB Invest's strategic pillars is financial inclusion at the enterprise and household level in the region. Financing MSMEs continues to be a real challenge for Latin America and the Caribbean (LAC), yet it is crucial for raising productivity and boosting job creation in the region. Most LAC countries struggle to provide adequate financial services to the MSME sector, including access to bank accounts and credit for working capital and long-term investments. Similar challenges are faced at the household level: around a third of the population still has no access to a bank account and over two-thirds no access to credit. These structural differences are compounded by issues of gender, race, and income levels. Specific groups, such as the elderly, young people, people in rural areas, people of African descent, and indigenous groups, face unique challenges in gaining access to financial services.

In this context, there are major opportunities to create an impact by supporting projects that expand financial services to those sectors of the population that are unbanked, underserved, and excluded, as well as by promoting financial products and services that focus on gender, diversity, and inclusion, indigenous and immigrant communities, the silver economy, rural finance, and food security through agribusiness. Moreover, funding for MSMEs is vital in order to raise productivity and boost job creation.

To this end, IDB Invest has developed a strategic road map designed to help close these gaps and leverage financial inclusion as an effective tool to reach the poor and vulnerable. The aim is to foster financial inclusion in the region by providing a comprehensive set of suitable high-quality financial services at affordable prices, which are easily accessible, responsibly delivered, and sustainable, and to do so in a way that respects the dignity of the customer.

From 2016 to date, IDB Invest has completed 36 transactions in the CAPARD region, totaling USD 1.2 billion

IDB Invest's value proposition to support financial inclusion in the region encompasses:

(i) financial solutions, through senior and debt instruments and subordinated instruments; capital contributions; risk mitigation instruments; capital market transactions, and thematic bonds, among others;

(ii) resource mobilization through loans; bonds; co-investments in bond issues, and syndicated loans;

(iii) advisory services to support financial institutions in issues relating to corporate governance, product development, digital transformation, climate change, gender and diversity, and customer training.

These operations have provided financing to more than 430,000 MSMEs

The implementation of IDB Invest's strategic road map includes strategic alliances with diverse financial entities that have demonstrated their commitment to financial inclusion in the region and guarantee the necessary outreach capability to attend to underserved segments of the population. These entities include commercial banks, microfinance institutions, credit unions, digital banks and fintechs, non-banking financial institutions, and so on.

and over 28,000 women

IDB Invest's efforts in the sphere of financial inclusion in the region have been intense. From 2016 to date, IDB Invest has completed 36 transactions in the CAPARD region, totaling USD 1.2 billion. These operations have provided financing to more than 430,000 MSMEs and over 28,000 women, as well as creating more than 37,000 jobs.

as well as creating more than 37,000 jobs

The following are just a few examples of IDB Invest transactions that have contributed to promoting financial inclusion in the CAPARD region.

A selection of IDB Group operations
to promote financial inclusion
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Génesis - Guatemala. With a 60.1% market share by loan volume and 39.2% by number of active customers, *Fundación Génesis Empresarial* is the largest microfinance institution in Guatemala. Génesis operates the largest network of agents in the country, a key factor in the implementation of the new digital strategy for expanding the reach of the services provided, mainly to low-income communities and the rural population.

USD 20 million

in order to improve access to financing for micro, small, and medium-size enterprises across the country.

In 2020, IDB Invest granted Génesis a loan in quetzales equivalent to USD 20 million in order to improve access to financing for micro, small, and medium-size enterprises across the country. This financing helps Génesis' microfinance portfolio to grow sustainably and focuses on MSME loans aimed at funding expansion projects that increase productivity, particularly in rural areas, which is where most agricultural production is concentrated, as well as the indigenous population with limited access to financing.

This operation contributes to the achievement of four Sustainable Development Goals (SDGs):

1 NO POVERTY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION, AND INFRASTRUCTURE	12 SUSTAINABLE CONSUMPTION AND PRODUCTION

It is complemented with advice on formulating a sustainable long-term financing strategy.

The support provided to Génesis by IDB Invest is complemented with advice on formulating a sustainable long-term financing strategy, which includes a proper structure for issuing thematic bonds, and designing an environmental and social risk management system. Furthermore, this advisory service assists with the acquisition of technology to effectively identify and monitor climate risk in the financing portfolio of its agricultural value chain. During this operation, synergies with IDB Lab were identified, which made it possible to expand the group's support to this institution, as described in the following section.

Through this financing, the FDC can expand the services it provides to financial intermediaries that are members of it so that they can increase access to credit among low-income households, as well as among MSMEs.

Fedecrédito - El Salvador. The Federación de Cajas de Crédito y Bancos de los Trabajadores, Sociedad Cooperativa (henceforth FDC or Fedecrédito) is a tier-2 non-banking financial institution established in 1934, whose primary function is to act as an intermediary in the provision of finance and other services to the country's 48 credit unions and seven workers' banks, which are also its member-owners. FDC is essential to the functioning of the national network of credit unions and workers' banks in terms of funding, information systems, the development of multichannel banking, and regulation. It is also the largest network of financial service providers in El Salvador, operating in 187 of the country's 262 municipalities. Fedecrédito only extends financing to its member institutions, which then channel these funds to the local market.

In 2018, IDB Invest approved a USD 15 million note subscription with a seven-year tenor and 2.5-year grace period, corresponding to the third series of the remittance securitization program. The securitization was carried out based on the income from current and future flows of family remittance transfers from FDC. The financing granted by IDB Invest encourages the diversification of funding for FDC financial institutions by enabling them to obtain international financing through capital markets and making them less dependent on local bank financing.

Through this financing, the FDC can expand the services it provides to financial intermediaries that are members of it so that they can increase access to credit among low-income households, as well as among MSMEs.

This operation contributes to two SDGs:

8 DECENT WORK AND ECONOMIC GROWTH

9 INDUSTRY, INNOVATION, AND INFRASTRUCTURE

A selection of IDB Group operations
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Banistmo – Panama. A gender bond for women-led SMEs. Banistmo is the second largest financial institution in Panama by volume of deposits and loans and has among its aims that of contributing to entrepreneurship and gender parity.

In 2019, IDB Invest agreed to underwrite a five-year gender bond issued by Banistmo in the local market through a private issuance of USD 50 million with payment at maturity. This transaction is the first social bond with a gender focus in LAC and is aimed exclusively at improving access to financing for MSMEs led by women. The funds help foster entrepreneurship and women's economic empowerment in the country and have been used to provide 311 women-led MSMEs with access to financing.

This project is being implemented through the provision of technical assistance with two aims in mind: (i) to help Banistmo develop a gender-sensitive framework for portfolio identification and origination (including eligibility criteria, review process, reporting schedule, indicators, and auditing); and (ii) to have the bond certified by an independent third party.

The first social bond with a gender focus in LAC and is aimed exclusively at improving access to financing for MSMEs led by women.

This project contributes to four SDGs:

5 GENDER EQUALITY

8 DECENT WORK AND ECONOMIC GROWTH

9 INDUSTRY, INNOVATION, AND INFRASTRUCTURE

10 REDUCED INEQUALITIES

Both of these are supporting Coopenae's efforts to reduce Costa Rica's housing deficit.

Coopenae - Costa Rica. Coopenae is one of the largest credit unions in Costa Rica and indeed Central America. It has over fifty years' experience and provides home loans and MSME loans.

In 2017, IDB Invest approved a financing package consisting of a 5-year 30 million colon (the local currency) and 6-year USD 5 million loan. Both of these are supporting Coopenae's efforts to reduce Costa Rica's housing deficit by expanding social housing financing, particularly for a traditionally underserved segment of the population.

This project contributes to two SDGs:

5 GENDER EQUALITY

11 SUSTAINABLE CITIES AND COMMUNITIES

Helping reduce the country's housing deficit by offering mortgages to a traditionally underserved segment of the population.

Coopeservidores - Costa Rica. Coopeservidores is an open-membership cooperative association with over sixty years' experience. Its business model is geared towards financing public (48%) and private (52%) sector workers. With over 100,000 members nationwide, it is the second largest credit union in Costa Rica.

With the support of the institution, in 2016 IDB Invest approved a five-year USD 30 million loan to improve access to financing for affordable housing in Costa Rica, thus helping reduce the country's housing deficit by offering mortgages to a traditionally underserved segment of the population.

This project contributes to three SDGs:

8 DECENT WORK AND ECONOMIC GROWTH

11 SUSTAINABLE CITIES AND COMMUNITIES

17 PARTNERSHIPS FOR THE GOALS

A selection of IDB Group operations
to promote financial inclusion
in the region

4

| BID Lab

IDB Lab plays a key role in promoting financial inclusion in CAPARD by leveraging innovation and incorporating new digital tools and fintech solutions to reduce some of the gaps in this regard in the region. The following projects illustrate this drive to integrate Central America's vulnerable populations into modern and inclusive financial systems:

The project has set ambitious targets, aiming to bring 18,000 new users into the banking system and enable 1,700 companies to carry out transactions via RESET.

Developed in partnership with Banco FIHOGAR, the RESET project **in the Dominican Republic** has sought to facilitate remote access to new financial products by launching a free electronic wallet. This initiative is designed to both reduce cash transactions to a minimum and connect users to a variety of financial products and services by allowing remote account opening, payment processing, and fund transfers by means of QR codes. At the same time, this tool makes it easier for companies and individuals alike to engage in e-commerce. The project has set ambitious targets, aiming to bring 18,000 new users into the banking system and enable 1,700 companies to carry out transactions via RESET.

The project will directly benefit 2.200 people and enhance the virtual training platform Escuela de Emprendedores Banesco ("Banesco Entrepreneurs School").

In Panama, IDB Lab is supporting the Emprendedores Banesco project launched by the financial institution in 2015 to address the barriers to economic and financial inclusion faced by migrant and refugee populations, with a particular focus on women and on the vulnerable communities where they are staying. Sponsored by Banesco Panama and in partnership with other international and national organizations, the program is designed to foster entrepreneurship and boost financial inclusion through tailor-made products and experiences. The project will directly benefit 2,200 people and enhance the virtual training platform Escuela de Emprendedores Banesco ("Banesco Entrepreneurs School") as well as holistic programs for a subgroup of beneficiaries.

**These tools help
them to digitize
and develop their
businesses
and formalize
their relationships
with financial
institutions.**

In El Salvador, IDB Lab is financing Cubo Technologies' efforts to digitize the MSME payment ecosystem in Central America by addressing the lag in the penetration of point-of-sale (POS) terminals. The company aims to connect more than 70,000 MSMEs (40% of them led by women) to the payment system by 2025. These tools help them to digitize and develop their businesses and formalize their relationships with financial institutions. To help achieve this goal, IDB Lab invested in the initial round of financing. In addition, IDB Lab and IDB Invest collaborated with Banco Cuscatlán—one of the largest banks in the country—in the SME Digital Challenge initiative. This project seeks to promote a platform for MSMEs to submit their bank paperwork digitally, streamline their applications, and reduce costs, as well as offering financial education courses that will benefit around 10,000 users.

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**Factoring helps
businesses
overcome the
liquidity challenge
by late
payments in
order to cover
working capital
expenses as
soon as their
products have
been delivered.**

Mercofact in the Dominican Republic is working with IDB Lab to promote greater inclusion for MSMEs in credit through factoring under more favorable conditions than those currently existing in the sector. Factoring helps businesses overcome the liquidity challenge caused by late payments in order to cover working capital expenses as soon as their products have been delivered. By introducing an "income-based lending" model, the project seeks to improve liquidity, productivity, and employment opportunities in MSMEs.

Lastly, IDB Lab has also worked with **Génesis Empresarial in Guatemala** to boost lending to MSMEs in rural areas. With backing from IDB Lab, the institution received digital technology support. Génesis Empresarial has been enabling mobile transactions through digital wallets and smart ATMs so as to expand the reach and coverage of financial services to Guatemala's low-income population, particularly women, as well as to its indigenous and rural population.

IDB
Improving lives