



COSTA RICA

SELECTED ISSUES

December 2023

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December 6, 2023

Approved By
Western Hemisphere
Department

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THE NEUTRAL INTEREST RATE: REVISED ESTIMATES¹

Estimates of Costa Rica's real natural rate of interest are between 0 and 3 percent, with a suite of semi-structural and univariate methods reaffirming this conclusion at close to 1 percent. This toolkit of multiple differing methods accounts for characteristics of the Costa Rican economy and suggests current monetary policy remains restrictive. Univariate estimates for Costa Rica are between those for the U.S. and largest regional peers. Finally, embedded within these results, underlying estimates of the real potential growth rate suggest a range between 3 percent and 4 percent.

1. The real natural rate of interest, r^* , sometimes referred to as the real neutral or equilibrium rate of interest, is critical for interpreting the current stance, and impact, of monetary policy on the economy. This concept is commonly defined as the short-term real interest rate consistent with economic output at its potential level and simultaneously low and stable inflation at target, neither expanding nor contracting the economy. Historical estimates for Costa Rica estimates suggest the real natural rate to have been between 1.4 percent and 1.9 percent.²

2. Structural changes to the Costa Rican economy, particularly in recent years, have important implications for the movement in the neutral rate. While previous methodologies have generally relied upon standard estimations, in forthcoming work (Wales, 2023) we provide several alternative semi-structural estimates which extend the canonical Laubach and Williams (2003) to account for characteristics of the Costa Rican economy. This includes accounting for both the tight connection to the US economy, and international spillovers of the neutral monetary stance, and the structure of the Costa Rican economy, which is increasingly dependent on activity within the special trade zones.³ Though each model incorporates distinct facets of the Costa Rican economy, ultimately, the underlying estimates for the neutral real interest rate do not vary widely (Figure 1, top left panel). Current estimates are particularly closely concentrated at close to 1 percent, and appear to have been relatively stable for the past decade. This follows a secular fall in the real neutral interest rate during the late 1990s and early 2000s when estimates were closer to 3 percent. Given modelling and estimation uncertainties, the current real natural interest rate likely falls within the range of 0 to 3 percent.

3. A suite of univariate methods also reaffirms this conclusion and suggests current monetary policy remains restrictive. Given the tight concentration of semi-structural estimates an alternative approach reaffirms these findings. The observed ex ante real interest rate can be filtered using only the dynamic univariate properties of the time series itself. These results also suggest a

¹ Prepared by Daniel Wales.

² For instance, around 3.5 percent in 2012 (Magud and Tsounta, 2012); 1.4 percent at the end of 2015 (Munoz-Salas and Rodriguez- Vargas, 2017) and 1.9 percent at the end of 2016 (IMF, 2016). The latest estimates suggest the real natural rate was around 1.5 percent in 2020 (Segura-Rodriguez, forthcoming 2023).

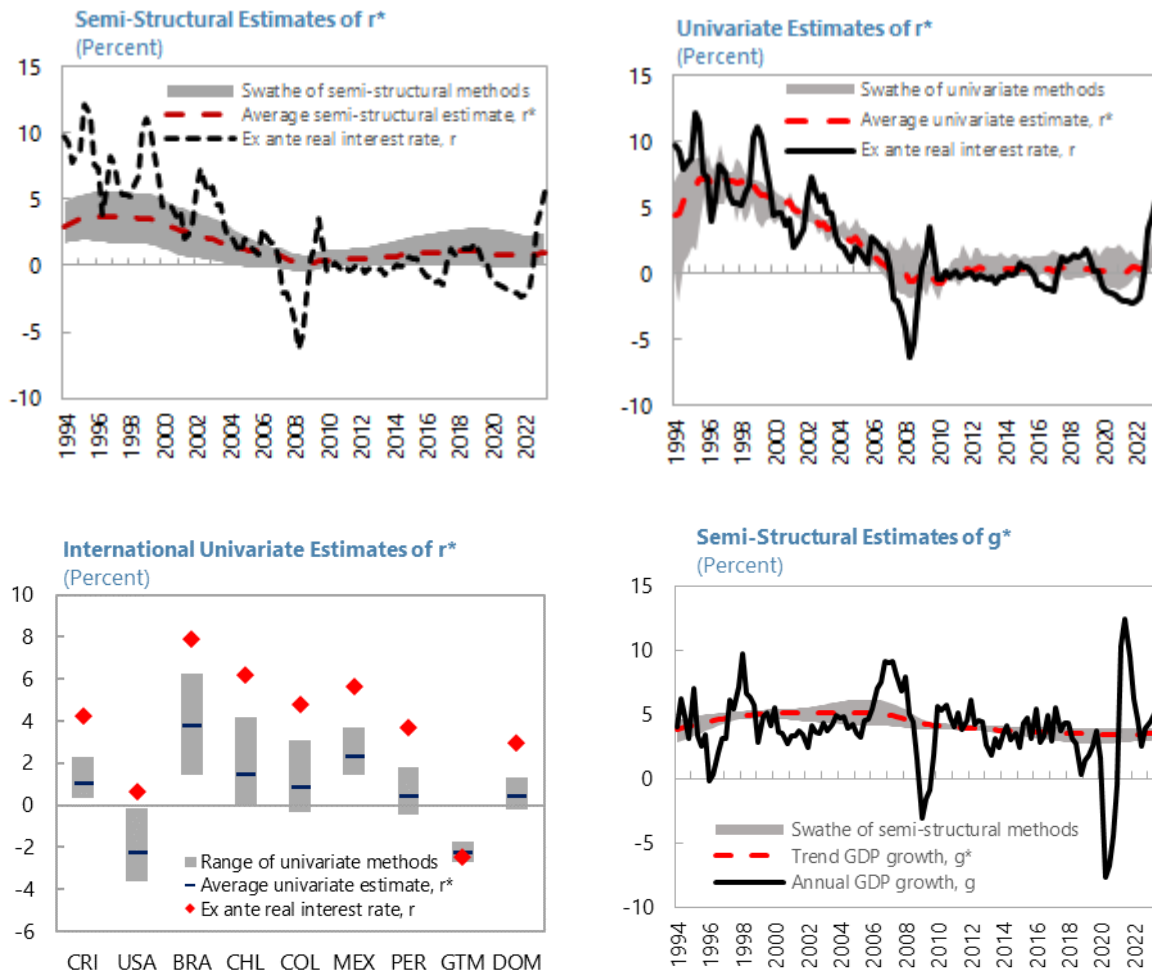
³ The recent fiscal consolidation and changes in the level of public debt also represent important structural changes with implications for the real natural rate of interest. The framework may be extended further to account for this.

current estimate for the real neutral interest rate of close to 1 percent is sensible (Figure 1, top right panel). Again, the range of model estimates is relatively small around this current point estimate. The univariate approach closely follows the observed ex ante real interest rate implying a neutral rate of close to 0 percent for the past decade following a steeper fall during the late 1990s and early 2000s, compared to the semi-structural estimates. At 5.6 percent in 2023 Q2, the currently observed ex ante real interest rate is around 4.6 percentage points above the neutral level implying a heavily restrictive monetary stance. Again, given modelling and estimation uncertainties, the current real natural interest rate from these methods is likely to fall within the range of 0 to 3 percent.

4. Estimates for Costa Rica are between the U.S. and largest regional peers. Replicating the univariate approach for the U.S. and other countries in Latin America suggests Costa Rica has a somewhat lower neutral real interest rate than the largest regional peers, Brazil and Mexico which currently appear to have neutral rates above 2 percent (Figure 1, bottom left panel) but above the U.S. However, current estimates for Costa Rica are comparable to the Dominican Republic and Peru, which also suggest a neutral rate between 0 and 2 percent, albeit with a smaller range than suggested for Costa Rica. One potential explanation for the difference relative to large regional peers could be the interest rate differential between the market and policy interest rates. This wedge, which has varied between 2pp and 4pp over the past decade, can also explain the larger differential between estimates of the natural real interest rate, r^* , and the natural rate of output growth, g^* .

5. Finally, embedded within these results, underlying estimates of the real potential growth rate suggest a range between 3 percent and 4 percent. One fortunate corollary of the semi-structural estimates for the neutral interest rate is the joint estimation with the natural, or potential, level of GDP. Contrasting the estimates for the potential growth rate of GDP highlights a remarkable stability over the past three decades between 3 and 4 percent (Figure 1, bottom right panel). The current growth rate of GDP appears to be somewhat above this longer-term potential rate.

Figure 1. Estimates of Costa Rica’s Neutral Real Interest Rate, r^* , and Long Run Growth Rate, g^*



Source: (Wales, 2023).

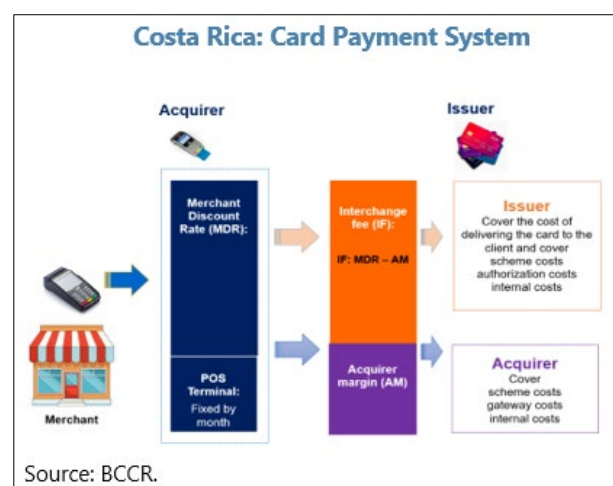
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DETERMINANTS OF CARD PAYMENTS FEES IN A CROSS-COUNTRY ANALYSIS¹

The March 2020 legislative decree gives the BCCR the mandate to regulate and monitor the card system, an essential part of the payment system in Costa Rica. In particular, the BCCR has the responsibility to determine the maximum fees for the card system while promoting the efficiency in processing of transactions by card companies. This paper expands the BCCR's own cross-country analysis on the main drivers of domestic card payment fees, without taking a view on the appropriateness of the level of the regulatory limits. A comprehensive study of the country-specific determinants of card payment fees is beyond the scope of this paper.

1. A card payment involves several actors and various fees are charged. There are typically two intermediaries mediating the transaction between customers and the merchants (affiliates), namely the customer's financial institution (card issuer) and the affiliate's financial institution (the acquirer). The customers receive cards from the issuer, which can be debit or credit cards, enabling them to make purchases. The affiliate generates a payment authorization message at the time of the transaction, indicating the payment amount and currency. In the settlement process, affiliates pay a merchant discount rate (MDR) to their acquirer (typically banks), which consists of various fees including an interchange fee paid to the issuer and an acquirer margin paid to the acquirer. The interchange fee typically constitutes the largest proportion of the overall MDR.²



2. Legislative Decree No. 9831 (Maximum Commissions of the Card System) introduced in March 2020 gives the BCCR the mandate to regulate and monitor the card system, an essential component of the payment system. As established in Article 1 of the decree, the purpose of the law is to regulate the commissions charged by service providers on the processing of transactions with a view to promote efficiency, competition and security, while guaranteeing the lowest possible cost for affiliates. To this end, the law delegates to BCCR the responsibility of determining the maximum authorized commissions and reviewing and adjusting them at least once a year. Before the Legislative Decree No. 9831 was introduced, the highest merchant discount rate, the sum of interchange fees and acquirer margin, was 12.0 percent (with a mode and an average at 4.0 and 3.1 percent, respectively), reflecting in part a highly concentrated payment system in Costa Rica. For example, the top 3 companies accounted for 71 percent of the credit card transactions

¹ Prepared by Fumitaka Nakamura.

² In addition, there are card network fees, which are processing fees set by credit card schemes for using their card networks.

before the implementation of this law.³ The Herfindahl-Hirschman Index (HHI), a common measure for market concentration, was 3,140, above the standard of highly concentrated cases of 2,500.⁴ After the BCCR imposed maximum card payment fees following the implementation of the decree, the number of service providers and customers have both increased.

3. In its most recent review of the MDR, the BCCR used international comparison to help determine the maximum card payment fees. This paper expanded the BCCR's analysis of fees for domestic transactions, aiming to discuss the main drivers of interchange fees and MDR in the cross-country setting, rather than endorsing any specific levels of regulatory limits.⁵ Our cross-country regression on the fundamental determinants of the card payment fees suggests that market concentration and the profit margin of the banking sector are important contributors to high card payment fees, while development of digital payments can help reduce the fees. Our regression analysis is based on the data for 70 countries with a total of 197 observations.⁶ As for the interchange fees, the share of the population who have made or received a digital payment reduces the interchange fees at a 1 percent statistically significant level. On the other hand, the net interest margin, which captures the banks' profit margin, and the degree of bank asset concentration can both increase the interchange fees. Although the standard errors are relatively large, partly due to the limited samples, similar results are obtained in the MDR regression.

4. The estimated interchange fee in this analysis is slightly lower compared to the results in the BCCR's original analysis, while the MDR is almost the same. Based on the regression analysis using the international data, the corresponding interchange fee for Costa Rica is estimated as 1.06 with a 95 percent confidence interval equal to [0.91, 1.20], compared to the BCCR's point estimate of 1.25. The estimated MDR, at 1.94, is almost the same as the results obtained by BCCR at 1.91. The commission fees set by BCCR (maximum MDR as 2.0 percent and the interchange fee as 1.5 percent) are comparable to those in other Latin America countries but are higher than in other OECD countries.⁷

³ Data for market concentration is from the BCCR.

⁴ The Herfindahl-Hirschman Index (HHI) is used as a measure to capture the market concentration. The HHI is calculated by adding up the squared market share of each firm. According to the U.S. Department of Justice, markets in which the HHI is between 1,500 and 2,500 points are considered to be moderately concentrated, and in excess of 2,500 points to be highly concentrated.

⁵ A comprehensive study of the country-specific determinants of card payment fees is beyond the scope of this paper. For example, the fees could depend on the types of transaction and cost structure in the country. Also, this paper focuses on the analysis on domestic payments and does not cover the fees on cross-border transaction.

⁶ In addition to the variables used by BCCR, we added control variables with respect to financial market development and banking sector indicators. The adjusted R-squared is 0.81 for the interchange fee and 0.64 for the MDR.

⁷ Latin America (OECD) includes Chile, Colombia and Mexico. Latin America (Non-OECD) includes Argentina, Brazil, Peru, Paraguay and Uruguay. OECD includes Australia, Austria, Belgium, Canada, Switzerland, Czech Republic, Germany, Denmark, Spain, Estonia, Finland, France, United Kingdom, Greece, Hungary, Ireland, Iceland, Israel, Italy, South Korea, Lithuania, Luxembourg, Latvia, Netherlands, Norway, New Zealand, Poland, Portugal, Slovakia, Slovenia, Sweden, Turkey, and U.S.

5. It is worth pointing out that in many countries, a cost-based methodology is often used to determine the maximum commissions.⁸ Rather than being based on international comparisons, a cost-based methodology takes into account the specific market structure in the country by reflecting certain costs incurred by the providers of the acquiring and issuing service, but it requires market participants to submit information on their activity-based costs. Going forward, the BCCR should consider complementing the cross-country analysis with a cost-based methodology that can capture the characteristics of Costa Rica's own payment system in determining the maximum commission fees.

Text Table 1. Costa Rica: Regression Results

Regression Coefficients

Variables	Interchange fee	MDR
Regulation	-0.5551 *** (0.0552)	-0.565 *** (0.1545)
ATMs	0.0019 ** (0.0008)	0.001 (0.0019)
Financial Development	0.3221 * (0.1811)	-0.540 (0.6631)
Digital Payment	-0.0102 *** (0.0023)	-0.002 (0.008)
Bank Asset Concentration	0.0033 * (0.0019)	-0.004 (0.0049)
NIM	0.0979 *** (0.0233)	0.072 * (0.0393)

Notes: Robust standard errors are provided in parentheses. *** p<0.01, ** p<0.05, *p<0.1.

Source: Staff estimates.

Estimated fees (percent)

	Estimated results	95 % Confidence Interval
Interchange fee	1.06	[0.91, 1.20]
BCCR result in 2022	1.25	[1.14, 1.37]
MDR	1.94	[1.40, 2.41]
BCCR results in 2022	1.91	[1.69, 2.13]

Source: BCCR and Staff estimates.

Fees of Card Payment in Other Countries (percent)

Countries	Interchange fee	MDR
Latin America (OECD)	1.4	1.8
Latin America (Non OECD)	1.8	2.8
OECD (other than Latin America)	0.4	1.0

Source: The government websites in each country. The background dataset of regression analysis published by BCCR covers the URL of the websites.

⁸ For example, the U.S., Australia and South Africa employ this methodology. The European Union uses an indifference test to set the maximum commission, which identifies the fee level where the affiliates are indifferent between card transactions and accepting cash.

CHARACTERISTICS AND ECONOMIC IMPACT OF MIGRANTS AND REFUGEES IN COSTA RICA^{1,2}

Migrants and refugees bring a diverse skill set to Costa Rica, complement natives' labor market participation, help mitigate the country's aging population, and boost economic activity and tax revenue collection at a relatively low fiscal cost. Despite Costa Rica's long tradition of hosting foreigners, the increase in migration and displacement flows over the last five years has proven challenging for the country. The innovative program with seasonal coffee workers shows that government policies, along with coordination with migrants and the private sector, can overcome key challenges, while benefiting all parties involved. Development partners should continue playing a key role in supporting Costa Rica's efforts to harmoniously integrate foreign-born population, particularly into the formal labor market and the social security system.

A. Demographic, Skills, and Labor Market Characteristics of Foreign-Born Population in Costa Rica

1. Costa Rica has the second largest share of foreign-born population in Latin America, with more than half requiring international protection. Migrants and refugees represent 10 percent of Costa Rica's population, second only to Belize (16 percent) and followed by Chile (8 percent), well above Latin America's average (2 percent).³ As of 2022, 59 percent of the country's non-native population (about 270,561 people) required international protection, including 239,640 asylum seekers, 14,088 refugees, 235 at risk of statelessness, and 16,598 others in need of protection.^{4,5}

¹ Prepared by Santiago Acosta-Ormaechea and Ivania García Cascante (IMF), Valeria Lentini Gilli (UNHCR), and Josué Sibaja Morales and Pablo Vega García (IDB), with inputs from Ana Aguilera (World Bank), Felipe Muñoz (IDB), Arnaldo Posadas (IDB), and Annalaura Sacco (IMF).

² Costa Rica is characterized by mixed movements of people, with permanent migrants and asylum seekers from north to south (mostly from Nicaragua) and transit migration and asylum seekers from south to north. This note focuses on the first type of movements.

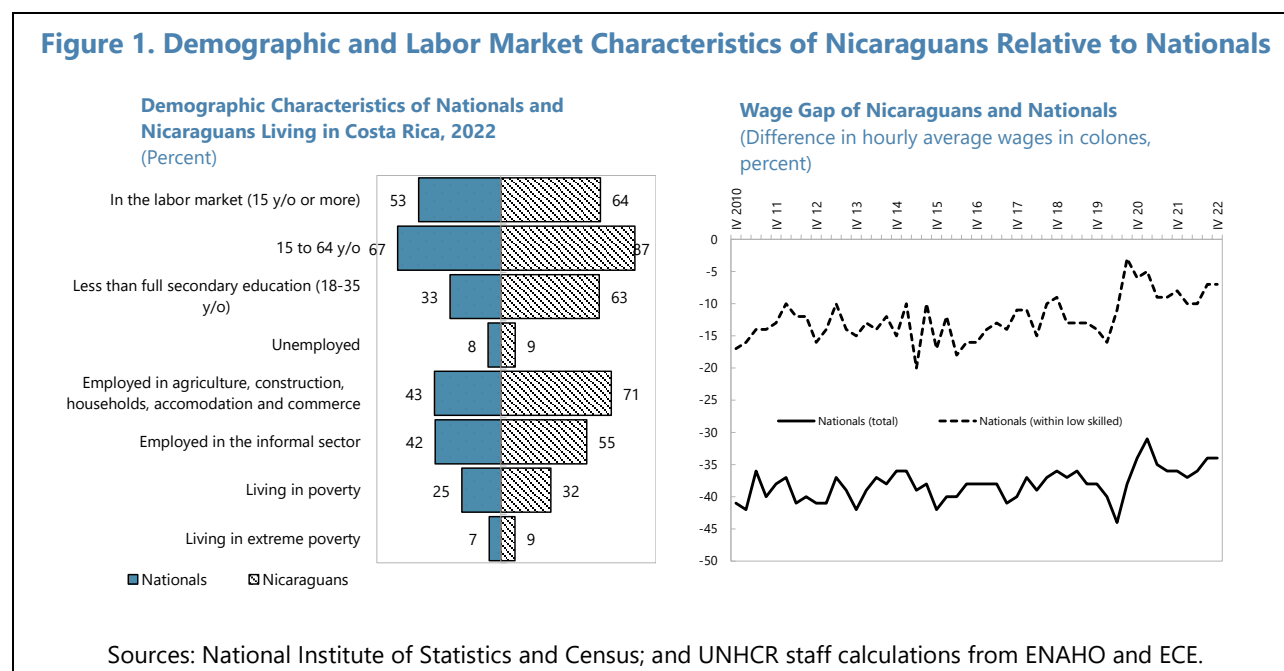
³ For cross-country comparisons, data are from UN Department of Economic and Social Affairs Report (UNDESA 2020).

⁴ Granular data on Costa Rica's foreign-born population are from the National Household Survey (ENAHO), which reported 460,442 non-natives in 2022 (9 percent of the population and 12 percent of the labor force), figures that slightly differ at the aggregate level relative to other sources discussed in the main text. For displaced and stateless populations data are taken from UNHCR. In 2022, Costa Rica was the world's third largest recipient of new asylum claims, including more than 100,000 from Nicaraguans (<https://www.unhcr.org/sites/default/files/2023-06/global-trends-report-2022.pdf>).

⁵ A refugee is a person who has crossed an international border to find safety due to violence, conflict, or persecution, and is protected by an international legal framework. An asylum-seeker is someone whose request for sanctuary has yet to be processed. A stateless is a person that is not considered national by any state. Others in need of protection refers to people who are outside their country or territory of origin, typically because they have been forcibly displaced across international borders, who have not been reported under other categories (asylum-seekers, refugees, stateless) but who likely need international protection (UNHCR 2020).

2. Nicaraguan migrants and refugees represent 82 percent of Costa Rica’s foreign-born population. They mostly work informally in low-skilled jobs and experience higher poverty rates than Costa Ricans. On average Nicaraguans migrants and refugees are younger, with a higher participation rate in the labor market and lower educational attainment (63 percent of those aged 18-35 have incomplete secondary school, compared to 33 percent in the case of natives), and they face similar unemployment rates (Figure 1, left).⁶ Five activities—agriculture, construction, accommodation, commerce, and housekeeping—account for 71 percent of their jobs (43 percent for nationals), and 55 percent of Nicaraguan workers hold informal jobs, exceeding the share for nationals (42 percent).^{7,8} Nicaraguans also experience relatively higher poverty and extreme poverty rates (32 and 9 percent) than Costa Ricans (25 and 7 percent). Their wage earnings are also lower, averaging 36 percent less than nationals, and 10 percent less for low-skilled workers (Figure 1, right).

Figure 1. Demographic and Labor Market Characteristics of Nicaraguans Relative to Nationals



3. Nicaraguans participate in a segmented labor market, often complementing rather than substituting native workers, but they face significant challenges to obtain legal resident status and formal jobs. In urban areas, 30 percent of Nicaraguan men work in construction, while in rural areas, where informality is more prevalent, they mostly work in agriculture (56 percent). Nationwide, 34 percent of Nicaraguan women work in paid-domestic jobs, and in rural areas they also work in accommodation (24 percent). Labor complementarity is stronger than labor

⁶ Nicaraguans living in Costa Rica at the time of the survey (ENAHO 2022).

⁷ The level of education of adult Nicaraguans is lower than that of nationals, although it has been increasing. In 2010, 40 percent of Nicaraguans aged 24-64 had more than primary education. By 2022, that proportion increased to almost 50 percent according to ENAHO. Oviedo (2022) also finds that the share of foreign-born workers in Costa Rica with high-level education has increased substantially over the last decade.

⁸ Informality allows firms to avoid paying social security contributions, payroll taxes, and other labor costs, which can be large in Latin American and the Caribbean (IMF 2021; Busso and others 2017).

substitution, with the latter being more prevalent among low-skilled workers. Blyde (2020) and Oviedo (2022) find that high-skilled Costa Rican women and low-skilled Nicaraguan women complement each other in terms of earnings and employment.⁹ As Nicaraguan women take on housekeeping and care jobs, higher-skilled Costa Rican women can increase their participation in the labor market. However, many Nicaraguans are unable to work legally in Costa Rica due to challenges to regularize their migrant status. Recent laws that add restrictions to regularize asylum seekers, the lack of information about regularization processes—including among migration officers—and the long backlogs in the migratory system, complicate further the regularization of migrant status.¹⁰ Obtaining legal resident status, a prerequisite for formal employment, is also time-consuming and costly. As a result, informal employment is often the only option for many Nicaraguans in the short term.¹¹

Box 1. Strengthening Non-Native Participation in Health Insurance: Seasonal Coffee Workers

Costa Rica is the third largest coffee producer in the Mesoamerican region, accounting for 8 percent of total coffee production (Honduras leads with 32 percent, followed by Mexico with 21 percent). Temporary workers from Panama and Nicaragua typically arrive in Costa Rica for the harvest season: Between 2020 and 2021, 6,087 workers from Panama and 4,469 from Nicaragua entered Costa Rica to work in the coffee harvest. Historically, coffee harvesters have a disadvantaged socioeconomic and educational background, and a diverse legal status and origin: About 40 percent are from Nicaragua, 40 percent from Costa Rica, and 20 percent from the indigenous Ngöbe Buglé population of Panama.

In 2018, the Costa Rican Social Security Fund (CCSS) approved a regulation to provide health insurance to seasonal harvest coffee workers.¹ The program started in the 2020-21 harvest, providing access to comprehensive health services, including clinical examinations, laboratory services, and dentistry. It also provides cash benefits—such as disability compensation, maternity leave, subsidies, and financial assistance for disability, leave, or funeral expenses. The cost of the health insurance scheme is 15 percent of the gross wage. The Coffee Institute (*ICAFFE*) covers 5.75 percent of this cost through the National Coffee Sustainability Fund (*FONASCAFE*)

⁹ Blyde (2020) finds that Nicaraguan migrants and refugees in Costa Rica had no negative impact on low-skilled national workers' earnings during 2010-18, but he documents a small reduction in low-skilled national workers employment. He also finds that high-skilled nationals and migrants complement each other in earnings and employment. Likewise, Barahona (2022) finds that foreign workers complement high-skilled national workers in wage earnings during 2011-21, documenting also a very small adverse effect in wage earnings for workers at the lowest end of the income distribution. Engler and others (2023) and Alesina and others (2016) also report that migrant and native workers complement each other, with no adverse effects on natives' aggregate employment and wages, in a sample of OECD and advanced countries. Additionally, PEN (2021) shows that Costa Rican workers are increasing their skills over time, potentially reinforcing future labor complementarities.

¹⁰ Decrees 43810-MGP and 43809-MGP added restrictions in 2022 for asylum seekers to obtain refugee status.

¹¹ Asylum seekers require up to ten years to obtain permanent resident status and pay around US\$70 to renew their annual work permit. Other options to work formally include a special but temporary work authorization, valid for two years and renewable, which costs around US\$95 (Decree N° 43809 MGP, December 2022). The rapid increase in the number of applications and the lack of adequate registries, personnel, and digital infrastructure to exchange information across governmental agencies, have significantly delayed foreigners from obtaining legal migratory status.

Box 1. Strengthening Non-Native Participation in Health Insurance: Seasonal Coffee Workers (Concluded)

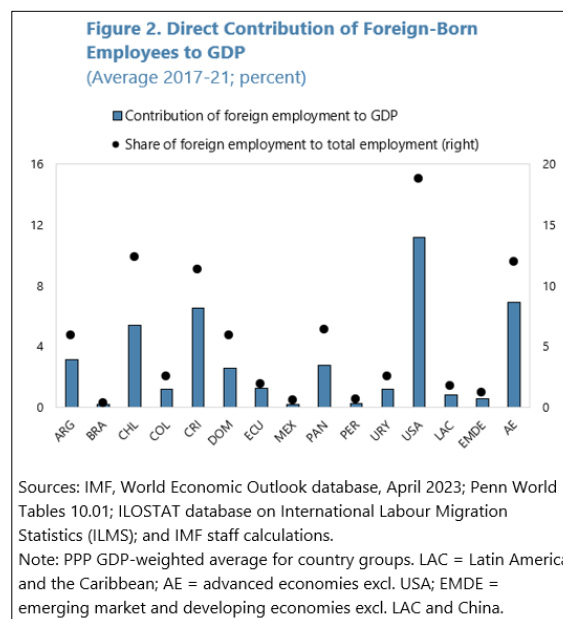
and the government provides the remaining 9.25 percent. Under this scheme there is no employee contribution.² Among other benefits, the program also (i) creates a protocol for migrant workers from Nicaragua and Ngöbe Buglé from Panama to enter Costa Rica to harvest coffee and return to their country after the harvest season; and (ii) coordinates with the transport sector in Nicaragua and Costa Rica the transfer of migrant workers to their job posts. In October 2023, the National Insurance Institute (INS), ICAFE, and the Ministry of Agriculture launched a new occupational risk insurance policy financed by FONASCAFE to further protect coffee harvesters.

^{1/} The CCSS approved the “Reglamento para el aseguramiento contributivo de la población recolectora de café en el seguro de salud, en forma excepcional y por la temporalidad de la cosecha” on August 30, 2018.

^{2/} The government typically contributes 0.25 percent of the gross wage to health insurance. Under this scheme, it contributes an additional 9 percent, adjusted for dependents. However, the additional government expense under this program is relatively low. In 2021, the subsidy totaled CRC245 million (0.0005 percent of GDP).

B. The Macroeconomic Impact of Migrants and Refugees in Costa Rica

4. The macroeconomic impact of non-natives on Costa Rica’s economy mostly feeds through the labor market, output, the fiscal balance, and the current account. In addition to their contributions to the labor market and production, migrants and refugees boost private consumption and investment, demand public goods and services—such as health and education—and receive transfers. Social security contributions, value-added and income taxes also increase alongside their integration into the economy and, particularly, into the formal labor market. Their remittances also affect the current account. The overall macroeconomic impact varies over time, depending on the capacity of the economy to integrate non-natives.



5. Estimations suggest that foreign-born workers directly contributed to about 6.5 percent of Costa Rica’s GDP on average during 2017-21 (Figure 2).¹² Results show a contribution to Costa Rica’s GDP significantly above the average for emerging and developing

¹² These results may underestimate the overall economic contribution of foreign-born workers, who represented about 11 percent of total employment in Costa Rica during 2017-21. Data used in estimations are from national surveys and may not accurately include seasonal workers and those in the high-end of the income distribution, leading to an underestimation of the share of foreign-born workers in the economy.

economies (1.2 percent of GDP) but aligned with the average for advanced countries (6.9 percent of GDP). These estimations assume that the contribution of foreign-born workers to GDP is given by the ratio of the total wage bill to GDP, weighted by the share of foreign-born workers to total employment. Other studies report migrants and refugees' contribution to Costa Rica's GDP between 9.3 and 12 percent, based on sectoral distribution of workers and added value within sectors (Gatica 2017; OECD 2018; Oviedo 2022). A simple growth accounting exercise further suggests that non-native employment could have directly lifted Costa Rica's GDP growth from 2.2 to 2.4 percent during 2017-21.¹³

6. The net fiscal impact of Costa Rica's foreign-born population is positive, averaging 0.5 percent of GDP during 2017-21.¹⁴ Non-natives' social security contributions (health, pensions and other social contributions) and tax revenue (through income and consumption taxes) reached around 1.1 percent of GDP. This exceeds the cost of providing them with health and education services, social transfers and housing benefits, and pensions, which totaled about 0.6 percent of GDP (Table 1).¹⁵ Social security contributions represent the main sources of fiscal revenue (0.9 percent of GDP), whereas health and education are the main fiscal outlays (averaging 0.5 percent of GDP). Among the foreign-born population, Nicaraguans' net fiscal contribution was also positive (0.1 percent of GDP), with their social security and tax contributions outweighing the cost of the public services and social transfers they received (Table 1). Nicaraguans obtain 72 percent of public services and welfare programs among the foreign-born population, but their high labor informality and low wages prevent them from contributing more through social security contributions and taxes. Additionally, Costa Rica receives international aid from development agencies to support migrants and refugees' integration, including security and violence prevention projects and capacity building. This aid is excluded from the estimations.¹⁶

¹³ The assumptions in this exercise are: (i) Production is given by a Cobb-Douglas production function with constant returns to scale, where capital and labor are the only production factors, and with labor contribution adjusted by years of education; and (ii) factor accumulation and productivity change proportionally with the ratio of foreign-born workers to total employment.

¹⁴ Estimations exclude migration revenues, such as administrative fees, and expenses, such as security and administration. These also exclude indirect costs, for instance, through displaced low-skilled native workers and the provision of social assistance to old-age migrants and refugees.

¹⁵ Alvarez and others (2022) estimate that fiscal spending associated with migration could reach about 0.5 percent of GDP across a sample of Latin American countries in 2021, suggesting that Costa Rica is on the high end of their estimations.

¹⁶ Between 2020-23, Costa Rica received on average about 0.02 percent of GDP from international cooperation related to migration.

Table 1. Costa Rica: Impact of Foreign-Born Population on Fiscal Revenue and Expenditure
(General Government, Percent of GDP)

	2017	2018	2019	2020	2021
REVENUE					
Health and other social	0.59	0.59	0.60	0.59	0.59
<i>o/w Nicaraguans</i>	<i>0.28</i>	<i>0.29</i>	<i>0.29</i>	<i>0.28</i>	<i>0.29</i>
Pensions	0.29	0.29	0.30	0.28	0.29
<i>o/w Nicaraguans</i>	<i>0.14</i>	<i>0.14</i>	<i>0.14</i>	<i>0.14</i>	<i>0.14</i>
Value-added (VAT)	0.18	0.17	0.16	0.17	0.16
<i>o/w Nicaraguans</i>	<i>0.11</i>	<i>0.11</i>	<i>0.10</i>	<i>0.11</i>	<i>0.10</i>
Income	0.05	0.03	0.03	0.03	0.03
<i>o/w Nicaraguans</i>	<i>0.01</i>	<i>0.00</i>	<i>0.00</i>	<i>0.01</i>	<i>0.00</i>
Total	1.10	1.09	1.09	1.07	1.07
<i>o/w Nicaraguans</i>	<i>0.54</i>	<i>0.54</i>	<i>0.54</i>	<i>0.54</i>	<i>0.53</i>
EXPENDITURE					
Health	0.30	0.32	0.33	0.34	0.32
<i>o/w Nicaraguans</i>	<i>0.19</i>	<i>0.20</i>	<i>0.21</i>	<i>0.22</i>	<i>0.21</i>
Education	0.15	0.14	0.20	0.19	0.18
<i>o/w Nicaraguans</i>	<i>0.13</i>	<i>0.12</i>	<i>0.18</i>	<i>0.18</i>	<i>0.18</i>
Social transfers and housing	0.08	0.09	0.10	0.12	0.10
<i>o/w Nicaraguans</i>	<i>0.07</i>	<i>0.08</i>	<i>0.08</i>	<i>0.09</i>	<i>0.06</i>
Pensions	0.04	0.04	0.04	0.05	0.05
<i>o/w Nicaraguans</i>	<i>0.01</i>	<i>0.01</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>
Total	0.56	0.59	0.66	0.70	0.65
<i>o/w Nicaraguans</i>	<i>0.39</i>	<i>0.41</i>	<i>0.49</i>	<i>0.51</i>	<i>0.46</i>
NET (revenue-expenditure)					
Total	0.54	0.50	0.43	0.37	0.42
<i>o/w Nicaraguans</i>	<i>0.15</i>	<i>0.12</i>	<i>0.05</i>	<i>0.03</i>	<i>0.07</i>

Sources: National authorities; UNESCO; and IDB staff calculations.

Note: *Health and other social* includes health, social assistance programs, and other contributions paid by employers and employees. Pensions include contributions to disability, old-age, and death insurance (IVM in Spanish). For expenditure, pensions also include the non-contributory pension system (RNC in Spanish). This [link](#) provides additional information about definitions and calculations.

7. Costa Rica's foreign-born population also helps offset aging and boosts a rapidly declining labor force. Projections suggest that Costa Rica's share of working-age population will start declining in 2024, putting a downward pressure on growth (Figure 3). Meanwhile, the dependency ratio—people aged 65 and over relative to the working-age population—is expected to double during 2022-50, adding pressures to Costa Rica's social security system (Figure 3). Thus, migrant and refugee flows, along with their younger age structure, would sustain a net increase in the working-age population for longer.¹⁷ The labor market participation rate among those aged

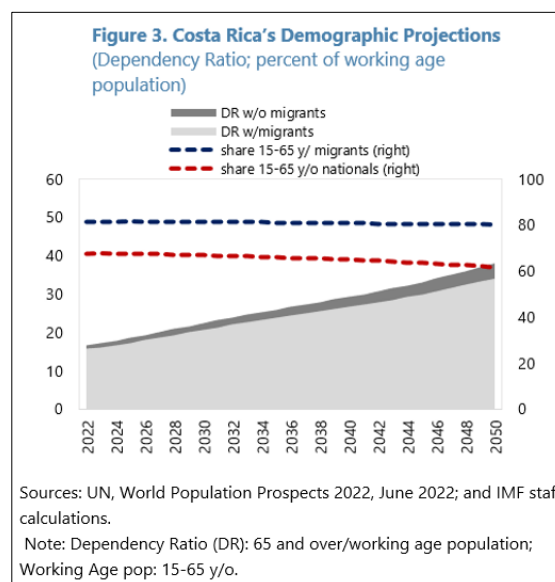
¹⁷ In 2022, the old-age dependency ratio of foreign-born population was 13.2 percent, whereas for nationals it was 18.9 percent (IDB-OECD-UNDP 2023).

between 18 and 65 years old is also higher for non-natives than for natives (76 and 68 percent, in 2021, respectively, OECD 2022), boosting labor supply. In addition, given the declining labor supply and aging of nationals, migrants and refugees would also help meet a growing demand for long-term caregivers (Spencer and others 2010).

8. Honoring migrants and refugees' labor rights could strengthen the sustainability of Costa Rica's social security system.

Costa Rica's pension system is already facing the

consequences of the demographic transition. For instance, the reserves of the main public pension pillar (insurance for disability, old-age, and death or IVM) are expected to be fully depleted by 2035. By then, public health spending is projected to rise by two percentage points of GDP relative to current levels. In addition, migrants have increased their participation in the non-contributory pension system (RNC) during 2017-22, partly due to their high participation in the informal labor market.¹⁸ In fact, the noncompliance of their labor rights, such as earning the minimum wage and enrolling into the social security system, exceeds that of nationals by more than 60 percent (Solís and Hernández 2022). Once enrolled in the social security system, foreign-born employees' social security contributions exceed the health, pensions, welfare, and housing benefits they receive (Table 1).¹⁹ Thus, addressing the constraints to transition from labor informality to formality would help ease pressures on Costa Rica's social security system, while reducing the likelihood of old-age poverty.



9. Costa Rica's outward remittances account for a small fraction of GDP, and overall has been a net recipient of remittances. Outward personal remittances averaged 0.6 percent of GDP, with 78 percent sent to Nicaragua (Table 2).²⁰ This is larger than in countries with a similar share of migrant population (0.2 percent of GDP in Chile), but similar to the Latin American average (0.6 percent of GDP).²¹ Although 69 percent of Nicaraguans in Costa Rica declared sending remittances,

¹⁸ Non-natives have increased the participation in the RNC system from 0.6 to 6.9 percent from 2017 to 2022, although nationals still account for more than 90 percent of the system's participants.

¹⁹ This also applies to Nicaraguan migrants.

²⁰ Costa Rica was the second largest remittances sender to Nicaragua in 2022 after the United States, according to the Central Bank of Nicaragua.

²¹ Data for cross-country comparisons on remittances are from the World Bank Global Knowledge Partnership on Migration and Development (KNOMAD) dataset. In this dataset, Costa Rica's outward remittances in 2022 represent 0.8 percent of GDP, a higher amount relative to that obtained from the Central Bank of Costa Rica's balance of payments, shown in Table 2, due to methodological differences. In both cases, Costa Rica's net remittances remain positive.

their low salaries have limited the overall amount of capital outflows under this category.²² Importantly, Costa Rica's remittances inflows have exceeded outflows by 0.2 percent of GDP during 2017-22 (Table 2).

Table 2. Costa Rica: Remittances
(Millions of US\$; and Percent of GDP)

	2017	2018	2019	2020	2021	2022
Inward remittances	527	499	519	495	559	563
percent of GDP	0.9	0.8	0.8	0.8	0.9	0.8
Outward remittances	335	364	380	350	388	417
percent of GDP	0.6	0.6	0.6	0.6	0.6	0.6
<i>o/w sent to Nicaragua</i>	<i>263</i>	<i>286</i>	<i>294</i>	<i>271</i>	<i>300</i>	<i>323</i>
<i>percent of GDP</i>	<i>0.44</i>	<i>0.46</i>	<i>0.46</i>	<i>0.43</i>	<i>0.46</i>	<i>0.47</i>
Net remittances	192	135	139	145	171	146
percent of GDP	0.3	0.2	0.2	0.2	0.3	0.2

Sources: Central Bank of Costa Rica; and IDB staff calculations.

C. Concluding Remarks and Policy Recommendations

10. The contribution of Costa Rica's foreign-born population to the economy has been positive. They participate actively in the labor market and boost output, investment, and revenue collection. Moreover, those in the formal job market more than offset the fiscal cost of the services and welfare transfers they receive with their social security contributions and taxes. Foreign-born workers are also younger than native peers, helping mitigate population aging. Evidence also suggests that Nicaraguan workers complement higher-skilled native workers, and that there is a low substitution effect associated with some low-skilled workers. In addition, native workers' skills have been increasing over time, which could reinforce labor complementarities with non-native workers in the future.

11. Government capacity should be strengthened to improve identification, regularization, and formalization of migrants and refugees, and to enhance the design of public policies at national and regional levels. Simplifying procedures, improving migration digital systems, enhancing coordination and information sharing across government agencies, and hiring additional staff, could help reduce costs and processing times for foreigners to obtain legal migratory status.²³ This, combined with ongoing government participation in regional platforms, such as the Declaration of Los Angeles and the Comprehensive Regional Framework for Protection

²² In 2022, Nicaraguans' average monthly salary in Costa Rica was about CRC356,000 (US\$596).

²³ Establishing a coordination office within the government to bring together all stakeholders involved in migration, for instance, as part of the government's efforts to prepare a national migration policy, would help ensure that policies are effectively coordinated.

and Solutions (MIRSP), would help articulate migration policies in Costa Rica and the region more effectively. Simultaneously, redesigning some parameters of key public services, such as social security and education, would allow the government to accommodate harmonically a larger number of beneficiaries entering the social security and public education systems while accounting for migrants and refugees' needs. Additional efforts to simplify access to housing and financial services would also be important to facilitate their economic and social integration.

12. Development partners should continue playing a key role in supporting Costa Rican authorities and host communities' efforts to integrate migrants and refugees. International cooperation should continue assisting foreign-born population's access to key services and infrastructure, while providing targeted technical assistance to host communities.²⁴ Coordination among development partners, donors, and the government would be important to better tailor support to specific foreign-born groups' needs (for example, migrants and asylum seekers in transit need more humanitarian assistance than permanent migrants and refugees, who mostly require inclusion programs).

13. Expanding targeted programs, such as that for seasonal coffee harvest workers, can foster migrants' economic integration and benefit economic activity. This experience is illustrative, as it provides health insurance for seasonal workers, increasing workers' participation in the social security system at a relatively low fiscal cost. The program also boosts production by facilitating workers' access to productive sectors and positioning Costa Rica as a fair and responsible trader in international markets. It also highlights the potential gains that Costa Rica can achieve by coordinating and expanding policies among migrants, private sector, development partners and the government.

²⁴ For example, a recently approved US\$20 million IDB donation aims to prevent violence against migrants, support their integration into hosting communities, and strengthen the government's institutional capacity to manage migration flows. UNHCR is assisting Nicaraguans and Venezuelans already in Costa Rica to apply for refugee status in various countries, including the United States. Other UNHCR programs focus on integrating refugees through training, grants, cash transfers, and insurance coverage. A US\$20 million GCF-World Bank concessional facility aims to increase access to key services and climate-resilient infrastructure in areas with vulnerable communities, including refugees, asylum seekers, and migrants.

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