

Quisqueya in Borinquen:

A Socioeconomic Profile of the Dominican Population in Puerto Rico, 2023

Ramona Hernández Francisco L. Rivera-Batiz Sidie S. Sisay



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Executive Summary

This research report presents a comprehensive analysis of the current socioeconomic status of the Dominican population in Puerto Rico and its changes over time. Using information provided by the U.S., Census for Puerto Rico and the Puerto Rico Community Survey, the study has the following conclusions.

Population Dynamics

- (1) According to the official Bureau of the Census estimates, the Dominican population in Puerto Rico was 58,352 in 2021, making it the largest immigrant group and the most numerous ethnic minority on the Island. This population estimate is based on the surveys carried out by the U.S. Census of Population in Puerto Rico and constitutes an underestimate of the number of Dominicans given that the Census has not been as effective in counting minority and immigrant communities --especially the undocumented—as compared to the rest of the population.
- (2) Although the number of Dominicans not counted by the Bureau of the Census is not known, according to the analysis by Duany (1992) the percentage of Dominicans who do not fill out Census forms relative to those who do is 37%. If one applies this figure to the Dominican population in 2021, which was 58,352 according to the U.S. Bureau of the Census, one arrives at an estimate of 21,590 for the Dominicans who were not counted by the official statistics. If this figure is added to the official Census estimate, the sum is equal to 79,942 Dominicans residing on the Island in 2021.
- (3) The estimates just presented include only persons who identify themselves as Dominican in the surveys to which they respond. None of them identified as Puerto Rican when asked about their ethnic or national identity. However, there is a second group of persons who despite identifying themselves as Puerto Rican, not Dominican, also state they were born in the Dominican Republic and/or had some Dominican ancestry (their mother, father, or both were Dominican). We refer to this second group as persons of Dominican ancestry and we estimate (based on the Bureau of the Census data) that there were 12,233 of them in Puerto Rico (on average, from 2016 to 2020). If one adds this figure to the 58,352 persons who identify themselves explicitly as Dominican in the official statistics in 2021, the total number of persons with Dominican identity or ancestry climbs to 70,585.
- (4) A comprehensive estimate of the total Dominican community in Puerto Rico should include (1) the Dominican population counted by the Bureau of the Census, (2) an estimate of the population not counted by the official statistics, and (3) persons who identify as Puerto Rican but have Dominican ancestry, many of whom do embrace this ethnicity. Considering that there may be a significant margin of error in these calculations, our estimate of the total Dominican population in Puerto Rico, including those counted by the official statistics as well as an estimate of the undercount and those with Dominican ancestry, was 93,175 in 2021.
- (5) According to the Bureau of the Census data, the Dominican population in Puerto Rico declined by 21% between 2010 and 2020, from 69,683 to 58,352. Previously, the number of Dominicans had been rising, from an estimated 18,660 in 1980 to 34,813 in 1990 and then to a

peak of 69,683 in 2010. Taking into account the Census undercount as well as persons with Dominican ancestry, the total Dominican community on the Island declined from 116,626 in 2010 to 93,175 in 2021.

- (6) Despite its recent decline, when compared to the states, the Dominican population in Puerto Rico ranks number seven within the United States. The state with the highest Dominican population is New York, with an estimated population of 897,584 in 2020, followed by New Jersey (352,385), Florida (270,313), Massachusetts (161,787), Pennsylvania (141,481), and Rhode Island (59,839).
- (7) The main explanation for the recent drop in the Dominican population is the economic stagnation of the Island during the last fifteen years, itself a result of a deep fiscal crisis as well as devastating natural disasters in the form of hurricanes, earthquakes, and the recent COVID-19 pandemic. Faced with declining economic opportunities, there was a massive emigration from the Island which led to a drop of almost half a million people residing in Puerto Rico between 2010 and 2020. This emigration included Dominicans, many of whom moved to the continental United States.
- (8) In addition, although the flow of immigrants from the Dominican Republic seeking to reside in Puerto Rico has continued to the present, it has slowed down considerably, and it is now one-third of the annual flow present in the nineties. The number of Dominican immigrants that obtained legal residence on the Island from 2011 to 2019 was equal to less than 3,000 per year, compared to the 9,000 per year at the beginning of the nineties.
- (9) In 2020, 58.9% of Dominicans in Puerto Rico were female, a significantly greater proportion than the overall population of the Island, which was 52.6% female. In addition, the proportion of women among Dominicans is growing, while it has stayed constant for the rest of the population.
- (10) The Dominican population in Puerto Rico is getting significantly older, on average. The median age of Dominicans in Puerto Rico was 52 years in 2020, which is substantially higher than it was in 2010 when it was 44, and in 2000 when it was 37. This follows the same trend followed by the overall population in Puerto Rico. But when compared to the overall Puerto Rican population, Dominicans have a significantly higher median age, a pattern that has held for decades. In 2020, the median age in Puerto Rico was 48 years, which is four years lower than for Dominicans.
- (11) Race is a topic that generates enormous controversy, and it is not different in Puerto Rico. It is, however, an issue that must be grappled with. Persons in the surveys used in this study were asked about their racial identity and they displayed strong ones. In 2020, a total of 20.3% of Dominicans categorized themselves as White, 34% as Black, and 45.7% as Other (mostly mixed race). This diverges from the overall population of Puerto Rico, which tends to have a greater proportion identified as White. In 2020, the proportion of the population of Puerto Rico who identified as White was 58.9%, compared to only 11.2% self-identified as Black and 29.9% as other (mixed race). These differences in racial identification between Dominicans and Puerto Ricans give rise to questions as to whether prejudice and discrimination based on race exist on the Island, as has been documented in the U.S. and other countries, and the impact on the Dominican population.

Socioeconomic Status

- (12) Dominicans have a significantly lower income per capita than the overall population in Puerto Rico. On average for the period of 2016 to 2020, Dominicans had an average annual household income per capita of \$11,245, compared to \$13,519 overall on the Island. This represents a 20% lower annual income per capita. This income gap between Dominicans and the rest of the population grew during the last decade. Ten years earlier, the per capita income of Dominicans was approximately equal to that of the overall population. And in earlier decades Dominicans displayed *higher* annual income per capita than the overall population of the Island. In 2000, for example, the average income per capita of Dominicans was \$12,541, compared to \$11,803 among the overall population (with all figures adjusted for inflation and expressed in 2020 dollars). As these numbers reveal, income per capita among Dominicans dropped between 2000 and the period of 2016-2020, while it rose for the overall population in Puerto Rico. This reflects how the deep economic crisis in Puerto Rico disproportionately affected Dominicans.
- (13) Dominicans have a significantly higher poverty rate than the overall population of Puerto Rico. On average, from 2016 to 2020, the poverty rate among Dominicans was 51.4%, compared to 44.4% in Puerto Rico overall. Furthermore, the poverty rate among Dominicans rose much more than that of Puerto Rico in the last decade. Ten years earlier, on average from 2005 to 2009, the poverty rate among Dominicans was 46.1%, essentially the same as that of the Puerto Rican population, which was equal to 45.8%.
- (14) There are significant differences in poverty within the Dominican community based on age. The poverty rate among Dominican children and youth, defined as persons aged up to 17 years, was 75.9% on average for the period of 2016-20, much higher than for other age groups: for those aged 18 to 64 the poverty rate was 45.8%, and for Dominicans aged over 64 it was 45.2%. The child/youth poverty rate among Dominicans was way above that prevailing among the overall population in Puerto Rico, which was almost 20 percentage points lower, equal to 57.2% in 2016-2020.
- (15) One of the forces accounting for the higher poverty rates among children (and this holds for both Dominicans and the rest of the population) is family structure. Because of the substantially lower income earned by women in the labor market, families headed by separated or divorced women with children or other family members living in the household, as well as single women with children, tend to have lower income and higher poverty than male-headed couples and married-couple families. The proportion of Dominicans residing in households headed by women on average from 2016 through 2020 was 33.6%, just slightly above that for the overall Puerto Rican population, which was 31.2%. But the average poverty rate among female-headed households among both Dominicans and Puerto Ricans was substantially higher than for other households. For Dominicans, from 2016 through 2020, as much as 62.3% of persons living in female-headed households were poor, while among male-headed households it was 53.7%, and 39.3% for married-couple households.

Labor Market Outcomes

- (16) Dominicans have substantially greater labor force participation rates than the overall population on the Island. On average, from 2016 to 2020, the participation rate for Dominicans 16 years of age and over was 63% while it was only 44.3% for Puerto Rico overall. Furthermore, this gap in labor force participation rates has been sustained over the years. For instance, back in 1990, the participation rate among Dominicans was 63.3% while it was 47.3% for the overall population.
- (17) The higher labor force participation rates of Dominicans hold for both men and women. On average from 2016 through 2020, the labor force participation rate of Dominican men was 73.7% while it was 50.5% for the male population in Puerto Rico. For women, Dominicans had a 55.7% labor force participation rate in 2016-2020, while for the overall female population, it was 39.7%.
- (18) Dominican labor force participation rates significantly exceed those of the rest of the population in Puerto Rico for all age groups. For instance, among the 40 to 49 age group, Dominicans had an 84.7% participation rate while for the population of the Island overall it was 69.5%. Similarly, for the population aged 50 and over, Dominicans had a 51.9% labor force participation rate while for Puerto Rico it was less than half, equal to 25.4%
- (19) On average for the period of 2016-2020, Dominicans aged 16 and over had an unemployment rate that was close to four percentage points higher than the overall population in Puerto Rico: the unemployment rate among Dominicans was 19%, compared to 15.4% for the overall population. However, in earlier periods, Dominicans had lower unemployment rates relative to the overall rate population. For instance, on average, the unemployment rate among Dominicans in the period of 2005 to 2009 was 15.2% compared to 16.2% for Puerto Rico overall, and going back to 1990, the Dominican unemployment rate was almost three percentage points lower than the one prevailing in the overall population.
- (20) Age makes a major difference in determining unemployment rates, which are traditionally higher for young populations. Indeed, Dominicans in Puerto Rico aged 16 to 19 years had a whopping 61.6% unemployment rate, compared to an unemployment rate of 25.5% among the 20 to 29 population, 21.4% for the 30 to 39 age group, and 16.6% for those aged 50 and over. This age-unemployment profile also prevailed among the workforce in Puerto Rico in general. For the Island's labor force aged 16 to 19, the unemployment rate was 50.3%, but it drops to 24.8% for those aged 20 to 29, and to 14.3% for those aged 30 to 39, with workers aged 50 and above having the lowest unemployment rate, equal to 8.8%.
- (21) The industrial distribution of Dominican workers in Puerto Rico does not differ substantially from that of the overall population. From 2016 to 2020 the sectors where Dominicans clustered were the service sector (41.6% of all workers) and the wholesale and retail trade sectors (22.2%), which were also the top employment industries for the overall population (equal to 37% and 22%, respectively). There are significant differences in a few sectors, though. Dominicans are over-represented in the construction industry, where 13.2% of Dominican workers are employed, compared to 5.7% of the Island overall. On the other hand, Dominicans are underrepresented in manufacturing, where 3.5% of Dominican workers are employed versus 7.8% in the general population.

- (22) In terms of occupational distribution, between 2016 and 2020 Dominicans were over-represented in service occupations, which account for 36.7% of Dominican workers. By comparison, the equivalent proportion among the overall Puerto Rican workforce was 19.4%. On the other hand, Dominicans were sharply under-represented among management and professional occupations, which accounted for 15.8% of all Dominicans in the labor force, as compared to 27.4% in Puerto Rico overall.
- (23) Dominicans are drastically underrepresented in the public sector. From 2016 through 2020, the public sector represented 11.2% of the employment of Dominican workers while the equivalent for the overall population of the Island was more than twice that percentage, equal to 24.4%. This gap in public sector employment has not changed much over time. For instance, on average from 2005 through 2009, Dominicans employed in the public sector accounted for 8.8% of all Dominican employment while it was 27.9% for all workers in Puerto Rico.
- (24) The lower rates of employment of Dominicans in the public sector are more significant when it is realized that the earnings of public sector employees are significantly higher, on average, that those in the private sector. The average annual earnings of full-time year-round public sector workers in Puerto Rico in the period of 2016 to 2020 was \$25,258 dollars, compared to \$20,102 among private sector workers. That is a quarter (25.6%) higher among government employees.
- (25) Dominicans have substantially higher rates of self-employment than the overall population of Puerto Rico. On average, from 2016 to 2020, 37.9% of all Dominican men in the labor force were self-employed as opposed to working for a salary. For women, the equivalent percentage was 35.5%. By contrast, for the overall Puerto Rican workforce, only 16.6% of men were self-employed, and 7.9% of women.
- (26) The percentage of Dominican workers who are self-employed has been rising. In 2000, 21.5% of Dominican men and 20.9% of Dominican women were self-employed. Both are significantly lower than the equivalent figures for 2016-2020. Self-employment rates have also increased on the Island overall, but not as much as for Dominicans.
- (27) Several factors could explain the high –and rising—percentage of Dominicans who are self-employed. Firstly, it may reflect the difficulties confronted by a largely immigrant population which, as noted earlier, has difficulties getting access to salaried employment in traditional sectors of employment in Puerto Rico, such as manufacturing and the public sector. Instead, they have prospered in the service and commerce sectors, in which self-employment is more common. Secondly, the high rates of self-employment among Dominicans may be connected to their greater participation in the informal sector, which some studies estimate may account for as much as 30% of Puerto Rico's gross national product.
- (28) The relatively high proportion of self-employed Dominicans and their overrepresentation in service occupations may partly explain why they were more deeply affected by Puerto Rico's economic crisis. These sectors depend closely on consumer demand and their success is closely determined by business cycles. The economic collapse in Puerto Rio, especially after Hurricane Maria and during the COVID-19 pandemic, had a strong adverse impact on the service sector, particularly small businesses. This could therefore explain the fall of the income per capita of Dominicans and their higher poverty rates, as documented earlier.
- (29) The average annual earnings of Dominicans are lower than those prevailing among the overall workforce in Puerto Rico. For Dominican men, the annual earnings of full-time, year-

round workers in 2016-2020 were equal to \$30,328, compared to \$33,269 for the overall male worker population. For women, the average annual earnings of Dominicans in 2016-20 were equal to \$24,859 while the corresponding figure for Puerto Rico was \$30,493. For both Dominicans and the overall population in Puerto Rico, average earnings were significantly lower among women, even though women on average tend to have greater educational attainment than men, as will be shown later.

(30) The average earnings of Dominican workers declined in the last two decades when adjusted for inflation. For Dominican men, the fall was from \$31,120 dollars in 1999 to \$30,328 in 2016-20 (where the data has been adjusted for inflation and expressed in 2020 dollars), while for Dominican women there was a drop from \$28,564 in 1999 to \$24,959 in 2016-2020. These figures starkly reflect the stagnation of the economy of Puerto Rico in the last two decades.

Education

- (31) There is a strong positive correlation between earnings and schooling. The average annual wage and salary income of full-time, year-round Dominican workers in Puerto Rico who had not received a high school diploma was equal to \$16,985 for the period of 2016-20. But those with a high school diploma had average annual earnings of \$22,783. For workers with some college education, who may have completed an associate degree but did not have a four-year college diploma, the annual earnings rise to \$24,771, and for those with a college degree average income increases to \$41,141. The positive connection between educational attainment and earnings holds as well for the overall population in Puerto Rico.
- (32) Dominicans have significantly lower educational attainment than the overall population in Puerto Rico. The proportion of Dominicans 25 years of age or older who had less than a high school degree or equivalent on average from 2016 to 2020 was 39%, compared to 22.1% in the overall population. While 16.4% of Dominicans had completed a college degree, compared to 26.3% for the overall population of the Island. The educational gap between Dominicans and the rest of the population has been sustained over time, although educational attainment has risen for both groups.
- (33) Educational attainment varies by gender. In fact, on average for the period of 2016-20, women had significantly higher educational attainment than men, among both Dominicans and the population in general. Among Dominicans, 18.8% of women had a college degree and an additional 18.8% had completed some college education (without a college degree), totaling 37.6%. By comparison, 13% of Dominican men had a college degree and 17.4% had completed some college education, up to 30.4%, substantially lower than women. The gap in educational attainment by gender is also reflected in the general population in Puerto Rico.
- (34) Given the strong positive correlation between educational attainment and wages, the lower average schooling of Dominicans has made it more difficult for them to succeed in recent years. In the past, the strong Puerto Rican economy allowed Dominicans to make great progress, relying on their high labor force participation rates. But the higher educational attainment levels required by the new economy have made such progress much more difficult, particularly within the slow growth displayed by Puerto Rico in the last fifteen years.

(35) Despite the lower educational attainment of Dominicans relative to the overall population in Puerto Rico, there has been substantial progress over time. Among Dominican women, the proportion who attained one year of college or more rose from 24.1% in 2000 to 37.6% on average from 2016 to 2020. For Dominican men, the increase was from 23.2% in 2000 to 30.4% in 2016-20. This educational progress, combined with a Puerto Rican economy that appears to have turned a corner and is facing forecasts of potential labor shortages in various sectors, including construction and services, suggests that the Dominican population is likely to make a substantial recovery in the next few years, not only in terms of numbers but also in socioeconomic status.

INTRODUCTION

There were close to 60,000 persons who identified themselves as Dominican in 2020 according to official U.S. Bureau of the Census statistics. But the actual number of Dominicans residing in Puerto Rico may be significantly higher. The Census has been known to undercount minority immigrant populations. Estimates of this undercount would raise the Dominican population in Puerto Rico in 2021 to close to 80,000. They constitute the largest ethnic minority group and the biggest immigrant population on the Island. This research report provides a comprehensive analysis of the current social and economic condition of Dominicans in Puerto Rico. It includes a discussion of its population dynamics, income and poverty, labor market indicators, and educational attainment, among other topics.

While there exists substantial research examining Dominicans in the continental United States (some very recent), as well as studies of Dominicans in Puerto Rico that include information for specific periods², or that focus on specific issues³, or discuss migration patterns⁴, there is currently no single up-to-date study providing a comprehensive analysis of the current situation of Dominicans on the island and its changes over time.

Providing a comprehensive study of the socioeconomic status of the Dominican population of Puerto Rico at this moment in time is essential. The last twenty years have seen enormous social and economic turmoil on the Island. Battered by hurricanes, earthquakes, and a devastating financial and economic crisis that led the government to bankruptcy, the population of Puerto Rico has witnessed a sea of change in recent years. How have these events affected the Dominican community?

This research report utilizes data collected by the U.S. Bureau of the Census. Information for 1990 and 2000 was obtained from the decennial U.S. Census of Population for Puerto Rico, which counts and collects information on all residents of Puerto Rico every ten years. The 5% Public Use Microdata Samples (PUMS) of the 1990 and 2000 Census were utilized. In 2001, however, the U.S. Bureau of the Census replaced the decennial Census PUMS with data provided by another source: the Puerto Rico Community Survey (PRCS). The PRCS is an annual household survey of the population in Puerto Rico and reproduces the format followed by the decennial Census of Population. Detailed data on demography and socioeconomic status is available from the PRCS and the corresponding one percent PUMS for the years 2001 through 2021. These data sets are supplemented with the 2020 U.S. Census of Population and other sources in providing a comprehensive discussion of the demographics, labor market outcomes, poverty, and income situation of Dominicans in Puerto Rico as they face the 2020s.

1

¹ See Hernández, Rivera-Batiz and Sisay (2022), Hernández (2002), Hernández and Rivera-Batiz (1997, 2000), Torres-Saillant and Hernández (1998), Georges (1991), and Duany (1990).

² Such as those authored by Velazquez-Estrada (2022), which covers only the specific period of 2015-2019, Caraballo-Cueto (2017), Rivera-Batiz and Santiago (1996), and Rivera-Batiz (1994).

³ Like those examining transnational migration patterns, such as Burgos Ortiz (2007), Duany (2006), Enchautegui (2000), Funkhauser and Ramos (1993), Hernández-Angueira (1990), and Ugalde, Bean and Cardenas (1979); undocumented migration (Duany, Hernández and Rey (1995) and Duany (1992); education (Gonzalez-Espada, 2007); and race and social relations (Duany, 2006, and Estrella, 2016).

⁴ Polanco, Peguero and Chalas (2017), Duany (2005, 2007), Rivera-Batiz (1994) and Thompson (1990).

⁵ The PRCS data utilized in this report for 2001 to 2021 were obtained from the Integrated Public Use Microdata Series (IPUMS) produced by the University of Minnesota [see Ruggles et. al. (2021)]. It should be emphasized that insofar as the surveys just mentioned are samples of the population, the results provided in this research report are estimates and are subject to sampling, measurement, and other sources of error [for more details see U.S. Census Bureau (2020)].

THE DOMINICAN POPULATION IN PUERTO RICO

How many Dominicans reside in Puerto Rico and how has this changed? These are the questions examined in this section.

Estimating the Number of Dominicans in Puerto Rico using Census Data

As with other ethnic populations, the number of Dominicans residing in Puerto Rico is an estimate, based on the survey instruments used to collect demographic information. Both the U.S. Census of Population for Puerto Rico and the Puerto Rico Community Survey (PRCS), which are the main sources of demographic and socioeconomic information on Puerto Rico, do not have a specific question that asked respondents to identify explicitly as Dominicans. However, they do include a separate question intended to allow individuals to self-identify as being Hispanic, Latino, or of Spanish Origin, and as part of this question, persons can check a box with the following choices: (1) Mexican, Mexican American and Chicano; (2) Puerto Rican; (3) Cuban; and (4) another Hispanic, Latino or Spanish Origin. These choices again do not include Dominicans explicitly. However, the "another Hispanic, Latino or Spanish Origin" box does have a blank space where persons can write in the specific Hispanic group that they form part of if they do choose the "Other Hispanic" category. To illustrate this, the questionnaire includes several examples of Hispanic groups that could be used to write into their forms: Salvadorean, Dominican, Colombian, Guatemalan, Spaniard, and Ecuadorean.

Because this Hispanic/Latino identification question in the Census and PRCS makes it more complicated for individuals to choose "Dominican", which they would have to write in instead of just checking a box with their identity (as it is with Mexican Americans, Puerto Ricans, and Cubans), researchers seeking to make sure there is no undercount of Dominicans in the PRCS and other Census-based publications have adopted the following criteria that define whether the person should be counted as Dominican:⁶ (1) the person self-identified as Dominican by writing-in this group on the PRCS questionnaire; (2) selected "other" under the Hispanic origin question and also indicated their birthplace was the Dominican Republic; (3) selected "other" under the Hispanic origin question and also indicated their first ancestry to be Dominican; (4) selected "other" under the Hispanic origin question and also indicated their second ancestry to be Dominican.

Changes in the Dominican Population in Puerto Rico According to Official Statistics

According to the data provided by the U.S. Bureau of the Census, the Dominican population residing in Puerto Rico was equal to 58,252 in 2021. This constitutes by far the largest ethnic and immigrant group on the Island (Cubans, which would be the next largest group, were estimated to be at 12,409 in 2020).

However, as Table 1 shows, the Dominican population declined by 16% from 2010 to 2021. Before that, the Dominican population had been rising, from 18,660 in 1980 to 34,813 in 1990, and then to a high of 69,683 in 2010.

⁶ This methodology was originally proposed by Cresce and Ramírez (2003).

Table 1

The Dominican Population of Puerto Rico, 1980-2021

Year	Dominican Population in Puerto Rico		
1980	18,660		
1990	34,818		
2000	57,275		
2010	69,683		
2021	58,352		

Source: Data for 1980, 1990, and 2000 come from the US Population Census for Puerto Rico, 5% PUMS; the data for 2010 come from the Puerto Rico Community Survey; the data for 2021 are from the 2021 Puerto Rico Community Survey (ECPR); Authors' tabulations.

Despite the population decline in the last decade, the Dominican community in Puerto Rico remains a substantial one and ranks as number 7 in terms of the most numerous Dominican states/territories in the United States. As Table 2 shows, the state with the largest Dominican population in 2020 was New York state, with an estimated 897,584 in 2020, followed by New Jersey, with 352,385, Florida (270,313), Massachusetts (161,787), Pennsylvania (141,481) and Rhode Island (59,839).

Table 2

Geographical Distribution of Dominicans:
Puerto Rico versus the Top States in the Mainland U.S., 2010 and 2020

	20	010	202	20	
State	Population	Ranking	Population	Ranking	
New York	736,096	1	897,584	1	
New Jersey	211,083	2	352,385	2	
Florida	182,022	3	270,383	3	
Massachusetts	123,406	4	161,787	4	
Pennsylvania	63,396	6	141,841	5	
Rhode Island	46,810	7	59,839	6	
Puerto Rico	69,683	5	55,308	7	
Connecticut	26,653	8	50,974	8	

Source: American Community Survey and Puerto Rico Community Survey Public Use Microdata Samples for 2010 and 2020; authors' tabulations.

But as Table 2 depicts, the declining Dominican population in Puerto Rico –and continued growth in other states—has led to a drop in rank among the states/territories with the largest Dominican populations, moving from number five in 2010 to seven in 2020.

What explains the sharp drop of Dominicans in Puerto Rico in the last 10 years?

Explaining the Decline of the Dominican Population in Puerto Rico: 2010-2021

The most significant major force explaining the declining Dominican population in Puerto Rico is the severe slump that the Island's economy has been suffering during the last 15 years. Facing shrinking economic opportunities and improved economies elsewhere, many in Puerto Rico have emigrated and Dominicans are part of this exodus, many of whom have moved to the mainland United States.

Puerto Rico's Economic and Social Crisis

Puerto Rico has undergone a series of devastating economic, social, and natural shocks over the last 15 years, which have led to a long and severe economic downturn. First was the collapse in the early and mid-2000s of the economic development strategy adopted by the Island's government for many decades. This strategy relied heavily on attracting U.S. foreign direct investment. Although there had been significant competition for these investments by developing countries – from Mexico to China-- manufacturing employment in Puerto Rico remained strong until the early 2000s due to a 1976 federal tax law that exempted U.S. firms operating on the Island from paying federal taxes on their profits (Section 936 of the Internal Revenue Service tax code). This sustained Puerto Rico as a pharmaceutical and manufacturing powerhouse. But Section 936 was phased out by the federal government in the late 2000s and the federal tax breaks completely ended in 2005. This resulted in a significant contraction of manufacturing production, as many pharmaceuticals and other firms closed their operations. Manufacturing employment on the Island dropped from 120,000 in 2003 to less than 79,000 in 2017.

The second economic shock affecting the Island was the American financial crisis of 2008-2009, which had a particularly severe impact on Puerto Rico. The total number of employed workers declined from 1.3 million in 2006 to 990,000 in 2015. And the collapse of the real estate and construction industries on the island --associated with the crisis-- led to the downfall of several major local financial institutions. The lack of access to credit had a deep effect on the island's private sector. Investment in physical capital declined sharply from 27% of Gross National Product (GNP) in 2001 to 12% in 2017.

The third major factor associated with the downfall of Puerto Rico's economy can be traced to the government's financial collapse, a result of both a shrinking economy and dismal public sector management. The ballooning government debt, which rose from \$24 billion in 2000 to \$74 billion in 2017, eventually became impossible to service. In May 2017, Puerto Rico's Governor at the time, Ricardo Rosselló, declared his intention to start bankruptcy-style procedures under the statutes of the Puerto Rico Oversight, Management and Economic Stability Act (PROMESA) enacted by the U.S. Congress to manage the Island's fiscal crisis.

The final nail in the coffin for Puerto Rico's economy was placed by a series of natural disasters. In September 2017, two back-to-back major hurricanes, Irma and Maria, hit the Island, causing

unmeasurable human and physical destruction. Maria, the strongest of the two cyclones, ended up killing close to 3,000 people, the deadliest natural disaster in any U.S. state or territory in over 100 years. And then, in January 2020, a series of strong earthquakes shattered the lives of those in the southwestern part of the Island. In the city of Ponce, 8,000 people were left homeless and 40,000 were living in camps outside their homes. To top it off, in March 2020, the COVID-19 pandemic arrived in full swing, leading to another round of deaths, economic lockdowns, and social dislocation. Finally, on September 2022 hurricane Fiona severely impacted the central and southeastern parts of the Island, causing widespread flooding and destruction of homes, roads, and bridges, and impacting the electric grid and the agricultural sector, among other effects.

Figure 1 shows the consequences of these shocks. The most popular indicator of the economic well-being of a country or nation is its Gross National Product per capita. In Puerto Rico, this indicator dropped precipitously in 2005, after what had been a long period of solid economic growth. This has been followed by a long period of stagnation. To this day, the economy of the Island has not fully recovered from the set of crises and disasters it has faced.

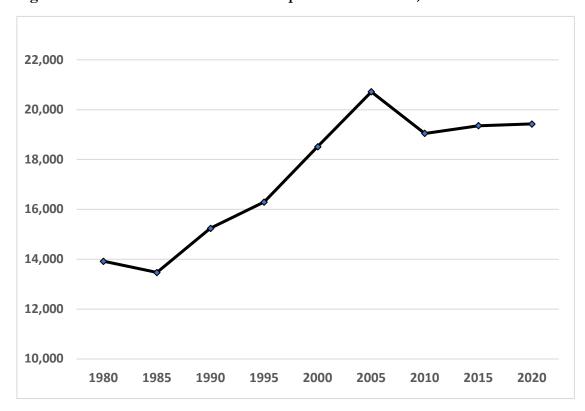


Figure 1. Gross National Product Per Capita of Puerto Rico, 1980-2020

Source: Instituto de Estadísticas, Puerto Rico.

The deteriorating economic conditions in Puerto Rico were associated with a large exodus of Dominicans from the Island. Using Census data --whose questionnaire includes a question on a person's previous year's residency-- we estimate that the number of Dominicans who emigrated from the Island to the mainland U.S. from 2009 to 2019 was equal to 32,103.

^{*} Yearly data, adjusted for inflation and expressed in 2020 dollars.

The population exodus from Puerto Rico was not just by Dominicans. The overall population on the Island dropped as well by over 500,000 between 2000 and 2020. As Table 3 shows, the population in Puerto Rico dropped from 3,808,605 in 2000 to 3,725,789 in 2010 and then fell sharply to 3,285,874 in 2020. Some of this population decline is linked to the aging of the population of the Island and an excess of deaths relative to births, but most of it is associated with net emigration.

Table 3

The Rise and Fall of the Population of Puerto Rico, 1980-2020

Year	Population of Puerto Rico	
1980	3,196,500	
1990	3,522,037	
2000	3,808,605	
2010	3,725,789	
2020	3,285,874	

Source: U.S. Census of Population.

Reduced Migration from the Dominican Republic to Puerto Rico

Although there was a net emigration of Dominicans from Puerto Rico in the last decade, there has still been a continuing inflow of Dominican immigrants to the Island. But this inflow has also declined sharply in recent years.

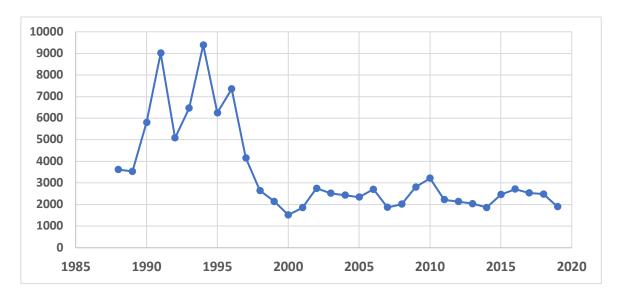
The number of immigrants from the Dominican Republic who obtained permanent legal residence in the United States and declared their destination to be Puerto Rico rose sharply in the late 1980s and the 1990s. As Figure 2 shows, the annual number of Dominicans obtaining legal permanent resident status in Puerto Rico reached a high of over 9,000 in the 1990s.

But although the flow of Dominican immigrants to the Island has continued to the present, it has slowed down considerably, and it is now less than one-third of what it was back in the 1990s. As Figure 2 depicts, from 2000 to 2019 the annual number of immigrants obtaining legal residency in Puerto Rico declined to between 1,859 and 2,713.

The recent pattern of reduced Dominican immigration to Puerto Rico does not follow the overall pattern of Dominican immigration to the U.S. in the last decade. Although it is true that Dominican migration to the U.S., in general, decreased in the late 1990s and early 2000s, it has climbed up quite drastically in recent years, as Figure 3 depicts. This is the opposite of what happened in Puerto Rico.

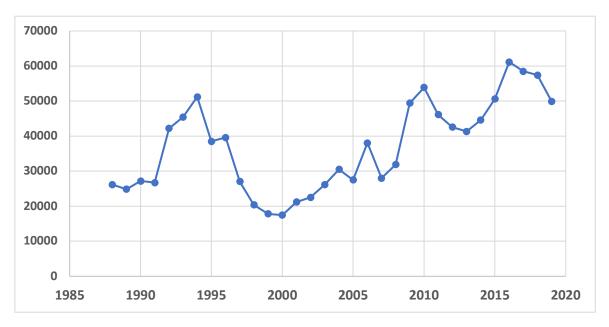
Of course, economic incentives matter eminently in migration decisions and the economic fortunes on the U.S. mainland and in Puerto Rico have diverged significantly in the last decade. The U.S. economy gradually recovered after the financial crisis of 2008-2009 and its Gross National Product per capita grew at an annual rate of about one percent per year from 2009 to 2019, adjusted for inflation. By contrast, in Puerto Rico –as Figure 1 showed, the economy has barely grown at all during this period.

Figure 2. Dominican Immigrants Admitted for Permanent Residence in Puerto Rico
1988-2019



Source: U.S. Department of Homeland Security, Yearbook of Immigration Statistics, various years.

Figure 3. Dominican Immigrants Admitted for Permanent Residence in the U.S. 1988-2019



Source: U.S. Department of Homeland Security, Yearbook of Immigration Statistics, various years.

The Census Undercount and Undocumented Immigrants

The estimates of the Dominican population presented in this study, which is based on U.S. Census Bureau surveys, likely represent an undercount of Dominicans living on the Island. The Census Bureau itself has acknowledged its undercount of racial and ethnic minorities (U.S. Census Bureau, 2022). The problem is more severe for communities with large numbers of undocumented immigrants. The Census surveys are supposed to include all immigrants, as they do not ask questions regarding legal immigration status and are entrusted to sample all persons in the U.S., including both documented and undocumented immigrants. But throughout the years there has been a substantial undercount of undocumented immigrants. The problem may have been particularly severe for the 2020 Census, as the administration of President Donald Trump sought to exclude undocumented immigrants from the Census count. Although this effort failed, the visibility of the controversy in the press and the courts, as well as the vigorous and continuous actions of the Trump administration to deport undocumented immigrants, may have led many of them to avoid Census enumeration. Estimates of the undercount of various populations in the 2020 Census range from 2 to 5 percent (U.S. Census Bureau, 2022).

This issue is relevant for Dominicans in Puerto Rico as there has been a long-standing migration of undocumented Dominican migrants to the Island. This phenomenon continues to the present, as the frequent reports of boats and fragile *yolas* transporting undocumented migrants from the Dominican Republic to Puerto Rico, some with tragic endings, appear in the press (see Ayala-Gordián, 2022, Pons, 2021, and Rosario, 2021). Examining the issue in relation to the 1990 Census undercount of Dominicans in Puerto Rico, Duany (1992, p. 2) concludes: "[First,] many Dominicans living in Puerto Rico seek to remain invisible to government authorities because of their illegal status. Second, the census missed disproportionately more workers in the underground economy than other residents of Puerto Rico. Puerto Ricans, as well as Dominicans who engage in informal economic activities, deliberately conceal information from outsiders."

Although there are no precise estimates of the Census undercount, there are several studies that have carefully studied the issue. According to the study by Duany (1992) and Duany, Hernández and Rey (1995), the undercount of the Dominican population in the U.S. Census in Puerto Rico was close to 37% of the official count. If we apply this figure to the data for the Dominican population over time, we obtain a total of 79,742 Dominicans on the Island in 2021 (including the Census undercount), a drop relative to 2010, when the estimate is of 95,466 (including again the under-count). It should be emphasized, however, that this is a rough estimate that can have a significant margin of error.

Dominican Identity and Ancestry

Psychologists, sociologists, and anthropologists have over the years converged on the idea that ethnic identity, particularly among immigrant communities, involves a complex set of forces that affect how an individual decides his or her affiliation with a particular ethnic group. Furthermore, scholars have found that children of immigrants may have shifting ethnic identities or even multiple

⁷ See Erikson (1968); Yinger (1976) and Phinney (1990).

ethnic identities, depending on their generation and the specific ethnicity of their parents.⁸ Census Bureau questions ask individuals to associate themselves with one particular, primary, ethnic group —Puerto Rican or Cuban, or Dominican, for example—but this does not mean that individuals may also have a secondary ethnic identity or heritage.

In addition to persons who identify themselves explicitly as Dominican in the surveys administered by the U.S. Census Bureau, and which we count as part of the Dominican population of Puerto Rico, there is a second set of persons who identify themselves as Puerto Rican, not Dominican, but who were either born in the Dominican Republic or have some Dominican heritage (their mother or father or both identified as Dominican). We refer to this segment of the population as persons with Dominican ancestry. We presume that many in this group represent children who grew up on the Island and, for a variety of reasons, have come to identify themselves as Puerto Rican and not as Dominican.

The average number of persons with Dominican ancestry in the period of 2016 to 2020 was 13,233. When added to the 56,590 persons who identify explicitly as Dominican on average during that period, there is a total of 69,823 persons with Dominican identity or ancestry residing in Puerto Rico at that time.

The number of persons with Dominican ancestry has generally risen over time, from less than 10,000 in 2000 to close to 17,160 on average from 2005 through 2009, although there has been a decline in the last decade, reflecting the overall reduction of the Dominican population of the Island. The socioeconomic status of this population --who identify themselves as Puerto Rican but also have close Dominican ancestry-- has not been examined in the literature and should be a matter for future research. The results discussed later in this report focus on persons who explicitly identify themselves as Dominican.

Estimates of the Overall Dominican Community in Puerto Rico

Previous sections have presented estimates of the Dominican population according to the official data provided by the U.S. Bureau of the Census for Puerto Rico, estimates of the Census undercount, and estimates of the Puerto Rican population with Dominican ancestry. Recognizing that these figures may have a significant margin of error, Table 4 shows our estimate of the total Dominican community in Puerto Rico, adding the official Census count, our estimate of the Census undercount, and persons with Dominican ancestry. The total is equal to 93,175 for 2021 and 112,626 for 2010.

As this research report moves on to discuss the demographics and socioeconomic status of Dominicans, we emphasize that the analysis that follows focuses exclusively on Dominicans who identify as such in the surveys of the population carried out by the U.S. Bureau of the Census.

⁸ This has been examined in relation to Dominicans in the mainland U.S.; see Itzigsohn and Dore-Cabral (2000).

Table 4

Estimates of the Total Dominican Community in Puerto Rico, 2010-2021

	Dominican Population				
Self-identified as Dominican in the Census	Estimate of the Census Undercount	Persons self-identified as Puerto Rican in the Census but with Dominican Ancestry	Total: self-(identified as Dominican plus those with Dominican Ancestry		
A	В	С	A + B + C		
58,352	21,590	13,233	93,175		
69,683	25,783	17,160	112,626		
•	as Dominican in the Census A 58,352	as Dominican in the Census Undercount A B 58,352 21,590	as Dominican in the Census Undercount as Puerto Rican in the Census but with Dominican Ancestry A B C 58,352 21,590 13,233		

Source: U.S. Bureau of the Census (PRCS) plus Census undercount estimate following Duany (1992).

THE DEMOGRAPHICS OF DOMINICANS IN PUERTO RICO

The great majority of Dominicans in Puerto Rico are immigrants, born in the Dominican Republic. However, this is slowly changing, with a greater proportion born in Puerto Rico itself.

Table 5 presents the decomposition of the Dominican population into the following three groups: immigrants (foreign-born), born in Puerto Rico, and born in the United States. In 2020, we estimate that 90.2% of Dominicans in Puerto Rico were immigrants, 7.6% were born in Puerto Rico, and 2.2% were born in the U.S. Table 5 also shows that the percentage of Dominicans born in Puerto Rico is growing. In 2000, only 5% of the Dominican population on the Island had been born in Puerto Rico, compared to 7.6% in 2020.9

⁹ As noted earlier, it is likely that many persons of Dominican ancestry (with one or both parents born in the Dominican Republic) who were born in Puerto Rico identify themselves as Puerto Rican and are not counted as part of the Dominican population. This is a common pattern among second and third-generation descendants of immigrants, depending on their assimilation or acculturation into the nation's culture.

Table 5
Immigrants versus Puerto Rico-Born Dominicans, 1990-2020

		Domi	nican Population		
Period	Total	Immigrants (Born in Dom. Rep.)	Born in Puerto Rico	Born in Continental U.S.	Born in PR as % of Total
2016-2020	55,158	49,772	4,171	1,215	7.6
2005-2009	67,778	61,154	3,953	2,671	5.8
2000	57,275	52, 870	2,881	1,524	5

Source: Data for 2000 are from the 2000 U.S. Census of Population Public Use Microdata Sample (PUMS); data for 2005-2019 are from the Puerto Rico Community Survey PUMS; authors' tabulations.

Table 6

Dominican Population by Sex, 2000 and 2020

Group in the Population	Total	Fen	nale	Ma	ıle
	Number	Number	%	Number	%
		2020			
Dominican Population	53,918	31,784	58.9	22,134	41.1
Puerto Rico Population	3,285,874	1,728,370	52.6	1,557,504	47.3
		2000			
Dominican Population	57,275	31,609	55.2	25,665	44.8
Puerto Rico Population	3,808,605	1,975,031	51.9	1,833.574	48.1

Source: For 2020, estimates based on the 2019 Puerto Rico Community Survey PUMS and the 2020 U.S. Census of Population; for 2000, based on the 2000 U.S. Census of Population PUMS; authors' tabulations.

Table 6 shows the Dominican population in Puerto Rico decomposed by sex. In 2020, close to sixty percent (58.9%) of Dominicans in Puerto Rico were women compared to the overall population of the Island, which was 52.6% female.

Moreover, the percentage of women among Dominicans is rising, from 55.2% in 2000 to 58.9% in 2020. By contrast, the percentage of women in the overall population has remained practically the same in the last decades. In 2000, 51.9% of the overall population in Puerto Rico were women, compared to 52.6% in 2020.

The Dominican population in Puerto Rico is aging. This follows the same trend followed by the overall population in Puerto Rico. Table 7 presents the median age of Dominicans in Puerto Rico, which was 52 years in 2020. This is substantially higher than it was in 2010 when it was 44, and in 2000, when it was 37. Furthermore, compared to the overall Puerto Rican population, Dominicans have a substantially higher median age, a pattern that has held for decades. In 2020, the median age in Puerto Rico was 48 years, which is four years lower than for Dominicans. By comparison, as Table 7 shows, in 2000, the median age in Puerto Rico was 32 years, while it was 37 years for Dominicans.

Table 7

Median Age of the Dominican Population in Puerto Rico, 1990-2020

Year	Dominicans	Puerto Rico	
1990	34	28	
2000	37	32	
2010	44	41	
2020	52	48	

Source: U.S. Census of Population and Puerto Rico Community Survey PUMS, various years

The topic of race generates controversy worldwide. Puerto Rico is not different. The conventional wisdom among many is that race as a socioeconomic issue is not that significant on the Island. This perception has been held by many in the population but also by social scientists. For instance, in their classic work on Puerto Rican social stratification, sociologists Feldman and Tumin dedicated some of their research to discussing the issue of race. They concluded: "The evidence urges upon us the conclusion that skin color is considerably less important in Puerto Rico than in the United States; that it is of virtually no significance whatsoever in many important areas of life" [Feldman and Tumin (1961, 239,245)].

Nevertheless, this conventional wisdom has been challenged over the years. Several social scientists have concluded the opposite, indicating that racial perceptions and identity are strong in Puerto Rico and that the presence of discrimination based on race abounds. Going back to 1945, anthropologist Eric Williams made the following comments regarding Puerto Rico:

"Discrimination is common in all the better hotels and restaurants...Clubs in Puerto Rico are customarily classified as "first class" and "second class." Whites belong to both types of clubs, but Negroes belong only to "second class" ones...Social discrimination has increased in Puerto Rico to such an extent that the legislature passed a Civil Rights Act in 1943 guaranteeing the right of all persons irrespective of race, creed or political affiliation to enjoy the facilities afforded by public places, businesses or any agency of the Insular Government." [Williams (1972, p. 45)]

More recently, in a survey of racial perceptions in Puerto Rico, Lloréns, Garcia-Quijano and Godreau (2017, pp. 173-174) concluded:

"These findings make evident that people are aware of the existence of racism in Puerto Rico and among Puerto Ricans, and that it is an important social problem which the majority of respondents, whether black, white, or other, recognize...The results of our various analyses with experiences of racism unanimously also show that the darker the self-reported skin color, the more likely respondents were to report experiencing racism."

Table 8

The Racial Distribution of the Dominican Population in Puerto Rico, 2020

Population Group	Whi	te	Blac	ck	Othe	r
	Number	%	Number	%	Number	%
Dominicans	10,964	20.3	18,326	34	24,628	45.7
Total in Puerto Rico	1,935,379	58.9	368.018	11.2	982,477	29.9

Source: Estimates based on the 2020 Puerto Rico Community Survey PUMS; authors' tabulations.

Table 8 presents the racial distribution of the Dominican population in 2020, as determined from the questions and the racial identification questions used in the Puerto Rico Community Survey (PRCS). It should be noted that these results differ sharply from those of the 2020 U.S. Census of Population for Puerto Rico. However, the later survey's racial identification question was changed from the one adopted by earlier Census surveys and by the PRCS as well, identifying racial categories using examples based on nationality (such as German, Irish, and English for the white category). Such a question is deeply flawed in measuring racial identity and has been rejected by most experts.

In 2020, a total of 20.3% of Dominicans categorized themselves as White, 34% as Black, and 45.7% as Other (mostly mixed race). This diverges from the overall population of Puerto Rico, whose great majority self-identified as White. In 2020, the proportion of the population of Puerto Rico who identified as White was 58.9%, compared to only 11.2% who self-identified as Black and 29.9% who identified as other (mixed race).

The substantial differences in the racial identification of Dominicans and Puerto Ricans gives rise to fundamental questions as to whether these differences give rise to prejudicial behavior and discrimination in employment, residential segregation, etc., as has been widely documented in the United States, Brazil, and other countries. The combination of racial discrimination with ethnic and anti-immigrant prejudice, particularly against the undocumented, compounds the problem. Xenophobia and ethnic bias are forces that unfortunately emerge worldwide, from the United States to Europe (see Gang, Rivera-Batiz and Yun, 1993).

The issue of discrimination against Dominicans in the Island has been noted in the academic literature (see Duany, Hernández and Rey, 1995; Duany, 2016; and Nina-Estrella, 2016) but it emerges periodically as well in the press, particularly in relation to the treatment of Dominicans by police. Reflecting on this recently, El Nuevo Día, a leading newspaper in Puerto Rico, felt the need to write the following editorial: "The Dominican community in Puerto Rico has been integrated into the various parts of our [Puerto Rico's] labor force and contribute significantly to the local economy but it is not exempt from the challenges of unequal treatment and discrimination, which have to be eradicated" (El Nuevo Día, 2022). Further research is necessary to determine the scope of racial/ethnic discrimination in Puerto Rico and its consequences.

THE SOCIOECONOMIC STATUS OF DOMINICANS

What is the current social and economic condition of Dominicans in Puerto Rico? How does it compare with the rest of the population on the Island?

Household Income Per capita

Experts often utilize income per capita in measuring the average standard of living of a country. Is there an equivalent when considering the economic situation of specific groups —or even individuals—within that nation? One way is to take the income of the household where a person lives and divide it by the number of persons in that household to compute per capita household income. For inter-group comparisons, one can then calculate the average household income per capita for each group. Note that it is important to divide household income by the number of persons because two households may have identical income but if one of them has more persons residing in it (say six instead of two), the standard of living in each can differ substantially.

Table 9 presents the differences in average annual household income per capita between Dominicans and the overall population of Puerto Rico. The data presented is obtained from the Puerto Rico Community Survey (PRCS), which is used in this report to examine income per capita and other socioeconomic indicators in Puerto Rico. This survey is annual and does not provide a sufficiently large sample of Dominicans to establish statistically confident results for many indicators. Most researchers, therefore, join the PRCS data for five years, which then adds up to a five percent sample of the population in Puerto Rico, large enough to produce more accurate estimates. The most recently available data covers the period of 2016-2020. The results available for this period are then generally compared with those for one decade earlier, obtained from the 2005-2019 PRCS. When looking back at indicators for earlier decades, such as 2000 or 1990, the PRCS is not available, but we utilize data from the decennial U.S. Census for Puerto Rico, which provides a 5 percent sample of the population, again a large enough sample to examine all socioeconomic indicators (the PRCS replaced the U.S. Census samples in 2005).

Table 9

Per capita Income of Dominicans in Puerto Rico, 1990-2020

Adjusted for Inflation in 2020 Dollars

Average Annual Household	Dominicans	Puerto Rico	
Income Per capita			
2016-2020	\$11,245	\$13,519	
2005-2009	\$11,282	\$11,876	
2000	\$12,541	\$11,803	
1990	\$8,004	\$7,173	

All figures have been adjusted for inflation, expressed in 2020 dollars using the Puerto Rico consumer price index.

Source: Data for 1990 and 2000 are from the US Census of Population 5% PUMS; data for 2005-2009 and 2016-2020 are from the Puerto Rico Community Survey PUMS; authors' tabulations.

As Table 9 shows, on average, Dominicans had an average annual per capita income of \$11,245 during 2016-2020, compared to \$13,519 among the overall population in Puerto Rico. This represents a 17 percent lower annual income per capita. This income gap between Dominicans and the rest of the population emerges during the last decade. Ten years earlier, the per capita income of Dominicans was just about the same as that of the overall population in Puerto Rico. And looking at earlier decades, one realizes that in the past Dominicans displayed *higher* annual income per capita than the overall population of the Island. In 2000, for example, the average income per capita of Dominicans was \$12,541 compared to \$11,803 for the overall population (these figures have been adjusted for inflation, expressed in 2020 US dollars).

The economic crisis in Puerto Rico in the last 15 years is reflected by the data presented in Table 9. Annual household income per capita failed to rise substantially in this period, growing by less than one percent per year from 2000 to 2020 (these data have been adjusted for inflation). In earlier decades, the rise in annual income per capita was consistently stronger, when adjusted for inflation. For instance, between 1990 and 2000, average household income per capita rose by 6.5% per year. But the impact of the crisis appears to have been stronger for Dominicans, whose income per capita starts to decline in the 2000s and drops from \$12,541 in 2000 to \$11,245 on average for 2016-2020 (with all figures adjusted for inflation and expressed in 2020 dollars).

Poverty Rates

The declining income per capita among Dominicans is reflected in a rise of poverty rates. Poverty status is determined by comparing the income of the family where the person lives with an income threshold measuring the financial resources that a family needs to satisfy basic needs (food, etc.). This threshold is adjusted by inflation and varies with the number of persons in the family, the number of children, and the age of family members. For instance, in 2020, the income threshold for a household consisting of two adults under the age of 65 with one child to be considered poor was \$20,832, but for a household of two adults and three children, the threshold rises to \$30,887. The poverty rate is the percentage of persons living in households with income below the poverty

income threshold. The poverty rates in Puerto Rico are calculated using the same poverty yardstick utilized in the mainland United States.

Table 10 shows that Dominicans have a higher poverty rate than the overall population of Puerto Rico. On average, for the period of 2016 to 2020, the poverty rate among Dominicans was 51.4%, compared to 44.4% in Puerto Rico overall.

Table 10

Poverty among Dominicans in Puerto Rico, 1990-2020

Percentage of persons residing in households living under the poverty line

Poverty Rate	Dominicans	Puerto Rico	
2016-2020	51.4%	44.4%	
2005-2009	46.1%	45.8%	
2000	47%	48.6%	
1990	54%	58.7%	

Source: Data for 1990 and 2000 are from the US Census of Population 5% PUMS; data for 2005-2009 and 2016-2020 are from the Puerto Rico Community Survey PUMS; authors' tabulations.

Table 10 also shows that the poverty rate among Dominicans rose much more than that of Puerto Rico in the last decade. In fact, ten years earlier, in the period of 2005 to 2009, the poverty rate among Dominicans was 46.1%, essentially the same as that of the Puerto Rican population, which was equal to 45.8%. So, although overall poverty in Puerto Rico did not change much in the last decade, for Dominicans it increased substantially.

Age and Poverty

There are substantial differences in poverty within the Dominican community. One of them emerges when the population is decomposed by age.

As Table 11 indicates, the poverty rate among Dominican children and youth, defined as persons aged up to 17 years, was 75.9% on average for the period of 2016-20, much higher than for other age groups: for those aged 18 to 64 the poverty rate was 48.5%, and for Dominicans aged over 64 it was 45.2%. Furthermore, the child/youth poverty rate among Dominicans was substantially higher than the prevailing rate among the overall population in Puerto Rico. For the period of 2016-2020, the child/youth poverty rate for the overall population of the Island was 57.2%, which was almost 20 percentage points lower than the equivalent percentage for Dominican children and youth.

It should be noted that the high child poverty rate among Dominicans is likely directly connected to the economic crisis and stagnation in Puerto Rico over the last 15 years and its singular impact on Dominicans. As Table 11 shows, back in 2000, the child poverty rate among Dominicans was

lower than the prevailing rate in the overall population, and other age groups also displayed lower or similar poverty rates when compared to the rest of the population. Indeed, the economic crisis on the Island has hit particularly hard Dominican children and youth, whose poverty has risen by almost 20 percentage points since 2020, while for the Puerto Rican population overall the children/youth poverty has not increased at all.

Table 11

Poverty by Age Group, Dominicans in Puerto Rico, 2000-2020

Age Group	Percentage of Persons in the Age Group Living Under the Poverty Line				
	Dominicans	Puerto Rico			
	2016-2020				
From 0 to 17 Years	75.9	57.2			
From 18 to 64 Years	48.5	41.9			
Over 64 Years	45.2	40			
	2005-2009				
From 0 to 17 Years	66.1	57.4			
From 18 to 64 Years	43.3	41.7			
Over 64 Years	44.7	43.4			
	20	000			
From 0 to 17 Years	58.4	58.9			
From 18 to 64 Years	46	44.6			
Over 64 Years	40	43.4			

Source: Data for 2000 are from the US Census of Population 5% PUMS; data for 2005-2009 and 2016-2020 are from the Puerto Rico Community Survey PUMS; authors' tabulations.

The comparatively high child poverty rates identified in this study should be a matter of urgent policy action. A substantial body of literature has now shown that children living in poverty are hurt in a variety of ways, both in terms of their immediate physical and psychological conditions, but also later in life, in terms of educational and labor market outcomes. As a recent report by the National Academy of Sciences concludes:

"the weight of the causal evidence does indeed indicate that income poverty itself causes negative child outcomes, especially when poverty occurs in early childhood or persists throughout a large portion of childhood" [Duncan and Menestrel (2019), p. 2].

In Puerto Rico, a recent study by the Instituto de Desarrollo de la Juventud (Institute for Youth Development) concluded: "Poverty hurts the healthy development of children, affecting cognitive development, nutrition, health, academic achievement, and exposure to crime. Clearly, some

children will be able to surpass the challenges imposed by poverty and will be successful. But it is not an easy task, and many children will fall behind... the consequences of child poverty go beyond the impact on the children themselves and their families. The loss of human capital linked to child poverty is costly for society and threatens the future prosperity of Puerto Rico." (Instituto del Desarrollo de la Juventud, 2020).

Reducing child poverty has been one of the policy objectives of the administration of President Joseph Biden. This goal was embodied in the American Rescue Plan of 2021, which temporarily increased the child tax credit from \$2,000 to \$3,000 for children under 17 and \$3,600 for children under six. Families in Puerto Rico are eligible for this tax credit. But policy proposals to reduce child poverty on a more lasting basis --both in the mainland U.S. and in Puerto Rico-- have been proposed but have not yet moved forward.¹⁰

Family and Household Structure

One of the forces accounting for the higher poverty rates among children and youth (and this holds for both Dominicans and the rest of the population) is family structure. Because of the substantially lower income earned by women in the labor market, families headed by separated or divorced women with children or other family members living in the household, as well as single women with children, tend to have lower per capita income and higher poverty than male-headed couples and married-couple families. This link has been documented for both mainland U.S.¹¹ and Puerto Rico. 12 As a result, the percentage of poor children residing in female-headed households is much higher.¹³

Based on the categories provided by the Census and the Puerto Rico Community Survey, one can determine the proportion of people residing in four different types of household: (1) female-headed households, which includes households in which women declare they are the heads of the household and where there are children or other family members living in the household but no spouse, (2) male-headed households, which includes households in which men declare they are the heads of the household and where there are children or other family members living in the household but no spouse, (3) households that declare they are a married couple, perhaps with children or other family members, and (4) other households, which include persons, male or female, living alone or co-habiting with each other but not married and without children or family members in the household.

The proportion of Dominicans residing in households headed by women on average in the period of 2016-20 was 33.6%, as reported by Table 12. For the overall Puerto Rican population, the equivalent proportion was slightly lower, at 31.2%.

¹⁰ The Build Back Better Legislation promoted by the Biden Administration, which has not passed the Senate, would make the tax credit permanent. Policy proposals in Puerto Rico targeting child poverty have not been approved by the Fiscal Control Board that has controlled government spending in Puerto Rico under its bankruptcy proceedings [see Diaz Ramos (2021)].

¹¹ Family structure has been one of the key forces associated with poverty in the U.S.; see for example Aber et. al. (2015, chapter 3), Haskins (2015), and Bauer, Moss and Stambaugh (2019).

¹² See Mayol-García (2019), and Colon-Lugo and Sparks (2013).

¹³ For instance, in the continental U.S., 13% of Hispanic children living in married-couple families in 2019 were poor, while the equivalent figure for Hispanic children in female-headed households was 41% (Federal Interagency Forum on Child and Family Statistics, 2021), p. 14.

Table 12

Distribution of the Population, by Type of Household

Average for the Period of 2016-2020

Type of Household	Percentage of Persons Residing in Each Type of Household		
	Dominicans	Puerto Rico	
Female-headed	33.6	31.2	
Male-headed	11.2	9.9	
Married Couple	42.4	46.3	
Other	12.8	12.6	

Source: Data are from the Puerto Rico Community Survey PUMS; authors' tabulations.

Table 13 presents the average poverty rates for female-headed and other households among Dominicans from 2015-2019. For Dominicans, 62.3% of persons living in female-headed households were poor, while among male-headed households it was 53.7% and 39.3% for married-couple households. For the overall population in Puerto Rico, the poverty rate among persons in female-headed households was 58.4%, compared to 47.1% in male-headed households, and 28.7% among married-couple households.

Table 13

Poverty in Puerto Rico, by Type of Household
Average for the Period of 2016-2020

Type of Household	Percentage of Persons under the Poverty Level		
	Dominicans	Puerto Rico, Overall	
Female-headed Household	62.3	58.4	
Male-headed Household	53.7	47.1	
Married Couple	39.3	28.7	
Other	61.1	66	

Source: Data are from the Puerto Rico Community Survey PUMS; authors' tabulations.

The data presented in this section has documented the lower per capita income and higher poverty rates suffered by Dominicans in Puerto Rico. It also shows that this is a relatively recent phenomenon, as the reverse was true 20 years ago, when Dominicans had higher per capita income and lower poverty than the rest of the population. What are the economic forces that have influenced the shifting relative social and economic status of Dominicans? The next section examines the basic labor market indicators for the Dominican population relative to other groups on the Island. A later section will examine the critical role played by educational attainment.

LABOR MARKET OUTCOMES OF DOMINICANS IN PUERTO RICO

The key labor market outcomes examined in this section include: (1) labor force participation, (2) employment or unemployment rate of those persons who are in the labor force, (3) earnings received by those who are employed, (4) industrial and occupational distribution of the employed workers, and (5) self-employment versus wage/salary employment.

Labor Force Participation

Table 14 presents the average labor force participation rates in Puerto Rico. This represents the proportion of the population aged 16 years or older who were either (1) working (employed) or (2) on layoff from a job or without a job but actively seeking employment (unemployed). Those who were not in the labor force include persons who were not employed and also were not looking for a job; these could be retired persons, those in school full-time, on disability, etc.

As can be seen from Table 14, Dominicans have substantially higher labor force participation rates than the overall population in Puerto Rico. On average, for the period of 2016 to 2020, the participation rate for Dominicans was 63.6% while it was only 44.3% for Puerto Rico overall. This gap has persisted over time. Back in 1990, the participation rate among Dominicans was 63.3% while it was 47.3% for the overall population.

Table 14

Labor Force Participation Rates of Dominicans in Puerto Rico, 1990-2020

Persons 16 years of age or older

Year or Time Period	Labor Force I	Labor Force Participation Rate (%)		
	Dominicans	Puerto Rico		
2016-2020	63.6	44.3		
2005-2009	68.7	47.2		
1990	63.3	47.3		

Source: 1990 data are from the US Census of Population 5% PUMS; data for 2005-2020 are from the Puerto Rico Community Survey PUMS; authors' tabulations.

The higher labor force participation rates of Dominicans hold for both men and women, as Table 15 shows. On average during the period of 2016-2020, the labor force participation rate of Dominican men was 73.7% while it was 50.5% overall for men in Puerto Rico. For women, Dominicans had a 55.7% labor force participation rate in 2005-2019, while for the overall female population, it was 39.%.

Table 15 also shows that the gap in labor force participation rates between Dominicans and the rest of the population in Puerto Rico has existed for a long period of time, although they declined for both groups in the last decade, as displayed in Table 15. For instance, for Dominican men, the average labor force participation rate dropped from approximately 78% to 74% between the

periods of 2005-2009 and 2016-2020. For the overall male workforce in Puerto Rico, the corresponding decline was from 54.3% to 50.5%. The same trend is observed among women. For Dominican women, the average labor force participation rate dropped from 61.3% to 55.7% between the periods of 2005-2009 and 2016-2020. For the overall female workforce in Puerto Rico, the corresponding decline was somewhat smaller, from 40.9% to 39.7%.

Table 15

Labor Force Participation Rates, by Sex, 1990-2020

Persons of 16 years of age or more

Population Group	Labor Force Participation Rate (%)		
By Year or Time Period	Male	Female	
	2016-2020		
Dominican Population	73.7	55.7	
Puerto Rico Overall	50.5	39.7	
	2005-2009		
Dominican Population	78	61.3	
Puerto Rico Overall	54.3	40.9	
	1990		
Dominican Population	77.8	52.1	
Puerto Rico Overall	58.5	37.1	

Source: 1990 data are from the US Census of Population 5% PUMS; data for 2005-2009 and 2016-2020 are from the Puerto Rico Community Survey PUMS; authors' tabulations.

One explanation for the higher labor force participation of Dominicans is the fact that Dominicans have an older median age than the overall population in Puerto Rico and, except for the population over 50, labor force participation rates rise with age. Table 16 presents the average labor force participation rates for Dominicans and for Puerto Rico overall for the period of 2016 to 2020. As can be seen, Dominican labor force participation rates exceed those of the rest of the population in Puerto Rico for all age groups. For instance, among the 40 to 49 age group, Dominicans had an 84.7% participation rate while for the population of the Island overall it was 69.5%. Similarly, for the population aged 50 and over, Dominicans had a 51.9% labor force participation rate while for Puerto Rico it was less than half, equal to 25.4%.

Table 16

Age-Specific Labor Force Participation Rates,
Average for the Period of 2016-2020
Persons 16 years of age or older

Age	Labor Force Participation Rate (%) Dominicans Puerto Rico	
From 16 to 19 Years	21.7	14.4
From 20 to 29 Years	70.2	61
From 30 to 39 Years	80.9	75.5
From 40 to 49 Years	84.7	69.5
50 Years or More	51.9	25.4

Source: 1990 data are from the US Census of Population 5% PUMS; data for 2005-2009 and 2016-2020 are from the Puerto Rico Community Survey PUMS; authors' tabulations.

Unemployment

The unemployment rate refers to the proportion of persons in the labor force who: (1) are not employed but are actively looking for employment, or (2) have been laid-off from their jobs but are expecting to return to work. Both the U.S. Census and the Puerto Rico Community Survey (PRCS) ask a series of questions seeking to determine whether a person is unemployed or not. These questions are the data source for unemployment rates presented here.¹⁴

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¹⁴ There is another source of unemployment information for Puerto Rico, which is the monthly labor market survey administered by the Puerto Rico Department of Labor and Human Resources called Puerto Rico Labor Force Survey ("Encuesta del Grupo Trabajador" or EGT in Spanish). Unfortunately, the estimates of unemployment produced by the Census/PRCS, and the EGT differ substantially from each other, with the latter providing unemployment rates that are lower --sometimes six to nine percentage points lower-- than the Census/PRCS surveys. Although in the past the questions asked by the two types of survey to determine whether a person was unemployed were somewhat different, beginning in 2006 the questions have become essentially the same. Yet, the surveys still give widely different answers as to how much unemployment exists in the Island. We cannot assess in this study which type of survey provides a more accurate picture of unemployment in Puerto Rico. However, note that the EGT is a small survey, consisting of 3,500 households [Departamento del Trabajo y Recursos Humanos (2020] while the annual PRCS interviews 36,000 households [Census Bureau (2020)] and the decennial Census 5% PUMS has an even larger sample. The EGT has also diverged widely from the results of another survey, the Quarterly Census of Employment and Salaries, particularly in the extent of the reduction of employment in Puerto Rico during the pandemic [see Departamento del Trabajo y Recursos Humanos (2020)]. Other researchers have noted that the differences in results may be connected to differences in the timing of the interviewing process [see the comments by Jose Caraballo Cueto, Professor at the University of Puerto Rico, in Garofalo (2019)]. Others point out that the importance of the informal sector in the Island could give rise to differences in how the respondents react to the questions raised by the interviewers in the two types of surveys, one of which is conducted by the US Census (the ECPR and the decennial Census) while the other (the EGT) is carried out by the local government in Puerto Rico (see Enchautegui, 2006). And, finally, it could just be a matter of problems with EGT's small sample, which could easily underestimate or overestimate unemployment rates among various specific subgroups of the labor force in the Island (see Vázquez Colón, 2022). Whatever the reason for the differences in estimates of unemployment -and other labor force indicators—by the two types of surveys, it should be a matter for serious research in the future. Since the Puerto Rico Labor Force Survey is not large enough --nor does it ask the required ethnicity/nativity questions-- to provide an accurate depiction of unemployment for Dominicans in the Island, we rely on the PRCS/Census data.

As Table 17 shows, on average for the period of 2016-2020, Dominicans aged 16 and over had an unemployment rate that was three percentage points higher than the overall population in Puerto Rico: the unemployment rate among Dominicans was 19%, compared to 15.4% for the overall population. However, in earlier periods, Dominicans had *lower* unemployment rates that the overall population. For instance, on average, the unemployment rate among Dominicans in the period of 2005 to 2009 was 15.2% compared to 16.2% for Puerto Rico overall, and going back to 1990, the Dominican unemployment rate was almost three percentage points lower than the prevailing unemployment rate in the overall population.

Table 17
Unemployment Rate, Dominicans in Puerto Rico*
Persons 16 Years of Age or More

Year or Time Period	Unemployment Rate (%)		Unemployment Rate (%)	
	Dominicans	Puerto Rico		
2016-2020	19	15.4		
2005-2009	15.2	16.2		
1990	17.4	20.2		

^{*} As determined from the Puerto Rico Community Survey and the U.S. Census of Population.

Source: The data for 1990 are from the US Census of Population 5% PUMS and the data for 2005-2009 and 2016-2020 from the Puerto Rico Community Survey (PRCS) PUMS; the authors' tabulations.

There is a slight difference in the unemployment rate of Dominicans when disaggregated by sex. Table 18 shows an average for the unemployment rate in the period of 2016 to 2020, decomposed by gender. Among Dominican men, the unemployment rate was 18.2% and for women, it was 19.8%. For Puerto Rico overall, there was no difference in unemployment by gender, with the unemployment rate equal to slightly over 15% for both men and women.

Table 18

Unemployment Rate, by Sex
Average for the Period of 2016-2020
Persons 16 years of Age

Population Group	Unemployment Rate (%)		
	Male	Female	
Dominicans	18.2	19.8	
Puerto Rico Overall	15.3	15.6	

Source: Puerto Rico Community Survey PUMS for 2016-2020; authors' tabulations.

Age makes a major difference in determining unemployment rates, which are traditionally higher for younger populations. Indeed, as Table 19 shows, Dominicans in Puerto Rico aged 16 to 19 years had a whopping 61.7% unemployment rate, compared to an unemployment rate of 25.5% among the 20 to 29 population, 21.4% for the 30 to 39 age group, 16.4% for those 40 to 49 and 16.6% for those aged 50 and over. This age-unemployment profile also prevailed among the workforce in Puerto Rico overall. For the Island's labor force aged 16 to 19, the unemployment rate was 50.3%, but it dropped to 24.8% for those aged 20 to 29, 14.3% for those 30 to 39, 11.4% for those 40 to 49, and 8.8% for those aged 50 and above.

Table 19

Unemployment Rates in Puerto Rico, by Age
Average for the Period of 2016-2020,
Persons 16 Years of Age or More

Age Group	Unemployment Rate (%)		
	Dominicans	Puerto Rico	
From 16 to 19 Years	61.6	50.3	
From 20 to 29 Years	25.5	24.8	
From 30 to 39 Years	21.4	14.3	
From 40 to 49 Years	16.4	11.4	
50 Years or More	16.6	8.8	

Source: Puerto Rico Community Survey PUMS for 2016-2020; authors' tabulations.

Industrial and Occupational Distribution of the Labor Force

The industrial sector and occupation of a person are both closely connected to their socioeconomic status. Although the industry and occupation in which workers are employed depends on their educational attainment, age, and other characteristics, it is also true that the specific situation of those industries and occupations can have ups and downs and can cause variations in unemployment rates and wages. Expanding industries and occupations can offer greater employment opportunities and salaries, while collapsing sectors can lead to higher unemployment and lower wages among its workers. In the case of Puerto Rico, for example, the decline of manufacturing noted earlier in this report has caused greater unemployment and lower income among many workers who form part of this sector. On the other hand, industries such as the information and technology sector as well as health services have expanded over the years, offering more abundant employment opportunities.

Table 20 presents the industrial composition of the labor force in Puerto Rico, compared to the Dominican labor force. The data reflect the sector of employment of persons in the labor force in the period of 2016-2020. For people who were employed, this was their actual employment at the time of interview (or one week earlier). For the unemployed, it is the industry of their last job.

Table 20

The Industrial Distribution of the Labor Force
Average for the period of 2016 to 2020

Persons in the Labor Force, 16 Years of Age or Older

Industry	Puerto Rico (%)	Dominicans (%)
Agriculture, mining, fisheries and forestry	2.3	1.7
Construction	5.7	13.2
Finance, Insurance and Real Estate	4.7	2.9
Manufacturing Industry	7.8	3.5
Public Administration	7.6	1.8
Service Sector	37	41.6
Transportation, Communications and Utilities	5.2	3.3
Wholesale and Retail Trade	22	22.2
Others	8	9.8

Source: 2016-2020 Puerto Rico Community Survey, PUMS; authors' tabulations.

The industrial distribution of Dominican workers in Puerto Rico did not differ substantially from that of the overall population. As Table 20 shows, for the period of 2016-2020, the sectors where Dominicans clustered were the service sector (41.6% of all workers) and the wholesale and retail trade sectors (22.2%), which were also the top employment industries for the overall population (equal to 37% and 22%, respectively).

There were substantial differences in a few sectors, however. Dominicans were over-represented in the construction industry, where 13.2% of Dominican workers were employed, compared to 5.7% of the overall population. On the other hand, Dominicans were underrepresented in manufacturing, where 3.5% of Dominican workers were employed versus 5.2% in the general population, and in public administration, where 1.8% of Dominican workers were employed compared to 7.6% among the overall population.

Table 21 shows the occupational distribution of the labor force for Dominicans and for the overall population in Puerto Rico. As can be seen, in the period of 2016-2020, Dominicans were over-represented in service occupations, which accounted for 36.7% of Dominican workers. By comparison, the equivalent proportion among the overall Puerto Rican workforce was 19.4%. On the other hand, Dominicans were sharply under-represented among management and professional occupations, which accounted for 15.8% of all Dominicans in the labor force, as compared to 27.4% in Puerto Rico overall.

Table 21

Occupational Distribution of the Labor Force
Average for the period of 2016 to 2020
Persons in the Labor Force

Occupation	Puerto Rico (%)	Dominicans (%)
Management and Professional	27.4	15.8
Technical, Sales and Administrative	15.4	11.8
Service Workers	19.4	36.7
Precision Production, Craft and Repair	8.3	10.2
Operators, Fabricators and Laborers	11.6	14.2
Farming, Forestry and Fishing	2.7	1.8
Other	15.2	9.5

Source: 2016-2020 Puerto Rico Community Survey, PUMS; authors' tabulations.

Public Sector Employment

There are two major sectors of employment in any economy: the public sector, which includes government employees, and the non-public sector, which includes the private sector as well as other non-governmental organizations and institutions. In Puerto Rico, public sector employees, in the state, local and federal government and in jobs ranging from schoolteachers and professors to public administrators, have traditionally represented a substantial source of employment. Although in recent years the austerity programs implemented in response to the fiscal crisis have reduced public sector employment, in the past government jobs accounted for more than 30% of employment in the Island.

Dominicans are dramatically underrepresented in the public sector workforce. As Table 22 shows, on average for the period of 2016-2020, public sector employment accounted for 11.2% of the overall jobs in which Dominicans were employed. Among the Puerto Rican population in general, the percentage of workers employed in the public sector was more than double, equal to 24.4% in the period of 2016 to 2020. This picture did not change much with respect to the previous five-year period. On average, for the years running from 2005 to 2009, public sector employment among Dominicans accounted for 8.8% of total employment among this population, while for Puerto Ricans overall, public sector employment accounted for 27.9% of total employment.

The lower rates of participation of Dominicans in government jobs is the more significant when you realize that average annual earnings in the public sector significantly exceed those in the rest of the economy on the Island. The average earnings of full-time, year-round public sector employees in Puerto Rico during the 2016 to 2020 period was \$25,258, compared to \$20,102 for

non-public sector employees. This constitutes more than a quarter (26.5%) higher annual earnings for government employees.

The reasons for the differences in the rate of participation of Dominicans versus the Puerto Rican population overall in public sector employment should be explored in future research. These gaps can emerge due to differences in demographic characteristics, but they could also represent patterns of institutional exclusion that should be addressed.

Table 22

Distribution of Employment: Public Versus Non-Public Sector
Average for the period of 2016 to 2020
Full-Time Employees

Sector of Employment	Puerto Rico	Dominicans
Public Sector	24.4%	11.2%
Non-Public Sector	75.6 %	88.8 %

Source: 2016-2020 Puerto Rico Community Survey, PUMS; authors' tabulations.

Self-Employment versus Wage-Salary Employment

Persons can participate in the labor force as either employee –who are paid a salary or wage-- or they can participate as owners of their own businesses. Table 23 presents the proportions of persons employed in these two types of ventures in Puerto Rico. As can be seen, Dominicans have higher rates of self-employment than the overall population of the Island. On average, for the period of 2016-20, as much as 37.9% of Dominican men and 35.5% of Dominican women were self-employed while the equivalent proportions for Puerto Rico were 16.6% for men and 7.9% for women.

And as Table 23 depicts, the rates of self-employment among Dominicans have been rising. Back in 2000, 21.5% of Dominican men and 20.9% of Dominican women were self-employed, substantially lower than the equivalent proportions in 2005-2009 and in 2016-20, as just presented.

The high and rising proportion of Dominicans who are self-employed may be explained by a variety of factors.

First, it may reflect the difficulties faced by a largely immigrant population that has had limited participation in traditional employee-based sectors of employment in Puerto Rico, such as manufacturing and the public sector, and has thrived instead in sectors such as services and trade, where self-employment is more common [see Persad (2012)].

Table 23

Self-Employment versus Wage/Salary Employment, by Sex, 2016-2020

Persons 16 Years of Age or Older

Average for the Period of 2016-2020

Population Group	Self-Employed (%)		Wage and Salary Employment (%)		
Year or Time Period	Male	Female	Male	Female	
2016-2020					
Dominicans	37.9	35.5	62.2	64.5	
Puerto Rico Overall	16.6	7.9	83.4	92.1	
2005-2009					
Dominicans	27.8	26.7	72.3	73.3	
Puerto Rico Overall	16	6.6	84	93.4	
2000					
Dominicans	21.5	20.9	78.5	79.1	
Puerto Rico Overall	13.5	4.9	86.5	95.1	

Source: 1990 data are from the US Census of Population 5% PUMS; data for 2005-2009 and 2016-2020 are from the Puerto Rico Community Survey PUMS; authors' tabulations.

Second, it may also be linked to greater involvement of Dominicans in the informal sector, which may account for as much as 30% of Gross National Product in Puerto Rico [Estudios Tecnicos (2010)]. In developing countries, and Puerto Rico as well, a substantial portion of the self-employed are part of the informal sector [see de Soto (1989) and Vanek et. al. (2014)]. These tend to be small enterprises in size, they are also labor-intensive and generate relatively low net income. [La Porta and Shleifer (2014)]. Since they are heavily dependent on direct consumer demand for their products and services, their success is closely tied to business cycles in the economy. The economic crisis in Puerto Rico in recent years may have had a disproportionate impact on the informal sector of the economy and if a large share of the Dominican population has been part of this segment of the economy, it could explain their declining income per capita and rising poverty.

The Earnings of Dominican Workers

Earnings refer to the pre-tax wage and salary income that workers receive from their employers during a given period. Most of the labor force is employed on a full-time basis and the analysis here focuses now on the earnings of these workers, which represent the core of the labor force.

Table 24 shows the average earnings of workers employed full-time, year-round in 2016-20.¹⁵ As can be seen, the average annual earnings of Dominicans were lower than those prevailing among the overall workforce in Puerto Rico. For Dominican men, annual earnings in 2016-20 were on average equal to \$30,328, compared to \$33,269 for the overall male worker population. For women, the average annual earnings of Dominicans in 2016-20 were equal to \$24,859 while it was \$30,493 for Puerto Rico overall.

Table 24 also shows the changes over time in the earnings of Dominican workers as well as for the overall Puerto Rican population. The table compares average annual earnings in 2016-2020 with those in 1999, where the earnings in 1999 have been adjusted for inflation and converted into 2020 dollars. The average earnings of both Dominican workers and Puerto Rican workers generally declined over these two decades. For Dominican men, the drop in wages was from \$31,120 in 1999 to \$30,328 in 2016-20 while for Dominican women the decline was from \$28,565 in 1999 to \$24,859 in 2016-20. For the overall male workforce in Puerto Rico, the reduction in earnings was from \$34,821 to \$33,269. The only group that showed some increase in wages, albeit a small one, was the overall female workforce in Puerto Rico, whose wages went up from \$28,822 in 1999 to \$30,493 in 2016-20. These figures starkly reflect the stagnation of the economy of Puerto Rico in the last two decades.

Table 24

The Annual Earnings of Dominican Workers, 1999 to 2020

Year-Round, Full-Time Employed persons 16 years of age or older

Population Group	Average Annual Salary		
	Male	Female	
	Average for 2016-2020		
Dominicans	\$30,328	\$24,859	
Puerto Rico	\$33,269	\$30,493	
	1999		
Dominicans	\$31,120	\$28,565	
Puerto Rico	\$34,891	\$28,822	

^{*} All the data has been adjusted for inflation and expressed in 2020 dollars.

Source: Data for 2016-2020 from the Puerto Rico Community Survey PUMS; data for 2000 from the 2000 US Census 5% PUMS; authors' tabulations.

As with unemployment rates, there are a variety of forces influencing earnings, but key among these variables is educational attainment. There is a strong positive correlation between earnings and schooling. Higher educational attainment raises worker productivity and leads to increased wages. Education is also used by employers as a screening device, with less-educated workers outranked by more-educated workers in the rationing of entry-level jobs and higher-paying promotions.

¹⁵ Full-time workers include persons employed year-round (50 to 52 weeks per year) at 40 hours per week.

Note that, for both Dominicans and the overall population in Puerto Rico, average earnings were lower among women, even though —as it will be shown later—women on average tend to have greater educational attainment than men. This gender gap affects more severely Dominicans because a much larger proportion of their population in Puerto Rico consists of women, as was established earlier.

Education and Earnings

Table 25 shows the average annual wage and salary income of full-time, year-round Dominican workers in Puerto Rico in 2016-20 decomposed by educational attainment. The average earnings of Dominican workers who had not received a high school diploma were equal to \$16.985. But those with a high school diploma (but no college education) had average annual earnings of \$22,783. For workers with some college education, but not a four-year college diploma, the annual earnings rise to \$24,771 and for those with a college degree, the average income increases to \$41,141. The positive connection between educational attainment and earnings holds as well for the overall population in Puerto Rico.

Given the critical importance of education –particularly completing a college education-- in determining earnings, the next section examines the educational attainment of Dominicans.

Table 25

The Rate of Return to Education in Puerto Rico
Annual Earnings, By Educational Attainment Group
Average for the period of 2016 to 2020
Year-Round, Full-Time Employed persons 16 years of age or older

Highest Educational Level Reached	Average Ar	Average Annual Salary	
	Puerto Rico	Dominicans	
Less than High School	\$20,053	\$16,985	
High School Diploma	\$22,190	\$22,783	
Associate degree or some college education	\$25,180	\$24,771	
College Degree or More	\$42,631	\$41,141	

Source: 2016-2020 Puerto Rico Community Survey PUMS; authors' tabulations.

EDUCATIONAL ATTAINMENT OF THE DOMINICAN POPULATION

This section presents the educational outcomes of the Dominican population in Puerto Rico, compared to the overall population of the Island. The data are for persons 25 years of age or older and it shows the percentage of persons who had completed various levels of schooling, including (1) persons who had not received a high school diploma or equivalency, so they had elementary school, middle school or perhaps up to 11 or 12 years of schooling but no high school diploma,

(2) those with a high school diploma or diploma, but had not completed a year of college, (3) those with some college education (completing either one or two years of college or an associate degree), and (4) those with a college degree or more (master's, doctoral, etc.).

Table 26 shows that the Dominican population has lower educational attainment than the overall population in Puerto Rico. The proportion of Dominicans 25 years of age or older who had less than a high school degree or equivalent from 2016 to 2020 was 38.6%, compared to 22.1% for the overall population. At the other extreme, 16.4% of Dominicans had completed a college degree, compared to 26.3% in the overall population of the Island.

Table 26

The Educational Status of the Dominican Population
Persons 25 years of age or older

Population Group	pulation Group Percentage of the		he Population with:	
	Less than a High School Diploma	High School Diploma or Equivalent, But Not More	Some years of College Education, but not a College Degree	College Degree or More
	Average for 2016-2020			
Dominicans	38.6	26.8	18.2	16.4
Puerto Rico Overall	22.1	30.5	21.1	26.3
		2000		
Dominicans	51	25.3	11.7	12
Puerto Rico Overall	35.7	29.4	16.7	18.2

Source: Data for 2000 from the 2000 US Census of Population 5% PUMS; data for 2016-2020 from the Puerto Rico Community Survey PUMS; authors' tabulations.

Educational attainment varies by sex. In fact, on average for the period of 2016-20, women had higher educational attainment than men, among both Dominicans and the population in general.

Table 27 shows the distribution of educational attainment of persons 25 years of age or older decomposed by sex. Among Dominicans, 18.8% of women had a college degree and an additional 18.8% had completed some college education (without a college degree), totaling 37.6%. By comparison, 13% of Dominican men had a college degree and 17.4% had completed some college education, up to 30.4%, substantially lower than women.

The gap in educational attainment by sex is also reflected in the general population in Puerto Rico. As Table 27 reports, among women in Puerto Rico, 30.5% had completed college in 2016-21 and 21.6% had completed some college education, adding up to 52.1%. For men, the corresponding figures were 21.4% with a college degree and 20.4% with some college, adding up to 41.8%, again substantially lower than for women.

Table 27

The Educational Status of the Dominican Population, By Gender
Average for the period of 2016 to 2020
Persons 25 years of age or Older

Population Group	Percentage of the Population with:			
	Less than A High School Diploma	High School Diploma or Equivalent, But Not More	Some Years of College Education, but not a College Degree	College Degree or More
	Dominicans			
Male	42.4	27.2	17.4	13
Female	36	26.4	18.8	18.8
	Puerto Rico Overall			
Male	24.4	33.8	20.4	21.4
Female	20.2	27.7	21.6	30.5

Source: 2016-2020 Puerto Rico Community Survey PUMS; authors' tabulations

Given the strong link between education and labor market outcomes, the lower educational attainment of Dominicans can help explain their shortfall in per capita income relative to the overall population of the Island as well as their higher poverty rates, as identified earlier. In the past, the combination of a strong economy in Puerto Rico with high Dominican labor force participation rates managed to produce economic indicators that surpassed those for the overall population. But the weak Puerto Rican economy in the last 15 years makes the educational attainment gap stand out at this moment in time as a determinant of economic progress among Dominicans.

Despite the lower educational attainment of Dominicans relative to the overall population in Puerto Rico, there has been substantial progress over time. Table 28 shows the proportion of Dominicans who completed one year of college or more from 2000 to 2020, compared with the equivalent for the overall population in Puerto Rico. As can be seen, both Dominican men and women have made considerable progress, just as the overall population in Puerto Rico has. Among Dominican women, the proportion who attained one year of college or more rose from 24.1% in 2000 to 37.6% from 2016 to 2020. For Dominican men, the increase was from 23.2% in 2000 to 30.4% from 2016 to 2020.

Table 28

The Educational Progress of the Dominican Population, 2000-2020
Persons 25 years of age or older

Population Group	Percent of the Population Completing College or Some College		
	Male	Female	
	2016-2020		
Dominicans	30.4	37.6	
Puerto Rico	41.8	52.1	
	2005-2009		
Dominicans	28	29	
Puerto Rico	35.1	43.5	
	2000		
Dominicans	23.2	24.1	
Puerto Rico	31.1	37.5	

Source: 2000 U.S. Census of Population 5% PUMS; 2016-2020 and 2005-2009 from the Puerto Rico Community Survey PUMS; authors' tabulations

CONCLUSIONS

This report has presented a comprehensive and up-to-date analysis of the demographics and socioeconomic status of Dominicans in Puerto Rico and its changes over time. We describe a community that grew because of massive migration in the eighties and nineties and has gradually evolved over the years, encountering a diversity of experiences, some of the success and others of great challenge, all of it alongside the highs and lows that have confronted all residents of the Island in the last 40 years.

We find that the size of the Dominican population has decreased considerably in the last decade. According to the official data based on the U.S. Bureau of the Census, the drop was from 69,283 in 2010 to 58,252 in 2021. If you add to these figures an estimate of the number of Dominicans that are not counted by the Census, the reduction of the Dominican population is from 95,466 in 2010 to 79,952 in 2021. And if you add persons with Dominican ancestry (who consider themselves Puerto Rican but were born in the Dominican Republic or had Dominican parents), the decline of the Dominican community in Puerto Rico is from 116,626 in 2010 to 93,175 in 2021. Nonetheless, this decline follows trends present in the general population as well, which have also dropped sharply because of massive emigration connected to economic stagnation and natural disasters that have deeply affected Puerto Rico.

Still, Puerto Rico remains among the US states/territories with the largest number of Dominican residents (number seven in 2020). In addition, Dominicans still constitute by far the largest

immigrant group in the Island and their population is growing as well through second and third generations born in Puerto Rico of Dominican parents. And as the economy of Puerto Rico recovers, one can expect migration from the Dominican Republic to rebound as well.

This report presents some disturbing findings regarding the recent socioeconomic status of the Dominican population in Puerto Rico. After decades of displaying an average income per capita that exceeded that of the rest of the population, Dominicans now have significantly lower income per capita and higher poverty rates relative to the rest of the population. And this economic malaise most severely affects Dominican children and youth. On average, from 2016 to 2020, the poverty rate among Dominicans aged 17 or younger was 75.9%, compared to 57.2% among the Island's population overall. This situation, in which three-quarters of Dominican children and youth live in poverty, requires serious policy attention. If not reversed, the high poverty among children and youth will have a devastating effect on the health, development, and well-being of the Dominican population.

There are multiple reasons for the gap that has emerged in the socioeconomic status of Dominicans and the rest of the population. In the labor market, Dominicans have sustained labor force participation rates that greatly exceed those of the rest of the population. This continues to the present. However, unemployment has risen, especially among the young, and the salaries of Dominican workers have declined significantly in the last decade, not only in absolute terms but also relative to the overall population in Puerto Rico. One explanation is that most Dominicans tend to work in the construction, service, and retail sectors, which are sectors of the economy closely subject to the whims of the business cycle. And the Puerto Rican economy has had a prolonged period of stagnation in the last 15 years, propelled by a fiscal crisis, hurricanes, earthquakes, and the COVID-19 pandemic. As a result, Dominican workers have suffered a disproportionate impact from these crises.

Furthermore, Dominicans have substantially higher rates of self-employment than the overall population of the Island. On average, for the period of 2016-20, as much as 37.9% of Dominican men and 35.5% of Dominican women were self-employed while the equivalent proportions for Puerto Rico were 16.6% for men and 7.9% for women. This sector of the economy –which consists often of small, entrepreneurial businesses— is also affected more intensely by economic crises, and so it has been in Puerto Rico, particularly after Hurricane Maria and the COVID-19 pandemic.

Another major factor affecting socioeconomic conditions is education. Unemployment rates tend to be lower and salaries higher for those who have greater schooling, especially for those who have completed some college education. And Dominicans have much lower educational attainment when compared to the overall population in Puerto Rico. Among Dominican women, the percentage who had completed college was 18.8% on average from 2016 to 2020. compared to 30.5% among women in the Island overall. Among men, 13% of Dominicans had a college diploma, compared to 21.4% of the population overall. Although educational attainment among Dominicans has increased over time, it has not been sufficient to counteract the rising role of education in the labor market. And this has had severe economic consequences for Dominicans in recent years. Raising school retention rates and college enrollment rates should be a high priority in reversing the recent decline in the socioeconomic status of Dominicans.

There is an additional force disproportionately influencing the socioeconomic status of Dominicans in Puerto Rico. This is the gender gap, which maintains a significant economic disadvantage for women in the labor market despite their substantially higher educational attainment when compared to men. This affects Dominicans in a disproportionate matter because the percentage of women in the Dominican population is substantially higher than for the rest of

the population (in 2020, close to 60% of the Dominican population in Puerto Rico consisted of females as compared to 53% among the overall population). The impact is particularly severe for women who are household heads living with children and/or other family members, who must manage their finances with lower salaries and more limited employment opportunities --compared to male-headed households and married couples- due to the gender gap in salaries.

Several topics have been identified in this report that need further research consideration. One of them is racial and ethnic bias and discrimination. This study has shown that Dominicans tend to self-identify in greater proportion as being black or mixed-race in comparison to the general population. In fact, on average from 2016 to 2020, as much as 34% of Dominicans declared their race as Black and 46% as mixed-race, as compared to only 11% of the rest of the population in the Island who self-identified as Black and 30% of mixed race. This racial gap can give rise to bias, segregation, and ostracism in society and in the labor market, as has been documented in the press and some academic studies. This report indicates that it should be a matter for further research, to determine what is its role in affecting the unemployment and salaries of Dominican workers, particularly among those who identify as Black.

Similarly, the research presented in this report is consistent with the presence of a substantial Dominican community that lives and works in social and economic enclaves, often categorized as being part of the so-called informal sector. Future studies should consider examining how life in these Dominican enclaves may influence the socioeconomic integration of Dominicans in Puerto Rico. Some international studies suggest a strong relationship between the preservation of immigrant culture and ethnic enclaves but there is controversy as to whether they help or isolate the migrants. In addition, further exploration of this subject should include the question of whether jobs in predominantly Dominican neighborhoods within Puerto Rico follow the discriminatory practices (based on gender or race) that may be present in the general labor market.

Despite the challenges facing Dominicans in Puerto Rico, a strong rebound appears likely. In fact, the same forces that caused the debacle of the last fifteen years may propel this recovery. The Puerto Rican economy appears to have turned a corner, propelled by the impending end of the government's bankruptcy proceedings and a massive 100,000 million influx of federal funding already assigned as part of economic recovery packages linked to the recent hurricanes and earthquakes as well as spending packages passed by the U.S. Congress, including President Biden's Inflation Reduction Act. There are now forecasts of potential labor shortages in various sectors, including construction, services, and commerce, in which Dominican workers have actively participated in the past. There has also been substantial progress made in educational attainment over the years. Among Dominican women, the proportion who attained one year of college or more rose from 24.1% in 2000 to 37.6 % on average from 2016 to 2020. For Dominican men, the increase was from 23.2% in 2000 to 30.4% in 2016-20. The combination of educational progress with an expanding economy is bound to lead to a turnaround of the Dominican population, both in terms of numbers and socioeconomic status.

In the meantime, one can only hope that as the Dominican population matures in Puerto Rico, and its visibility grows, alongside the implementation of new public policy initiatives aimed at alleviating the economic challenges of the past fifteen years, a bright future may be in the cards for Dominicans, Puerto Ricans, and the children of both.

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