

Gender Gaps in the English-speaking Caribbean: Education, Skills, and Wages

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1 Introduction

The Caribbean is a set of islands located south of North America, east of Central America, and north of South America. Culturally speaking, the region is highly diverse due to the large heterogeneity of ethnic origins (Africa, India, China, Java, and others), a characteristic that makes it rich in terms of cultural expressions. In the five English-speaking countries included in this study -The Bahamas, Barbados, Guyana, Jamaica, and Trinidad and Tobago-, political and societal institutions were replicated from British ones (Beuermann & Schwartz, 2018). These countries base their productive systems on commodities and services. Guyana and Trinidad and Tobago are commodity-based economies with a significant reliance on oil. The Bahamas, Barbados, and Jamaica base their economies on services, especially tourism, which comprise nearly 50 percent of The Bahamas and Barbados' GDP and 30 percent of Jamaica's.¹

The educational profile of the population also varies across these countries. Barbados and The Bahamas have relatively more educated populations, since they have the largest proportion of 25-to-65-year-olds with secondary education or more (87 and 82 percent of the total population respectively).² Barbados has the highest proportion of adults between 25 and 65 years old with a post-secondary or university degree, followed again by The Bahamas (39 and 31 percent, respectively), while in Trinidad and Tobago, Jamaica, and Guyana this proportion stands at 23, 18 and 9 percent, respectively.³ However, more than the quantity of education (i.e., years of education), the quality of education (i.e., actual learning) is key to skill development and growth, as shown by Hanushek & Woessmann (2012). While the Caribbean region has made considerable progress in terms of quantity or access to education, learning outcomes are still mixed, as illustrated, for example, by the relatively low passing rates on the Caribbean Secondary Examination Certificate (CSEC) taken at the end of secondary school. More important, as the available literature shows, is the existence of important gaps between male and female students in the English-speaking Caribbean in terms of education and labor market outcomes.

Historically, gaps favored boys over girls in terms of access to education and learning outcomes. More recently, they tend to favor girls, even if their labor market participation and wages tend to be lower and leading positions are mostly filled by men. Traditionally, access to education in the Caribbean was mostly reserved for males. Toward the end of the 20th century, however, Caribbean countries achieved gender parity at the primary and lower secondary levels.⁴ At

¹ Beuermann & Schwartz (2018).

² In Trinidad and Tobago and Jamaica this number is equal to 63 and 58 percent, and for Guyana, 29 percent.

³ Own calculations based on The Bahamas' 2014 Household Survey, Barbados' 2016 Survey of Living Conditions, Guyana's 2012 National Population and Household Census, Jamaica's 2018 Survey of Living Conditions, and Trinidad and Tobago's 2014 Survey of Living Conditions. For more information, see Section 6.2 of the Annex.

⁴ The current enrolment trends have only been in favor of women for the last two decades. Before that, in the Caribbean and globally, education was seen as "the business of men" (Bailey & Charles, 2010).



the upper secondary and tertiary levels, the trend is now reversed, with women having higher enrollment levels.⁵ Previous empirical evidence for countries in the English-speaking Caribbean suggested either parity or a female advantage in terms of school achievement at the primary level of education. However, not all boys underperform, nor do they do so in every subject. Although the gap in favor of females is seen in most subjects, with reading and English literature presenting the most notable differences (De Lisle, 2022), boys sometimes outperform girls in subjects like mathematics and physics (Figueroa, 2000, Bailey, 2003, 2004, cited in Ellis, 2018).

Despite higher investments in education, females' labor market outcomes are less favorable than those of males. Women have lower participation in the labor market and, among labor market participants, higher unemployment rates and lower wages than men. Indeed, women remain disproportionately under-represented in the employed labor force and over-represented in the unemployed labor force. They also have higher job-seeking rates, and, on average, lower earnings than their male colleagues at all levels of educational achievement.

Despite the importance of these phenomena, gender gaps in the Caribbean have not been as extensively studied as in other regions, such as other higher-income areas like the United States and Europe, or Latin America. More information is needed to better understand the underlying factors behind these gender gaps to develop sound policy recommendations that can improve males' performance in education and female outcomes in the labor market.

This document aims to fill this knowledge gap by exploring micro-level data on education and labor markets for five countries in the English-speaking Caribbean: The Bahamas, Barbados, Jamaica, Guyana, and Trinidad and Tobago. It provides a detailed examination of potential determinants, asking: What are the main characteristics of these gender gaps? Are they observed through the entire life cycle? Do they grow over time? What factors explain them?

To answer these questions, we study a variety of educational and labor market outcomes in the region. This analysis allows for the assessment of gender gaps in education and how they translate into labor market outcomes and trajectories.

Our main findings confirm trends in terms of boys' educational underachievement relative to girls across primary, secondary, and post-secondary levels. This gap holds true not only for the quantity of education, as measured by enrolment and completion rates, but also for the quality of education, or learning outcomes. Likewise, women are significantly less likely to be in the share of population "not in education, employment, or training" (NEETs) and more likely to complete a university

⁵ This trend is also seen in terms of repetition. According to the World Bank's World Development Indicators (WDI), repetition rate in the Latin American and Caribbean (LAC) region was 4.39 percent in 2018, with girls' rate being lower than that of boys': almost 4 vs. 5 percent. Particularly, in Trinidad and Tobago and Suriname, this gender gap in favor of girls exceeded 2 percentage points in 2012 (UNESCO, 2012). Beyond this brief analysis, there is a lack of detailed information in the English-speaking Caribbean regarding repetition rates. Availability of up-to-date data is needed to further analyze efficiency with a deeper focus.



degree. We explore in detail the mix of factors that could be influencing boys' underperformance in education, including social norms of masculinity related to controlling economic resources and providing financial support for one's family. These norms appear to particularly apply in the case of relatively younger cohorts. We find that gender differences in terms of human capital attained and self-selection into different industries only account for a fraction of the total wage gap. This implies that unobservable characteristics unrelated to labor productivity also play a significant role. These are commonly attributed to discrimination against women (Blau & Kahn, 2017) and suggest a likely segregation against them in Caribbean labor markets.

Overall, the analysis in this document confirms previously documented trends using updated data in both the educational and labor market spheres. We complement previous studies by: (a) following the English-speaking Caribbean population from primary school to the labor market; (b) assessing the existence of gender gaps in education and in the labor market separately; and (c) analyzing the relationship between them and how one affects the other.

This document is organized as follows. Section 2 explores gender gaps in education in terms of access and learning and describes the NEETs situation in the English-speaking Caribbean. It ends by exploring possible explanatory factors for the observed differences in education. Section 3 focuses on the labor market. It describes gender gaps in terms of labor force participation, wages, on-the-job training, and informality. It then analyses potential explanatory factors of the gender wage differences. Finally, Section 4 offers conclusions.



2 Gender Gaps in Education⁶

This section provides an in-depth analysis of the gender gaps present in the English-speaking Caribbean in terms of education outcomes, such as access, efficiency, and learning. It also includes a cohort analysis that assesses the evolution of these gaps, as well as a description of gender differences in terms of individuals “not in education, employment, or training” (NEETs).⁷ Finally, we review the available literature on possible explanatory factors for the documented educational differences.

2.1 Gaps in Access

Enrollment in primary and secondary school, as well as primary completion rates, are similar for girls and boys. However, secondary completion rates, as well as post-secondary enrollment, largely favor women.

2.1.1 Primary School⁸

Primary school net enrollment is high, above 97 percent in all the countries considered.⁹ Enrollment figures are mostly equivalent for girls and boys (see Figure 1). In comparison with other countries, the Caribbean region’s performance in net primary school enrollment has been more than satisfactory. According to the World Bank’s World Development Indicators (WDI) for Latin American and the Caribbean (LAC) as a whole, the net primary school enrolment rate in 2018 was 93.72 percent. It was 85.69 percent for small state economies in 2018,¹⁰ and 96.15 percent for high-income economies that year, which was roughly similar to the Caribbean.¹¹

⁶ For a full description of each country’s educational system and the assessments available, see Sections 6.3 and 6.4 in the Annex.

⁷ For a description of data sources, see Section 6.1 in the Annex.

⁸ The Bahamas’ Survey of Living Conditions does not include a variable to measure enrollment. Also, data is for individuals aged 15 or older, which impedes an analysis of primary school.

⁹ The net enrollment rate is the ratio between all students in the theoretical age group for a certain level of education enrolled in that level, and the total population in that age group. The gross enrollment rate is the ratio between all students enrolled in a certain level of education, regardless of age, and the official school-age population corresponding to the same level of education. Since over and under-aged students are included in this ratio, it can exceed 100 percent.

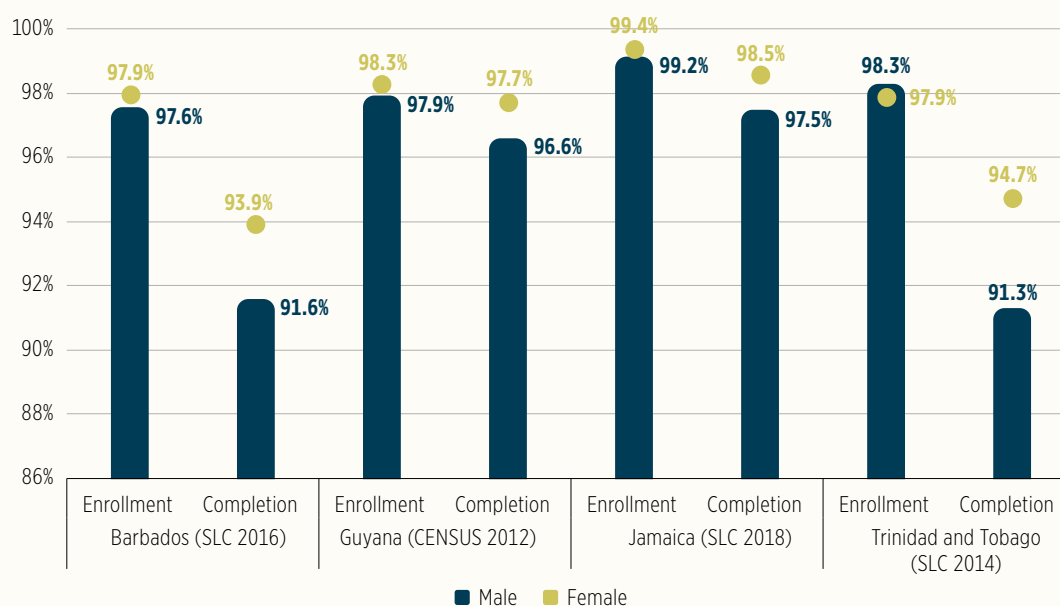
¹⁰ Small state economies are those with a population below 1.5 million that share challenges related to their economies’ size, their remote location and their state of isolation. This group includes: Antigua & Barbuda, The Bahamas, Dominica, Grenada, Kiribati, Marshall Islands, Micronesia, Nauru, Palau, St. Lucia, St. Kitts & Nevis, St. Vincent & the Grenadines, Samoa, Seychelles, Tonga, Tuvalu, Belize, Bhutan, Brunei, Djibouti, Equatorial Guinea, Estonia, Eswatini, Bahrain, Barbados, Cabo Verde, Comoros, Cyprus, Fiji, Iceland, Maldives, Guyana, Montenegro, Suriname, Mauritius, Malta, Sao Tome & Principe, Solomon Islands, Timor-Leste, Trinidad & Tobago, and Vanuatu.

¹¹ High-income economies include: Andorra, Antigua & Barbuda, Aruba, Australia, Austria, The Bahamas, Bahrain, Barbados, Belgium, Bermuda, British Virgin Islands, Brunei Darussalam, Canada, Cayman Islands, Channel Islands, Chile, China, Croatia, Curaçao, Cyprus, Czech Republic, Denmark, Estonia, Faroe Islands, Finland, France, French Polynesia, Germany, Gibraltar, Greece, Greenland, Guam, Hong Kong SAR (China), Iceland, Ireland, Isle of Man, Israel, Italy, Japan, Korea, Kuwait, Latvia, Liechtenstein, Lithuania, Luxembourg, Macao SAR (China), Malta, Mauritius, Monaco, Nauru, Netherlands, New Caledonia, New Zealand, Northern Mariana Islands, Norway, Oman, Palau, Panama, Poland, Portugal, Puerto Rico, Qatar, Romania, San Marino, Saudi Arabia, Seychelles, Singapore, Saint Maarten (Dutch part), Slovak Republic, Slovenia, Spain, St. Kitts and Nevis, St. Martin (French part), Sweden, Switzerland, Taiwan (China), Trinidad & Tobago, Turks and Caicos Islands, United Arab Emirates, United Kingdom, United States, Uruguay, Virgin Islands (United States).



Figure 1 also shows that primary school completion rates are relatively high as well, above 90 percent in all countries, and similar between girls and boys. Trinidad and Tobago is the only country showing a significant gap in favor of females (more than 3 percentage points). Caribbean performance has been either at par or better than other regions. According to the WDI, the primary school completion rate for Latin America in 2019 was 98.3 percent. The total primary school completion rate for small state economies was 87 percent in 2019, below the Caribbean countries under consideration, and 97 percent for high-income countries.

FIGURE 1 PRIMARY SCHOOL NET ENROLLMENT RATE AND COMPLETION RATE BY GENDER. BARBADOS (2016), GUYANA (2012), JAMAICA (2018), AND TRINIDAD AND TOBAGO (2014)



Note: data available for Barbados, Guyana, Jamaica and Trinidad and Tobago. The Bahamas' Household Budget Survey does not include a variable to measure enrollment. Also, data is for persons aged 15 or older, which impedes an analysis of primary school.

Source: own elaboration based on Barbados' 2016 Survey of Living Conditions, Guyana's 2012 National Population and Household Census, Jamaica's 2018 Survey of Living Conditions and Trinidad and Tobago's 2014 Survey of Living Conditions.

2.1.2 Secondary School

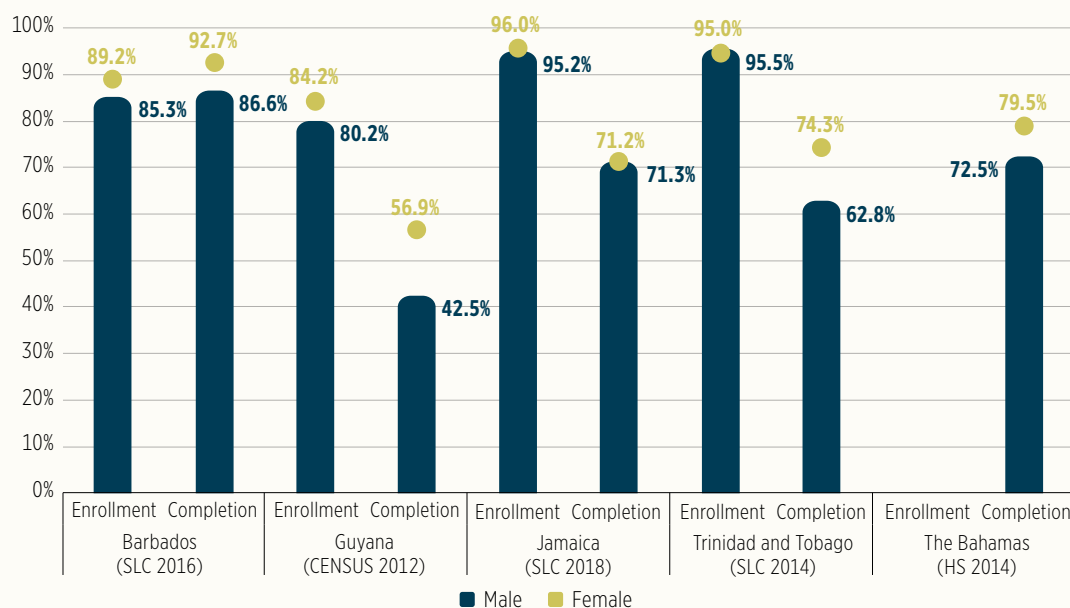
Jamaica and Trinidad and Tobago have the highest rates of secondary school net enrollment: 95.58 and 95.27 percent, respectively. Enrollment is 87.15 percent in Barbados. All these countries show statistically similar enrollment between girls and boys (see Figure 2). Guyana displays a relatively lower enrollment of 82.13 percent, along with statistically different rates between girls



and boys (84.16 for girls and 80.18 percent for boys). The overall enrollment figures compare favorably with respect to LAC (77.5 percent in 2018) and small state economies (58.13 percent in 2017), while they are in line with high-income countries (90.8 percent in 2018).

Guyana has the lowest secondary school completion rate, at 49.7 percent. It is followed by Trinidad and Tobago and Jamaica, with 68.54 and 71.24 percent, respectively. The Bahamas and Barbados have the highest rates, at 75.91 and 89.64 percent, respectively. When it comes to gender gaps, Guyana and Trinidad and Tobago display statistically significant differences in favor of females: 14.35 percentage points for Guyana, and 11.59 percentage points for Trinidad and Tobago (see Figure 2). According to data from the IDB's Learning Improvement Information Center (CIMA in Spanish),¹² the average completion rate for secondary education in LAC¹³ was 64.4 percent in 2018, 68.2 percent for girls and 60.6 percent for boys.

FIGURE 2 SECONDARY SCHOOL NET ENROLLMENT RATE AND COMPLETION RATE BY GENDER. BARBADOS (2016), GUYANA (2012), JAMAICA (2018), TRINIDAD AND TOBAGO (2014), AND THE BAHAMAS (2014)



Note: The Bahamas' Household Budget Survey does not include the necessary information to compute enrollment rates.

Source: own elaboration based on Barbados' 2016 Survey of Living Conditions, Guyana's 2012 National Population and Household Census, Jamaica's 2018 Survey of Living Conditions, Trinidad and Tobago's 2014 Survey of Living Conditions, and The Bahamas' 2014 Household Budget Survey.

¹² <https://cima.iadb.org/es/regional-overview/efficiency/early-school-leavers/>.

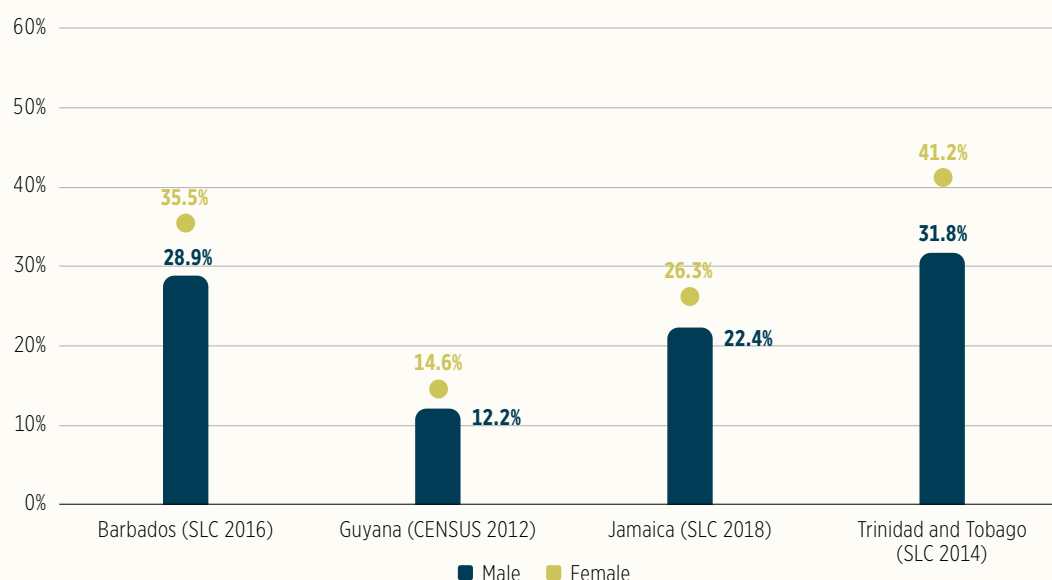
¹³ Percentage of people in a cohort between 3 and 5 years older than the theoretical age for the last grade of a certain level of education who completed that level (CIMA, 2018).



2.1.3 Post-Secondary Education

Figure 3 displays net enrollment rates for post-secondary education.¹⁴ Trinidad and Tobago has the highest post-secondary enrollment rate, at 36.48 percent, followed closely by Barbados with 32.14 percent. In Jamaica and Guyana, the rates are 24.44 and 13.4 percent, respectively. Figure 3 suggests generally higher enrollment rates for women. However, the observed differences are statistically significant only for Guyana and Trinidad and Tobago. These rates compare favorably overall with small state economies (20 percent in 2019) but are behind those of LAC (52.72 percent in 2019) and high-income countries (75.7 percent in 2019). Gender gaps consistently favor women in other regions as well. In 2019, gender gaps were 59.7 percent for women vs. 45.86 percent for men in LAC, 24.8 percent for women vs. 16.09 percent for men in small state economies, and 84.37 percent for women vs. 67.47 percent for men in high-income countries.

FIGURE 3 POST-SECONDARY NET ENROLLMENT RATE BY GENDER (AGES 18-23). BARBADOS (2016), GUYANA (2012), JAMAICA (2018), AND TRINIDAD AND TOBAGO (2014)



Notes:

1) data available for Barbados, Guyana, Jamaica and Trinidad and Tobago. The Bahamas' Household Budget Survey does not include a variable to measure enrollment.

2) post-secondary education includes all the degrees above complete secondary school and below a bachelor's degree.

Source: own elaboration based on Barbados' 2016 Survey of Living Conditions, Guyana's 2012 National Population and Household Census, Jamaica's 2018 Survey of Living Conditions and Trinidad and Tobago's 2014 Survey of Living Conditions.

¹⁴ Post-secondary education includes all the degrees above complete secondary school and below a bachelor's degree.



2.2 Gaps in Learning

Secondary and post-secondary learning gaps consistently favor women across Caribbean countries.

To measure gaps in learning, this subsection focuses on the results from two evaluations administered by the Caribbean Examinations Council (CXC). These are the Caribbean Secondary Education Certificate (CSEC – typically taken at the end of regular secondary school) and the Caribbean Advanced Proficiency Examination (CAPE – which comprises a 2-year post-secondary program). This part of the analysis only includes Barbados, Jamaica, and Trinidad and Tobago because the data was not available for The Bahamas and Guyana.¹⁵

Table 1 displays gender gaps in terms of CSEC performance where the average performance of women is subtracted from the average performance of men. Overall, we observe consistently negative gaps across countries in terms of passing rates and the proportion of top performers. Women, in effect, are achieving disproportionately higher passing rates and top performances than men.

TABLE 1 GENDER GAPS IN PASSING RATE AND TOP PERFORMERS' RATE, CSEC. JAMAICA (2020), BARBADOS (2016), AND TRINIDAD AND TOBAGO (2016)

CSEC SUBJECT	PASSING RATE GAP			TOP PERFORMERS' RATE GAP		
	BRB (2016)	JAM (2020)	TTO (2016)	BRB (2016)	JAM (2020)	TTO (2016)
Math	-2.23%	-0.39%	-6.09%	0.47%	0.18%	-3.45%
Biology	-0.19%	-6.48%	-2.24%	0.89%	-7.21%	-3.63%
Chemistry	0.83%	-5.44%	-4.55%	5.37%	-5.01%	-2.45%
Food and Nutrition	-3.84%	-5.01%	-10.83%	-7.17%	-11.80%	-7.49%
English A	-2.77%	-7.62%	-16.45%	-5.25%	-8.04%	-14.20%
English B	-14.91%	-10.34%	-17.86%	-4.35%	-7.38%	-15.40%

Note: the passing rate is computed as the total number of students with scores I, II or III over the total number of students in the subject entries database. The top performers' rate is equal to the total number of students with score I over the total number of students in the subject entries database. Gaps are always computed by subtracting females' values from males'. The highlighted numbers represent statistically significant differences.

Source: own calculations based on Jamaica, Barbados and Trinidad and Tobago's learning assessment data.

¹⁵ The Bahamas do not sit for CXC examinations, and for Guyana the information was not available at the time of the study. For more information on the countries' examinations, see Section 6.3 in the Annex.



TABLE 2 GENDER GAPS IN PASSING RATE AND TOP PERFORMERS' RATE, CAPE UNIT 1. JAMAICA (2020), BARBADOS (2016), AND TRINIDAD AND TOBAGO (2016)

CAPE UNIT 1	PASSING RATE GAP			TOP PERFORMERS' RATE GAP		
	BRB (2016)	JAM (2020)	TTO (2016)	BRB (2016)	JAM (2020)	TTO (2016)
Math	-2.35%	-4.49%	-5.44%	-2.09%	-3.90%	-5.96%
Biology	12.63%	-7.47%	-2.16%	-8.89%	-1.32%	1.88%
Chemistry	18.31%	-8.61%	-1.29%	5.96%	-4.36%	-1.95%
Food and Nutrition	-25.49%	-11.49%	no males	N/A	-0.28%	no males
Literature	-2.66%	16.58%	-15.84%	N/A	-0.81%	-1.80%

Note: the passing rate is computed as the total number of students with scores I, II or III over the total number of students in the subject entries data base. The top performers' rate is equal to the total number of students with score I over the total number of students in that subject entries data base. Gaps are always computed by subtracting females' values from males'. The highlighted numbers represent statistically significant differences.

Source: own calculations based on Jamaica, Barbados and Trinidad and Tobago's learning assessment data.

Table 2 shows gender gaps for CAPE outcomes.¹⁶ Similarly, most of the gaps favor women and, among the statistically significant gaps, only one favors men (the passing rate for chemistry in Barbados). Overall, the evidence shows consistent learning gaps favoring women.

2.2.1 Evolution of the gaps

Gaps in educational attainment favoring females are larger in the younger population. People in the Caribbean are more educated now than in the past.

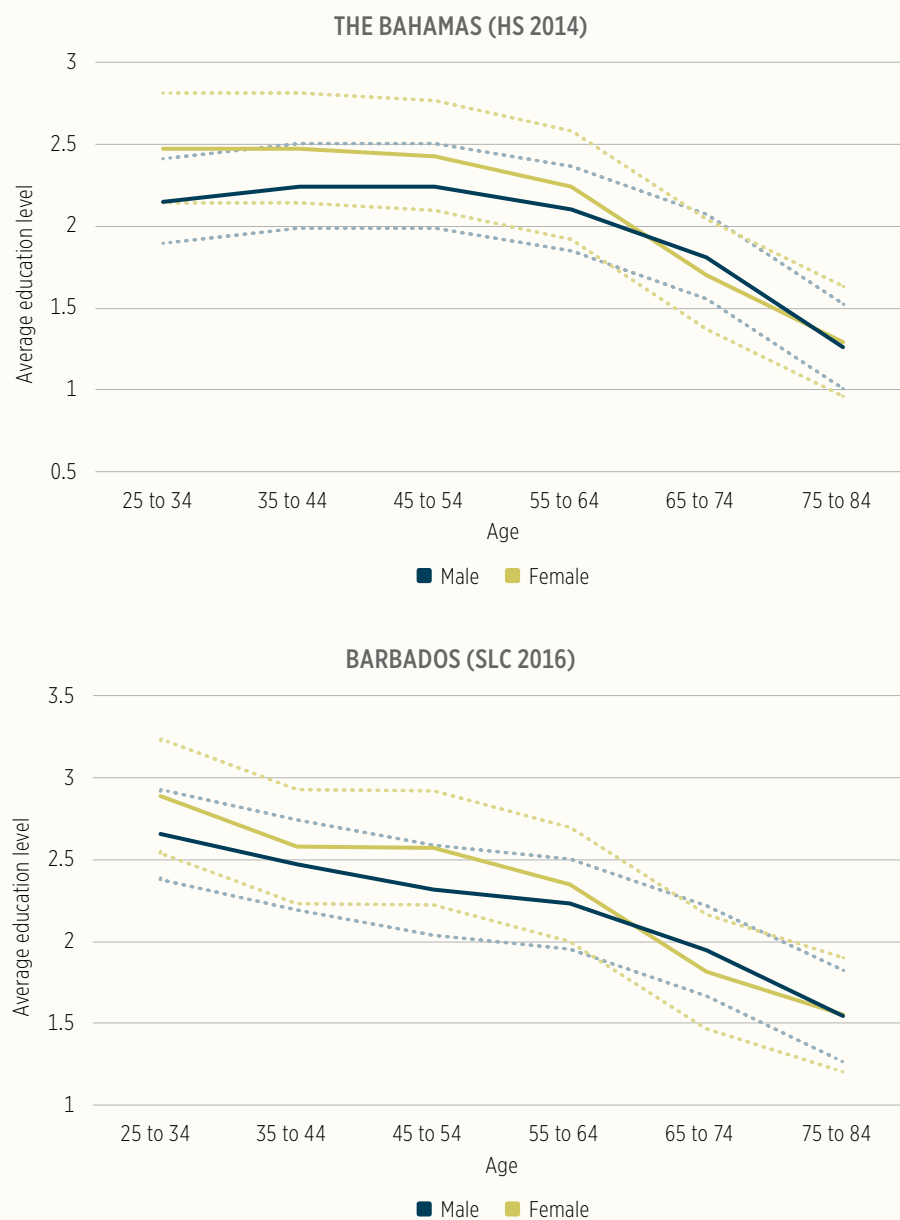
Using a cohort analysis, this subsection explores gender gaps in terms of educational attainment and their evolution over time. When it comes to average educational levels, all countries share a similar trend. Figure 4 shows that, as age increases, educational levels decrease. This means that younger generations are relatively more educated than older generations. Second, while no general gender gaps are observed among older generations, younger women are more educated than men. These trends mimic the ones found by Duryea et al. (2007) for a group of LAC countries.¹⁷ Using a cohort analysis and data from the countries' household surveys, the authors find that women born between 1940 and 1942 had on average 0.8 less years of schooling than their male counterparts, while the average number of schooling years for women born between 1979 and 1981 was 0.3 higher than that of males.

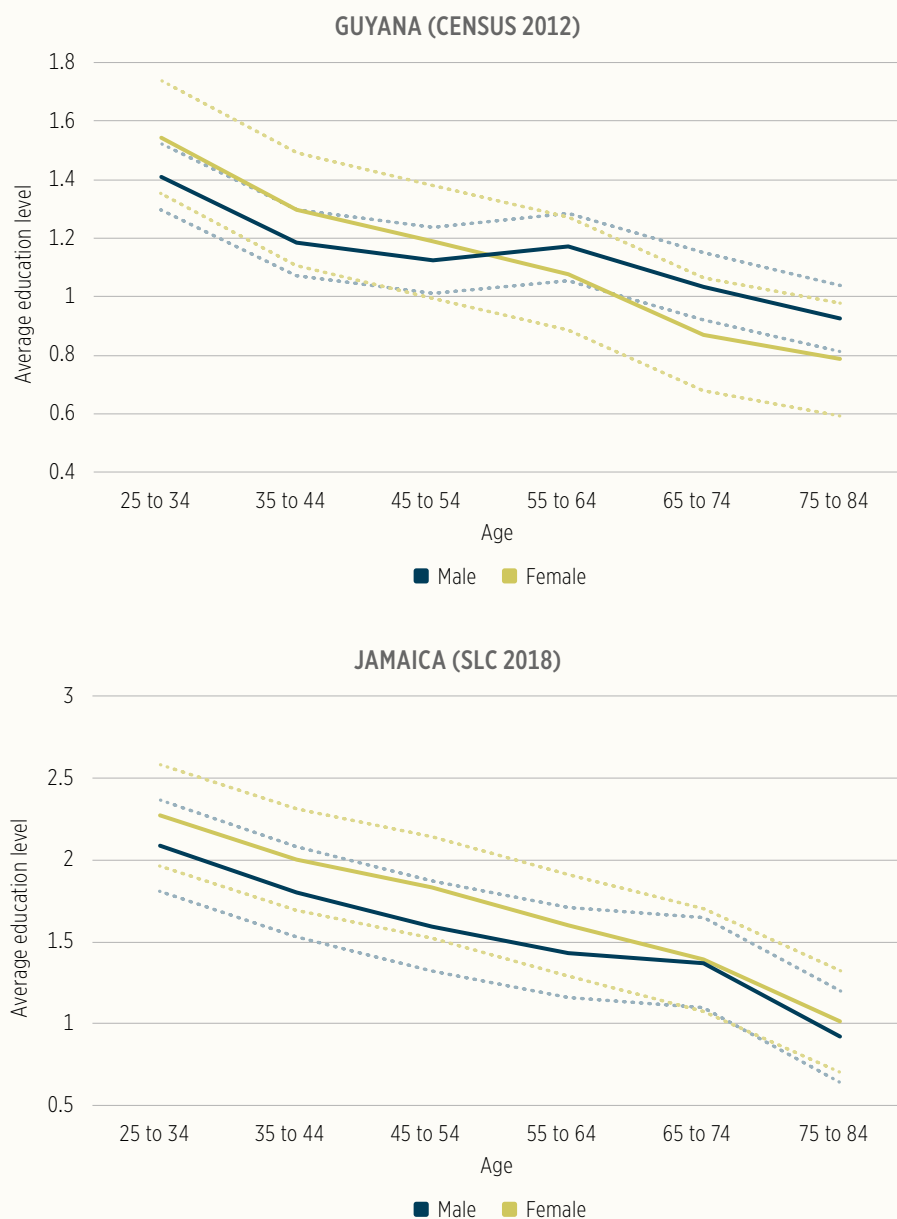
¹⁶ Subjects in CAPE examinations are organized in 1-unit or 2-unit courses, each of them containing three modules. The present analysis focuses only on unit 1 of five subjects: math, biology, chemistry, food and nutrition and literature. Since only a small number of students registered for unit 2 of these subjects, results tend to vary more and are not representative.

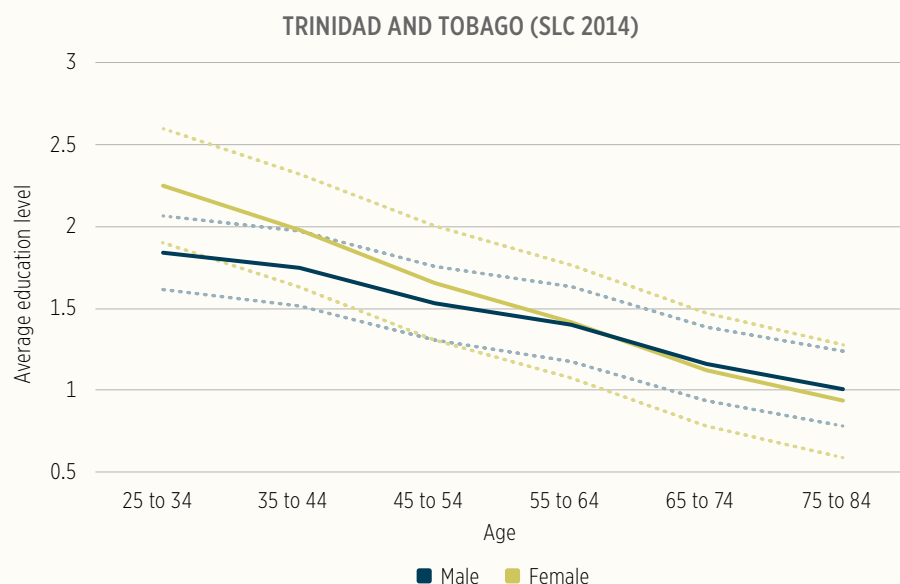
¹⁷ Brazil, Jamaica, Uruguay, Argentina, Panama, Colombia, Venezuela, Costa Rica, Chile, Honduras, Nicaragua, El Salvador, and Paraguay. Exceptions were indigenous communities of Guatemala and Bolivia (Duryea et al., 2007).



FIGURE 4 AVERAGE EDUCATION LEVEL BY AGE GROUP AND GENDER AND 90% CONFIDENCE INTERVALS. THE BAHAMAS (2014), BARBADOS (2016), GUYANA (2012), JAMAICA (2018), AND TRINIDAD AND TOBAGO (2014)







Notes:

1) average educational level correspondences are: 0. Below complete primary; 1. Complete primary; 2. Complete secondary; 3. Complete post-secondary; 4. Complete university. For example, if the average educational level for the country's population is between 1 and 2, it means that, on average, it is between complete primary and complete secondary.

2) post-secondary education includes all the degrees above complete secondary school and below a bachelor's degree.

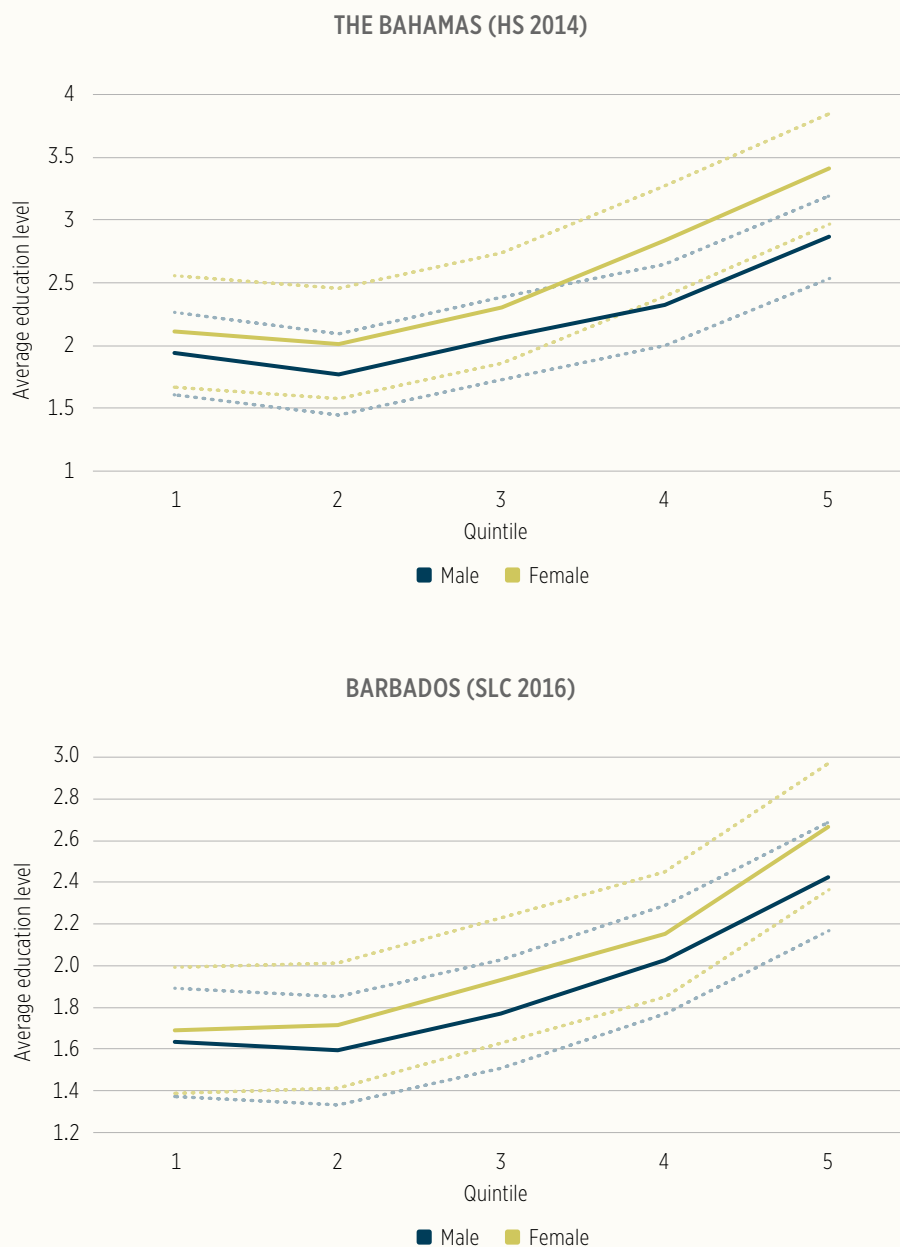
Source: own calculations based on The Bahamas' 2014 Household Survey, Barbados' 2016 Survey of Living Conditions, Guyana's 2012 National Population and Household Census, Jamaica's 2018 Survey of Living Conditions and Trinidad and Tobago's 2014 Survey of Living Conditions.

2.2.2 Gaps by socio-economic status

We also explore whether gender gaps vary by socio-economic status. Figure 5 displays average educational attainment by quintiles of household per capita consumption. Educational attainment improves together with socio-economic status. Nonetheless, across all quintiles, the gender gap favors women. Therefore, males are falling behind women in terms of average educational attainment across the entire spectrum of socio-economic realities.

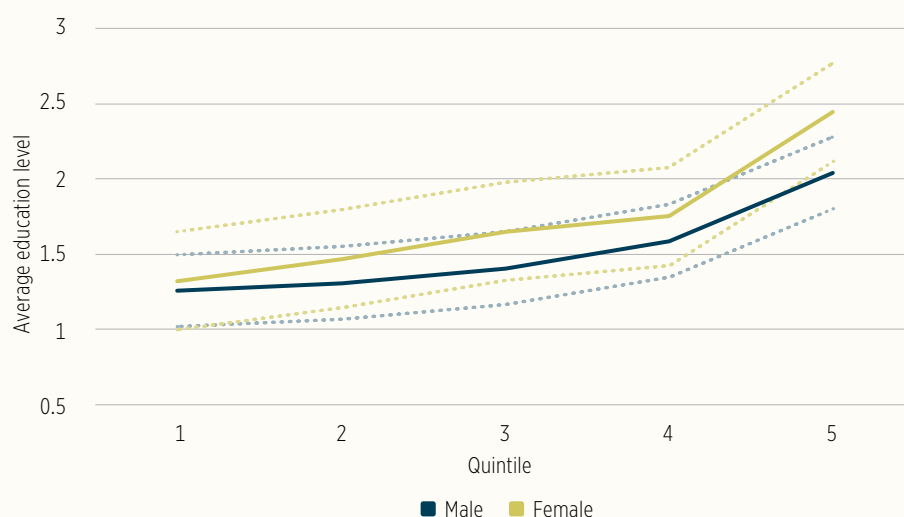


FIGURE 5 AVERAGE EDUCATION LEVEL BY SOCIO-ECONOMIC LEVEL AND GENDER AND 90% CONFIDENCE INTERVALS. THE BAHAMAS (2014), BARBADOS (2016), JAMAICA (2018), AND TRINIDAD AND TOBAGO (2014)

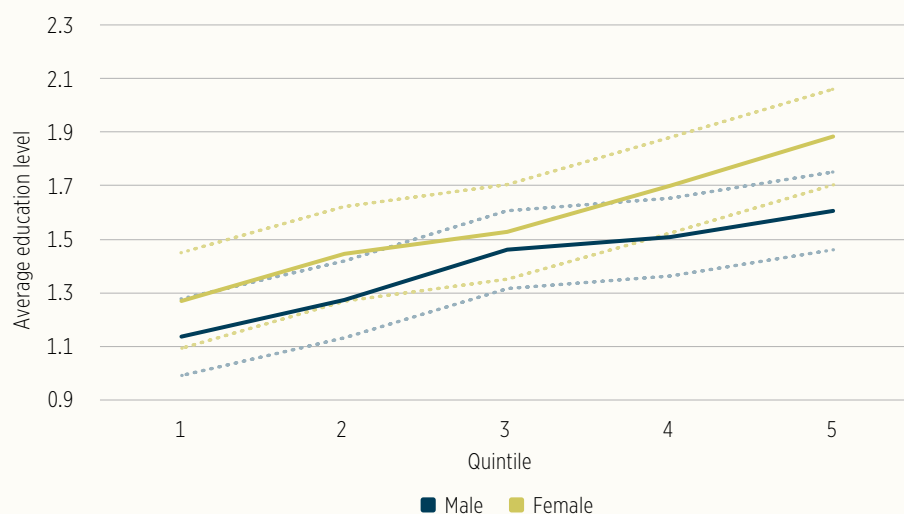




JAMAICA (SLC 2018)



TRINIDAD AND TOBAGO (SLC 2014)



Notes:

1) Average educational level correspondences are: 0. Below complete primary; 1. Complete primary; 2. Complete secondary; 3. Complete post-secondary; 4. Complete university. For example, if the average educational level for the country's population is between 1 and 2, it means that, on average, it is between complete primary and complete secondary.

2) Post-secondary education includes all the degrees above complete secondary school and below a bachelor's degree.

3) Quintiles are based on household per capita consumption defined by each country statistical agency to measure poverty statistics. Only for the case of The Bahamas, quintiles are based on household per capita income.

4) Guyana was not included since data on income/consumption was not available.

Source: own calculations based on The Bahamas' 2014 Household Survey, Barbados' 2016 Survey of Living Conditions, Jamaica's 2018 Survey of Living Conditions and Trinidad and Tobago's 2014 Survey of Living Conditions.

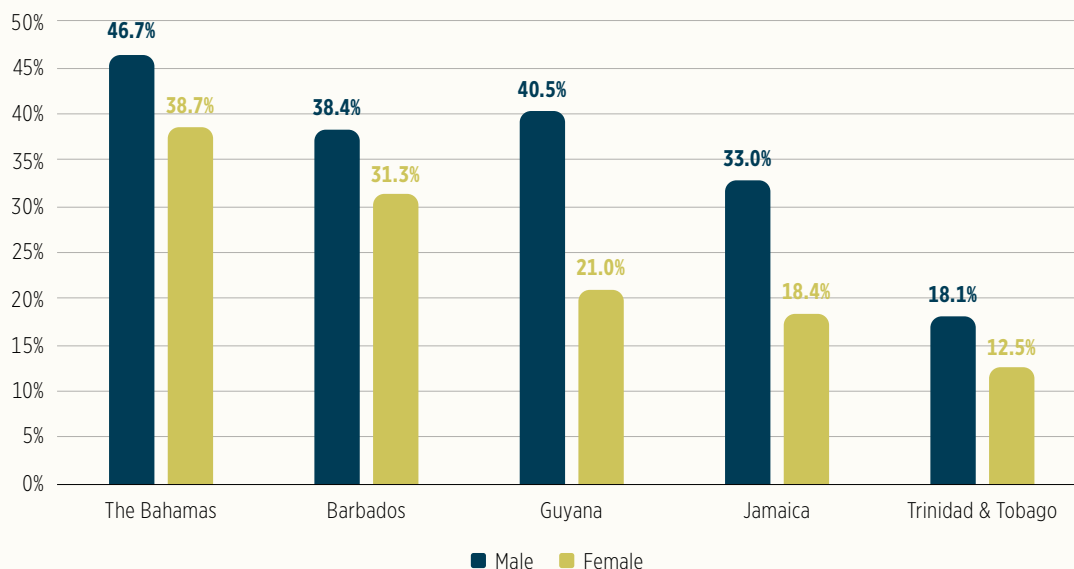


2.3 Not in Education, Employment, or Training (NEETs)

The share of NEET population is high and disproportionately encompasses males.

One of the most important assets the region has for its economic development is its young population. To realize that population's full potential, however, some important issues need to be tackled. In the Caribbean, one of them is the share of NEET population: the proportion of individuals aged 16-25 not in education, employment, or training. Across the five Caribbean countries included in this study, that stands at 28.5 percent. This figure is noticeably higher than that in LAC (23.8 percent in 2020)¹⁸ and high-income countries (13.1 percent in 2020).¹⁹

FIGURE 6 NEETS: INDIVIDUALS AGED 16 TO 25 YEARS OLD. THE BAHAMAS (2014), BARBADOS (2016), GUYANA (2017), JAMAICA (2016), AND TRINIDAD AND TOBAGO (2015)



Source: own calculations based on The Bahamas' 2014 Household Survey, Barbados' 2016 Continuous Labor Force Survey, Guyana's 2017 Labor Force Survey, Jamaica's 2016 Labor Force Survey and Trinidad and Tobago's 2015 Continuous Sample Survey of Population.

¹⁸ World Development Indicators. See: <https://databank.worldbank.org/source/world-development-indicators/>.

¹⁹ World Development Indicators. See: <https://databank.worldbank.org/source/world-development-indicators/>.



Figure 6 shows that this problem disproportionately affects males. The share of male NEETs is consistently larger than that of female NEETs for every country considered in this study. This behavior contrasts with that observed in Latin America and the Rest of Small Economies (ROSE)²⁰, where the share of female NEETs is approximately 29 and 26 percent respectively, and the corresponding figures for males are 12 and 19 percent, respectively.²¹

2.4 Possible Explanatory Factors for Educational Differences

This section reviews international literature to describe some potential factors behind the observed gender gaps in learning and educational attainment that favor females in the English-speaking Caribbean.

2.4.1 Gender Roles and Education

When financial resources in the household are scarce, boys are often withdrawn from school to bolster the family income, while girls are kept in school in an effort to delay early pregnancy (Bailey, 2009).²² For males, early entry into the job market is thus a principal reason for school dropout (The Institute for Gender and Development Studies, 2014). Caribbean boys are often under immense pressure to be employed and earn money, since notions of masculinity in the region are strongly related to the ability to provide for oneself and one's family (Clarke, 2009, De Lisle et al., 2010, Jha et al., 2012, Mayers, 2014, Peebles, 2014, UNESCO, 2017, cited in De Lisle, 2022). This is supported by Gayle (2002), who points out that the main reason for the high attrition rates among boys is economical, and by De Lisle (2022), who finds that most underperforming boys in the Caribbean seem to be in low achieving environments (schools or geographic areas) or situations of poverty, contexts in which they are more likely to be asked to contribute to the family income. Given the labor market structure, it is also easier for boys than girls to find a job, regardless of their level of educational attainment. These topics are discussed more extensively later.

Data from Trinidad and Tobago's 2014 Survey of Living Conditions shows that almost every male and female household head agreed with the importance of sending their children to school (97.74 vs. 97.35 percent for males and females, respectively). However, when asked which children they would send if they could not send them all, the proportion who answered a girl was significantly higher (Figure 7). This is true overall and also among both male and female household heads.

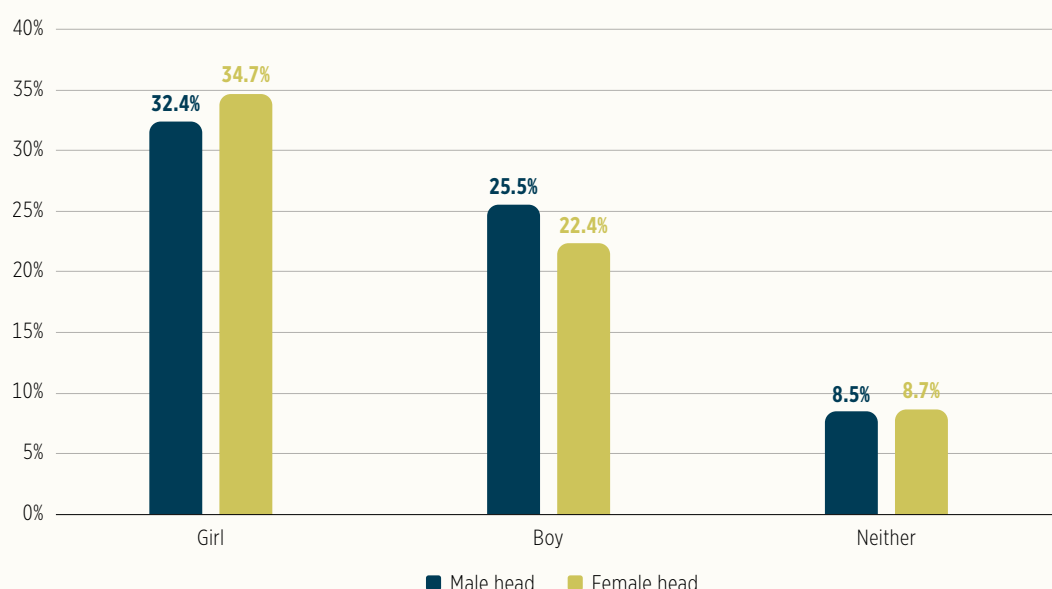
²⁰ ROSE countries: Bhutan, Botswana, Cyprus, Gabon, Lesotho, Mauritius, Mongolia, Montenegro, Macedonia, Timor-Leste.

²¹ The data is collected from International Labor Organization Statistics for 2019. See: <https://ilostat.ilo.org/data/>.

²² Relatedly, Beuermann & Jackson (2022) document that while accessing a preferred secondary school in Barbados does not improve test scores, it reduces the likelihood of teen pregnancies, which is ultimately reflected in improved educational attainment and long-term labor market success among women.



FIGURE 7 IF YOU COULD NOT SEND ALL YOUR CHILDREN TO SCHOOL, WHO WOULD YOU CHOOSE TO SEND? BY HOUSEHOLD HEAD'S GENDER. TRINIDAD AND TOBAGO (2014)



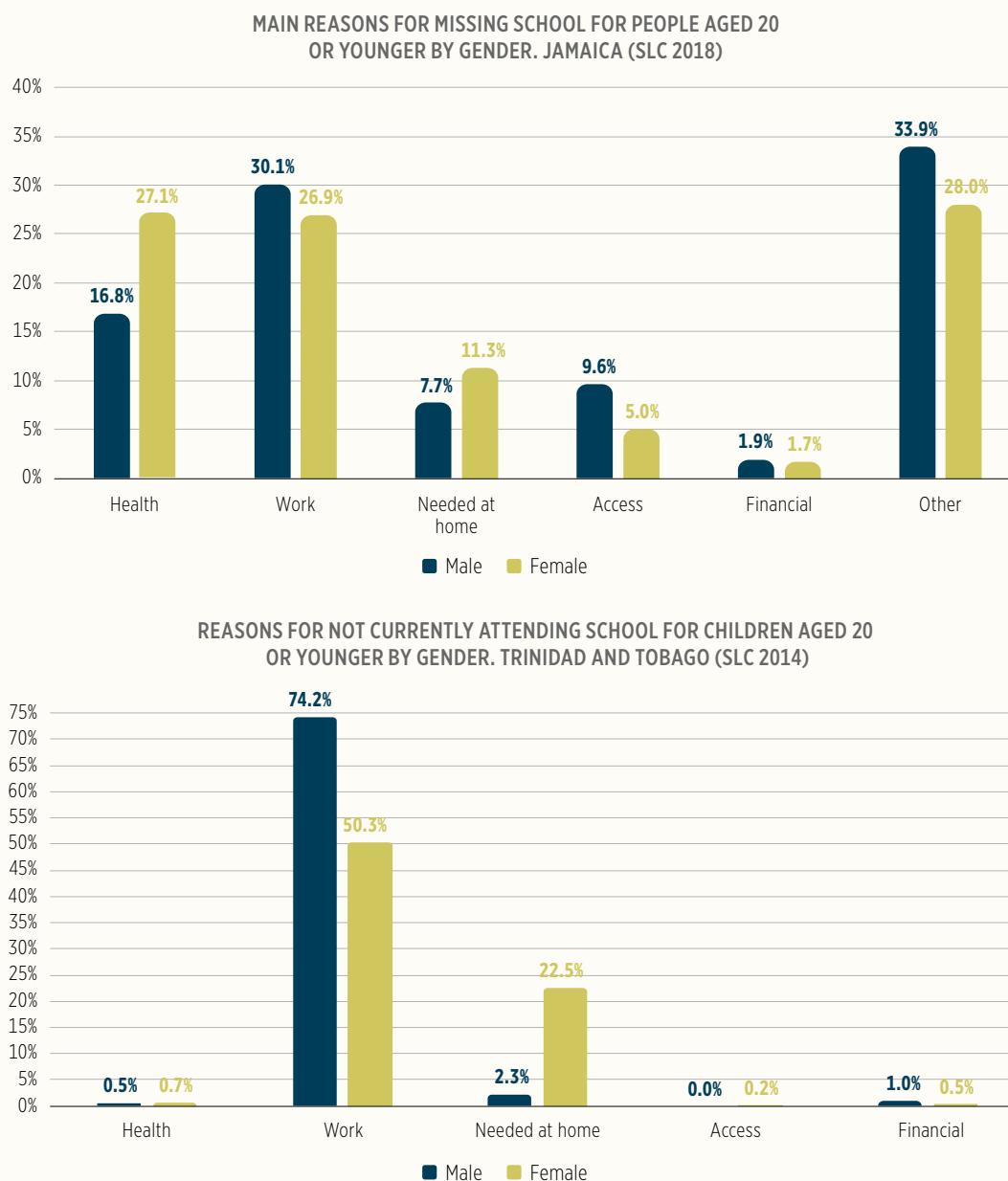
Note: data only available for Trinidad and Tobago.

Source: own elaboration based on Trinidad and Tobago's 2014 Survey of Living Conditions.

Moreover, data from Jamaica and Trinidad and Tobago (2018 and 2014 respectively) shows that work and household chores are some of the most important factors when analyzing school absence with a clear gender dimension, with work affecting boys more than girls, and the opposite happening with household chores (Figure 8). In Jamaica, the main reasons for missing school for people aged 20 or younger are concentrated in two categories: work (30 and 27 percent for Jamaican boys and girls respectively) and health problems (17 and 27 percent of students in each group, respectively). Home duties are also an important reason for missing school, but girls report being needed at home at a higher rate (11 percent for girls vs. 8 percent for boys). For Trinidad and Tobago, the main reasons for not attending school for children aged 20 or younger are work and home duties, with a clear gender pattern as well. Work accounts for 74 percent and 50 percent for boys and girls respectively, while home duties affect 2 percent and 22 percent of students in each group, respectively.



FIGURE 8 SCHOOL ABSENCE. JAMAICA (2018) AND TRINIDAD AND TOBAGO (2014)



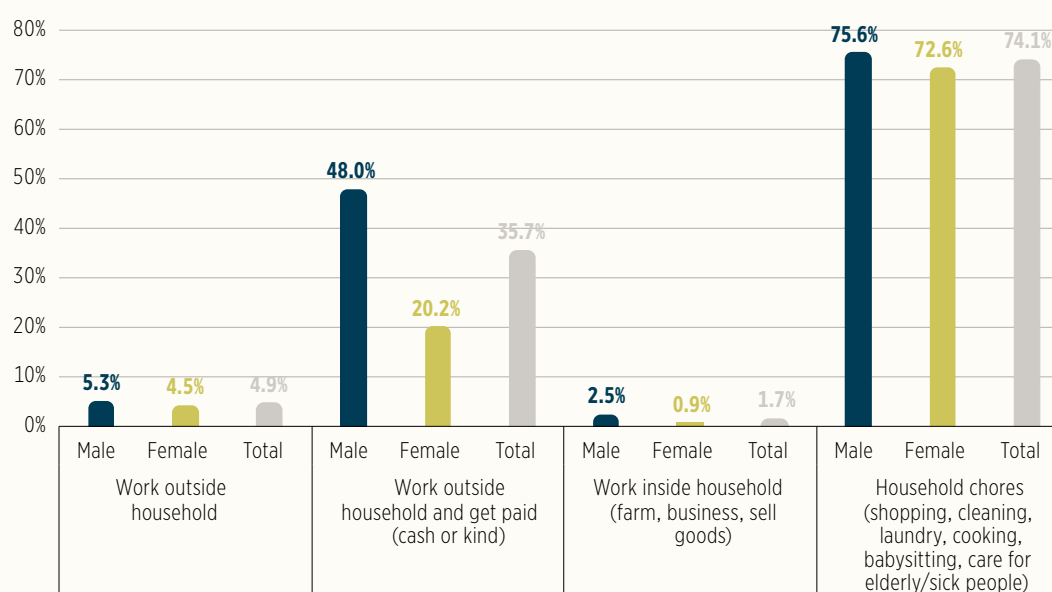
Note: Data is only for Jamaica and Trinidad and Tobago. The variable was harmonized to be comparable by country. For Jamaica, the category “work” includes working outside the home and market day work; “needed at home” also includes errands; “access” includes problems with transportation, the closing of schools, and rain; “financial” includes problems with transportation, uniforms and financial issues in general; and “other” includes truancy, lack of safety at the school or in the community, and violence. For Trinidad and Tobago, “work” includes both working or seeking work; “needed at home” includes home duties and babysitting; and “access” refers to transportation.

Source: own elaboration based on Jamaica’s 2018 Survey of Living Conditions and Trinidad and Tobago’s 2014 Survey of Living Conditions.



Data from Barbados' 2016 Survey of Living Conditions shows that child labor in the country seems to affect mostly boys (Figure 9). The proportion of boys working outside the household and getting paid is significantly higher than that observed for girls.

FIGURE 9 WORK FOR CHILDREN AGED 14 OR YOUNGER BY GENDER. BARBADOS (2016)



Note: data only available for Barbados.

Source: own elaboration based on Barbados' 2016 Survey of Living Conditions.

2.4.2 Socialization: Academic Identity and Masculinity

While some studies find that biological differences are a determining factor in how males and females perform on certain in-school tasks such as reading (Burman et al., 2008, cited in Bristol, 2015), most research suggests that these differences result from gender and social constructions (Berger & Luckmann, 1966, Jansz et al., 2010, cited in Bristol, 2015). Many authors point to the critical role played by gender socialization as a key variable in the relative academic underperformance of boys in the Caribbean (Bailey, 2008, USAID, 2011, The Commonwealth Educational Hub Discussion Summary, 2016, cited in De Lisle, 2022).

According to Bristol (2015), observed gender gaps in education can be attributed to expectations, before girls and boys begin their formal schooling, of how they should interact with their environment. These expectations are constructed by adults through their interactions with children during their first years of socialization. A study in Jamaica, Barbados, and St. Vincent and the Grenadines similarly finds evidence that some gender-related responses to education



may have less to do with natural differences than with cultural expectations about how Caribbean males and females are supposed to respond (Parry, 2000).

Research shows that differences in academic identity and ideals of masculinity can impact children and adolescents' academic outcomes and that this sometimes translates to the labor market. While girls in the English-speaking Caribbean are expected to help around the house and are usually more supervised, boys are supposed to “go play” and are not so closely monitored (USAID, 2011). These differences are also illustrated by the selection of toys with which infants and, subsequently, toddlers play (Beeson & Williams, 1982, cited in Bristol, 2015). In Jamaica, for example, the 2011 JA Kids study finds that while a significantly higher proportion of girls have soft toys and toys that teach numbers and letters, most boys are given riding and push-and-pull toys (Coore-Desai et al., 2019). Moreover, activities that parents share with their children are sometimes different depending on the sex of the child. These values and ideals are not only internalized by children, but also influence and contribute to the structure of their home, school, community, and work environments (Figueroa, 2000).

Girls' behavior in their homes is transferred to the learning environment. This seems to be an advantage (Ellis, 2018). Their socialization teaches them obedience, cooperation, and other skills that help them fit into school routines (USAID, 2011), while boys are less prepared because of the freedom they are given, which is usually associated with lower levels of responsibility and self-control (Figueroa, 2007). Following Mac & Ghail (1994, cited in Bristol, 2015), in addition to the socialization that occurs at home, there is a second socialization for children as they begin compulsory education. In some cases, the gender construct depends on the gender of the teacher. Sandberg & Pramling (2005, cited in Bristol, 2015) point out that female pre-school teachers usually emphasize more quiet play, which is less characteristic of boys. Male pre-school teachers, on the other hand, tend to encourage physical play.²³

This socialization helps shape a gender identity that, in the case of boys, is often incompatible with academic achievement (USAID, 2011) and the type of schooling common in the Caribbean (Figueroa, 2000). As pointed out in Figueroa (2000), the skills that boys acquire “on the streets” and the role models they encounter there and in the media run contrary to their needs in the educational arena. Boys are allowed and expected to fend for themselves and be active, which makes them ill-prepared to exhibit the discipline required for the school environment (Chevannes & Brown, 1998, cited in USAID, 2011). It is in school that they start to be classified as disobedient and underperformers (Bristol, 2015). These difficulties may make it more likely for boys to feel disconnected and externalize their frustrations (Ferguson, 2000, cited in Bristol, 2015; Bristol, 2015). As a result, teachers are more likely to perceive them as rule breakers (Dobbs et al., 2004, cited in Bristol, 2015) and may have lower expectations for them in terms of achievement (Wood et al., 2007, cited in Bristol, 2015).

²³ The role of pedagogy in the classroom is further analyzed in the next subsection.



Conversely, females' identity and socialization conform with the school system and the "sit still and listen to what you are told" aspect of it (Figueroa, 2007). Female identities seem to be more in tune with Caribbean's education ethos (Ministry of Science, Technology and Tertiary Education, 2011, cited in De Lisle, 2022).

This context is closely related with the construction of masculinity ideals present in the English-speaking Caribbean. Growing up, children are provided with the means to construct a gender identity based on modeling behaviors that differentiate them from the "opposite" sex. These behaviors and practices are not fixed, and they may be shaped by colonization, racism, male domination, heterosexism, and homophobia, among others (Haywood et al., 2003, cited in De Lisle, 2022). As a result, the paths to achieving "legitimate" manhood may vary to a significant degree between and within cultures over time (Plummer, 2010). In the case of the English-speaking Caribbean, they tend to be highly marked.

Gender identity for boys is driven towards hard, physical, risk-taking, hyper-masculine, and, in certain cases, violent behaviors (Plummer, 2010, cited in De Lisle, 2022). In Jamaica, for example, according to the Man Box study,²⁴ repressing emotions and being self-reliant are core pillars of perceived self-sufficiency and toughness. Hegemonic masculinity in the Caribbean is associated with the possession of power, profits, glory, and pleasure (Beckles, 1996, cited in Parry, 2000). From a young age, boys there learn the importance of making money to earn the respect of their families. The control over economic resources becomes a building block of the *macho* masculine identity (Chevannes, 2002, cited in Cobbett & Younger, 2012). This sometimes becomes even more important than attending school, increasing the opportunity cost of schooling. As mentioned before, schoolboys are more likely than girls to have part-time jobs. This, in turn, may cause them to have less time for schoolwork and increase the probability of their dropping out of school to earn money (Evans, 1999, cited in Cobbett & Younger, 2012). The "provider identity" is thus both a source of power and disadvantage for boys in the Caribbean (Cobbett & Younger, 2012).

The macho identity usually rejects everything female-related, and this can affect boys' academic performance as well. Education and good performance at school are considered feminine, and consequently are rejected by many boys who want to fit in and be "real" men (Clarke, 2011, cited in USAID, 2011). Young boys in the Caribbean often think that if they perform outside the expected and traditional roles outlined by the region's hegemonistic conception of masculinity, they will be ridiculed and labeled "sissy" by both boys and girls (Bailey et al., 2002, cited in USAID, 2011). There also seems to be an intolerance, particularly among many Caribbean males, of non-heterosexual identities (Parry, 2000).

²⁴ The Man Box refers to a set of beliefs, communicated by peers, families, and the media, that place pressure on men to be and behave a certain way (Levtov & Telson, 2021).



This perceived homophobic construction of gender identity seems to be shaping negative attitudes and motivation for some Caribbean boys towards academic achievement, ultimately affecting their academic performance (Mayers, 2014, Parry, 2000, Plummer, 2015, Wilks, 2016, cited in De Lisle, 2022). Some Caribbean boys prefer not to be seen studying (Parry, 2000), and with this, their school engagement falters. Reading also tends to be seen by boys as a female pastime, which could, for example, help explain the gender gap in achievement in English literature, though in Jamaica, this gap could also be linked to language per se, as males usually speak Creole (USAID, 2011). There is a relative shortage of men in higher education. These factors may help explain it: males are creating a distance between themselves and what has come to be seen as a primarily female, and therefore, a non-male activity (Bailey & Charles, 2010).

Peer group influence is also of paramount importance in this context, especially as boys approach the pre-pubescent years (Chavannes, 1999, cited in Plummer, 2010), where there is less parental supervision. In this regard, displays of hypermasculinity might be attempts at gaining peer acceptance, predisposing some boys to underachieve and drop out of school to show their maleness (De Lisle, 2022). According to the Man Box study in Jamaica, staying “inside the box” of rigid masculinity can give men a sense of belonging and of living up to what is expected of them. However, when those norms involve aggressiveness and the repression of emotions, they can lead to socially threatening and isolated lives.

Increasingly restrictive norms of masculinity have led boys to engage in risky behaviors, including violence and crime. This puts both them and others at risk (Plummer et al., 2008, Plummer & Geofroy, 2010, cited in Cobbett & Younger, 2012). In this regard, the exclusion of the poorer marginalized male from the traditional, and according to ideas of masculine identity, rightful materialistic basis of power, could be influencing these violent behaviors (Miller, 1986, cited in Gayle, 2002). Parry (2000) suggests upper and middle-class boys may be equipped with the necessary resources to opt for an alternative masculine identity that acknowledges the importance of educational efforts and/or rewards. This is highly correlated with the household environment a boy is raised in, however, and, for that reason, the ability to forge a healthier masculine identity exists throughout social classes, with the values imparted at home serving a crucial role.

Building on previous literature and the hypothesis that salient notions of masculinity may be stigmatizing academic attainment in the Caribbean, the IDB, Equimundo and CariMan conducted in 2022 a study in Guyana, Suriname, and Trinidad and Tobago to better understand young men’s lives and perceptions (Heilman et al., forthcoming). The methodology combined new survey data with focus group discussions of young men aged 18-30 that covered attitudes within several domains of gender and masculinity, including education, sexuality, violence, care work and domestic roles. The findings with respect to how young men value education confirm a relatively cynical view, particularly of tertiary education. The majority of young men in these countries believe they can be successful without attaining a CSEC certificate and that university education only leads to high paying jobs if one already has money or connections. One third of them reported that their parents had urged them to pursue a job rather than stay in school or university.



2.4.3 Classroom Pedagogy

Teaching practices and interactions with students are other important elements that may be influencing boys' performance, motivation, and engagement at school.

Pedagogy in the Caribbean is usually characterized as teacher-centered, authoritarian, traditional, and abstract. This could be counterproductive for boys, as they appear to be more responsive to interactive and experiential classes, and to those that include debates and arguments (Commonwealth Educational Hub Discussion Summary, 2016, Figueroa, 2007, George, 2009, Jha & Kelleher, 2006, Ministry of Science, Technology and Tertiary Education, 2011, Naslund-Hadley, 2013, Wilks, 2016, cited in De Lisle, 2022). In this regard, classes that are limited to information sharing, copying notes from the blackboard, and traditional knowledge and fail to challenge students through interaction and practical experience may contribute to the disengagement of all students, and particularly boys. According to the Jamaica Situation Analysis (Moncrieffe, 2012, cited in The Institute for Gender and Development Studies, 2014), poor teaching quality is partly responsible for boys' detachment from school.

Literature on gender gaps in the Caribbean suggests that teachers' expectations and behavior might be another important causal agent (Kutnick et al., 1997, cited in De Lisle, 2022). Teachers tend to interact differently with males and females and expect different conduct from the two groups, usually having higher expectations for females (Gayle, 2002; USAID, 2011; Parry, 2000). In this regard, empirical evidence gathered from classroom observations suggests that boys and girls tend to exhibit gender-specific behaviors inside the classroom. Evans (1999, cited in Gayle, 2002) found that boys were more likely to be disruptive and to engage in activities unrelated to the formal curriculum when unsupervised, and, on some occasions, when supervised as well.

Something similar is seen when it comes to the teachers' vision of their students. In a study in Jamaica, Barbados, and St. Vincent and the Grenadines, Parry (2000) found that teachers' adjectives to describe boys' attitudes inside the classroom included "lazy", "disruptive", "noisy" and "mediocre"; but they used words such as "attentive", "applied", "serious" and "encouraging" to describe girls. Brown in Parenting Partners Caribbean (USAID, 2011) looked at a group of master's degree students in early education who were asked to pick words associated with boys and girls. Of the 25 words related to boys that the master's students chose, 17 were negative (troublesome, challenging, rude) while of the 24 responses to girls, 22 were positive (sweet, loving, more focused). These perceived behaviors tend to influence teachers' expectations and interactions with their students, which in turn could influence students' motivation and achievement.

Males are generally not expected to display sensitive behavior, either towards their peers or school staff (Parry, 2000). This is related to the already mentioned notion of males being stronger and in need of less protection, and the expectation that they fend for themselves (Figueroa, 2007).



Given these ideas of male toughness, boys at school are usually treated more harshly than girls and are more likely to endure public humiliation (Figueroa, 2007; Bailey, 2014). According to Parry's 2000 study, sarcasm and ridicule were routinely used as a disciplinary strategy, and teachers, particularly women, expected their male pupils to cope with it. This was especially true in Jamaica and in schools where teachers were less educationally prepared. However, the fact that boys do not visibly respond to such treatment does not necessarily mean that they are any less sensitive to or affected by it. Rather, they may respond in the stereotypical way they are expected to behave (Parry, 2000).

Figueroa (2000) suggests that even if teachers recognize that the image of the tough male causes problems in school, they tend to contribute to its reinforcement through confrontational responses. Furthermore, Evans (1999, cited in Gayle, 2002) found that teachers encourage this antagonism by, for example, dividing classes up by gender when conducting quizzes and using gender-biased statements to motivate students to excel. These strategies can be extremely counterproductive in terms of academic performance (Ritchie & Ritchie, 1981, Wilson, 1982, Woods, 1975, cited in Parry, 2000). However, according to Carrington (1993, cited in Parry, 2000), teachers may be unaware that they are treating boys and girls differently. In this way, gender stereotypes that are prevalent inside the household, the community, and the education system in the Caribbean (De Lisle, 2022), influence teachers' expectations of the way males and females ought to behave (Carrington, 1993, cited in Parry, 2000).

Interestingly, recent evidence suggests that introducing single-sex schools among relatively disadvantaged populations could be effective in reducing gender gaps in learning in the Caribbean. Jackson (2021) studies a program where the Ministry of Education in Trinidad and Tobago converted 20 low-performing secondary schools from coeducational to single-sex. After accounting for student selection and using administrative data covering the full population, results show that boys in single-sex schools scored higher on the National Certificate of Secondary Education (taken at age 15). Both boys and girls took more advanced coursework, and girls performed better on CSEC exams. Moreover, there were important non-academic effects: all-boys cohorts had fewer arrests as teens, and all-girls cohorts had lower teen-motherhood rates. Survey evidence suggests that these single-sex effects reflect both direct gender peer effects, due to interactions between classmates, and indirect effects generated through changes in teacher behavior.

Teachers' gender is another factor that could help explain educational differences between boys and girls. Female teachers seem to dominate at all levels in the English-speaking Caribbean. In Jamaica, for example, females accounted for 88.2 and 71.5 percent of teachers in primary and secondary schools respectively in 2018 (The Planning Institute of Jamaica, 2019). Some authors suggest that boys may be less enthusiastic about academic subjects and participate less in class when they are taught by female teachers and that this may be correlated with poor academic achievement (Edmund-Woods, 2011, cited in De Lisle, 2022). Authors such as Gayle (2002)



suggest that males are socialized to be leaders. Nonetheless, they find themselves being taught by female teachers, and this, coupled with the differentiated treatment they sometimes receive at school, may aggravate the psychological impact of relating to female leadership.

Along these lines, there is some evidence suggesting positive academic gains for Black boys who have male teachers, and in particular, teachers of color (Dee, 2005, Ouazad, 2008, cited in Bristol, 2015). New male teaching recruits might act as role models (Holland, 1991, Rezai-Rashti & Martino, 2010, cited in Bristol, 2015) and father figures (Kunjufu, 2005, cited in Bristol, 2015) for these boys. However, some authors argue that such a policy could have negative effects. Haase (2008, 2010, cited in Bristol, 2015) described how the infusion of male teachers into an elementary school prompted the perpetuation of heteronormative understandings of gender and masculinity among students, particularly boys. Male teachers in this case conflated masculinity with physical prowess, for example. Martino (2008, cited in Bristol, 2015) highlights that such a policy could imply a sort of “remasculinization”, as well as the presumption that male teachers are able to improve boys’ learning outcomes simply by virtue of their gender. Moreover, such a policy would presuppose that the new male recruits were capable of or even desired to serve in father-figure roles (Bristol, 2015). Bristol’s 2012 study in New York City middle schools shows that some male teachers working in special education classrooms, in which students were typically Black and Latino boys, were disproportionately saddled with the responsibility of improving the learning outcomes of the school’s most challenging population, from both an academic and a behavioral perspective (Bristol, 2012). Lastly, some literature suggests that the sex of the teacher does not play a significant role in boys’ underachievement (USAID, 2011).

Beyond book learning, schools provide many influences that affect students’ learning and life outcomes. such as leadership and management; use of human and material resources; provisions for safety, security, health and wellbeing; teaching practices in support of students’ personal and social development; and curriculum and enhancement programs, to mention a few. These influences are different in different schools and affect children in different ways. The next section will analyze school curriculum segregation and how this affects boys and girls. For a deeper analysis on how schools’ characteristics interact with students’ performance, see Box 1.

**BOX 1 DOES EVERY SCHOOL ADD THE SAME VALUE FOR GIRLS AND BOYS?**

The concept of school value-added refers to the causal improvements that schools generate on students' outcomes.^[1] In other words, a value-added analysis estimates the extent to which schools improve the outcomes of their students relative to their incoming ability. Calculating credible measures of value-added is often challenging given the self-selection of students to schools. This precludes the possibility of identifying valid counterfactual scenarios to identify a cause-effect relation between school attendance and student outcomes. Nonetheless, centralized school choice systems for secondary education in Barbados, Jamaica, and Trinidad and Tobago allow for a credible estimation of individual schools' value-added.^[2] For this study, we applied the value-added methodology to assess if secondary schools in these countries causally improve the outcomes of boys and girls evenly. The outcomes considered are the likelihood of obtaining a CSEC certificate (i.e., passing at least five subjects including English and mathematics), and the likelihood of earning a CAPE diploma.

Results^[3] show that in Barbados and Jamaica, schools with the highest value-added on both CSEC and CAPE outcomes causally improve the results of girls relatively more than those of boys. In other words, the causal improvement generated by the same school in terms of CSEC and CAPE success is relatively larger for girls with respect to boys despite them both being exposed to the same school environment and resources. This is consistent with the observed learning gaps favoring girls and shows that school dynamics and pedagogical practices favor girls relatively more than boys. However, in Trinidad and Tobago, differences between girls and boys in terms of schools' value-added are statistically indistinguishable from zero. This suggests that gender learning gaps are not exacerbated by differential gender school effects and, therefore, differences come from individual or household-level determinants.

[1] Abdulkadiroglu et al. (2020).

[2] See Beuermann et al. (2023) for methodological details.

[3] Results based on authors' own calculations available upon request.



2.4.4 School Curriculum

Some authors argue that it is important to develop a more “relevant” curricula to improve boys’ engagement with education, with more masculine content that matches their culture and preferences (Evans, 1999, De Lisle et al., 2005, cited in Cobbett & Younger, 2012; George, 2009, cited in De Lisle, 2022). Evidence suggests, for example, that books of potentially great interest to boys are sometimes banned from schools (Boltz, 2007, cited in Bristol, 2015). Other authors, however, argue that developing a more tailored curricula could reinforce dominant versions of hegemonic masculinity and lead to the assumption that all boys are equal and have the same needs and interests. Homogeneity among boys, after all, has been proven wrong by most empirical research and practice (Younger et al., 2005, cited in Cobbett & Younger, 2012), and, in the cases where it was recognized, it existed at only superficial levels.

Some authors highlight the importance of teachers being aware of how curricula can facilitate boys’ learning and engagement (Bristol, 2015). According to Cobbett & Younger (2012), instead of being “more masculine”, schools can better help boys by promoting cultures characterized by greater freedom to express gender in different ways. Curriculum differentiation, reflecting the multi-ethnic, multicultural, and multilingual characteristics of the Caribbean countries, could also help promote greater engagement of *both* boys and girls (Naslund-Hadley et al., 2013, UNICEF, 2014, cited in De Lisle, 2022). Along these lines, the literature also suggests that the existence of a link between the learning environment and the needs of the labor market can lead to an improvement in the engagement of boys (Bristol, 2015, Joseph et al., 2012, Commonwealth Educational Hub Discussion Summary, 2016, Ministry of Science, Technology and Tertiary Education, 2011, cited in De Lisle, 2022).

As suggested in Cobbett & Younger (2012) and Figueroa (2007), the curricula of the Caribbean often perpetuate the stereotyping and segregation of sex roles. Students in this view are generally encouraged and channeled into traditional and “gender-appropriate” subject areas. Females are highly visible in subjects such as language and arts, while males are mostly enrolled in science, technology, engineering, and mathematics (STEM) classes (Whitely, 1994, cited in Parry, 2000; Parry, 2000, Ogunkola & Garner-O’Neale, 2013, cited in De Lisle, 2022).

In a study in Barbados, Jamaica, and St. Vincent and the Grenadines, Parry (2000) found that school officials assured in interviews that both boys and girls had equal access to all subjects. But this rarely included woodwork or home nutrition, which were strictly organized along gender lines. In some of these schools, science classes were considered more important than those related to art, and female students were discouraged from taking them because “they would find the math too difficult.” Subjects like technical drawing were also considered to be “inappropriate” for female pupils.



This gendered-based curriculum segregation was, in the past, closely associated with students' choices for the CSEC examinations. According to Figueroa (2007), traditionally female-dominated subjects, such as typewriting, shorthand, food and nutrition, home management, and clothing and textiles, tended to have percentages of female participation of between 80 and 90 percent or more. The contrary happened in areas of male dominance, such as mechanical engineering, building technology (woods), building technology (construction), electrical and electronics technology, and technical drawing, where female participation was low.

This situation seems to have changed in recent years. According to updated CSEC data for Jamaica, Barbados, and Trinidad and Tobago, the proportion of girls taking STEM-related subjects, such as math, chemistry, and biology, among students registered for the exam, is almost always higher than that of boys (see Table 3). However, girls continue to outnumber boys in more female-traditional subjects, such as English language and food and nutrition. When considering the total of students taking each subject, girls always surpass boys by more than 50 percent.

TABLE 3 PERCENTAGE OF STUDENTS TAKING STEM AND NON-STEM-RELATED SUBJECTS OF THE TOTAL OF STUDENTS REGISTERED BY GENDER, CSEC. JAMAICA (2020), BARBADOS (2016), AND TRINIDAD AND TOBAGO (2016)

CSEC SUBJECT	JAMAICA (2020)		TRINIDAD & TOBAGO (2016)		BARBADOS (2016)	
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
Math	54.2%	57.3%	82.8%	83.0%	48.4%	45.1%
Biology	7.7%	57.3%	20.3%	26.6%	1.7%	45.1%
Chemistry	8.2%	11.8%	19.6%	20.1%	1.7%	2.3%
Food and nutrition	4.5%	15.3%	3.6%	9.5%	4.1%	10.5%
English A	58.5%	65.6%	85.8%	85.2%	75.8%	79.3%

Note: the highlighted numbers represent the group with the higher percentage.

Source: own elaboration based on Jamaica, Barbados and Trinidad and Tobago's learning assessment data.

The situation observed for students in primary and secondary school also translates to tertiary and university levels. The earliest available gendered-segregated statistics for the University of West Indies (UWI) show that most women followed humanities and education career paths and had a strong presence only in the softer natural sciences, such as biology. In 1974/1975, when Jamaican women achieved equal participation at the UWI, they accounted for nearly 80 percent of humanities and education students, 40 percent or less of those in law, medicine, and the pure and applied sciences, and less than 20 and 4 percent of those studying agriculture and engineering, respectively (Figueroa, 2007). In this case, as well, the numbers seem to have improved with time, at least for some countries. According to the 2018 Jamaican Economic



and Social Survey, females accounted for 75.3 percent of STI-related (Science, Technology and Innovation) undergraduate degrees at the UWI, the University of Technology (UTECH) and Northern Caribbean University (NCU). Jamaican women made up 68 percent of the students enrolled in STI-related undergraduate degrees at the UWI. Female registration at the UTECH was 53 percent, and at NCU, 73 percent (The Planning Institute for Jamaica, 2019).

Despite these improvements, there are still curriculum-segregation and sex-role stereotyping (see Box 2) issues in the English-speaking Caribbean, and these seem to be having severe consequences when it comes to females' choices, job placement and career opportunities in the labor market. Females are usually disadvantaged in some STEM occupations and are underrepresented in many technical-vocational areas (De Lisle, 2022). Bailey & Charles (2010) point out that the school curriculum for girls tends to de-emphasize the development of leadership capabilities and fails to equip them for higher paid technology-based job opportunities. This will be further analyzed in Section 3.

BOX 2 GENDER BIASES IN CURRICULA

Besides the curriculum segregation described in this subsection, in the English-speaking Caribbean there is also evidence of gender biases in the curriculum itself. In this regard, we carried out a comprehensive assessment of gender gaps in the curricula of primary and secondary school education in the five countries of this study.^[1]

Our results show that in The Bahamas, for example, the primary school curriculum seems to be gender neutral in terms of language, but there are not many opportunities for children to see themselves in non-traditional gender activities. Moreover, most pronouns and terms used are male-centered, and the curriculum does not include suggested practices in terms of gender-responsive pedagogies. The only notable exception to this trend is in Health and Family Life Education (HFLE), in which students can evaluate gender roles and related assumptions.^[2] The language in the secondary school curriculum uses male terms when referring to the general population.

There are also cases of male-centric representation and the use of male pronouns in Barbados's primary school curricula. The English curriculum, in particular, includes cases of traditional gender roles or expectations ("boys are elves, and girls are fairies"), and tends to lean on male characters when providing examples or telling stories. This characteristic does not seem to be repeated in other subjects analyzed, however. As in The Bahamas, the primary school curriculum in Barbados does not include suggested practices for gender-responsive pedagogies. At the secondary school level, the curriculum is more gender-neutral and includes some attempts towards inclusiveness, for example, by using male and female personalities to provide examples.



In Guyana, the primary school curriculum has a heavy focus on traditional gender roles. Leaders, dominant characters, and individuals in the public sphere are generally men, which can reinforce stereotypical understandings of gender among students. At the secondary school level, the curriculum is less reliant on gender stereotypes and assumptions, and the language used is more gender neutral. However, there are no clear guidelines for teachers to help them implement gender-responsive pedagogies.

We find the language to be gender neutral in Jamaica's primary school curriculum. Moreover, there seem to be opportunities for students to critically reflect on gender norms. The curriculum even has some specific learning outcomes that point to non-stereotypical conceptions of gender.^[3] However, in some cases, the use of male pronouns and terms can still be detected. A similar situation is observed in the secondary school curriculum.

Finally, in Trinidad and Tobago gender is not given much consideration in the curriculum, neither at the primary school or secondary school level. The curriculum seems to be gender neutral: gender roles, gender language and gender assumptions seem to be absent at the primary school level, and there are no explicit suggestions in terms of the gender-responsive practices teachers should adopt.

[1] Bean, 2021 [IDB Unpublished manuscript].

[2] "Students will complete a survey identifying persons or institutions that influence their sexuality e.g. Who are the people in your life who taught you to be a boy or girl? What did you learn from each one, and how did you learn it?" (Bean, 2021 [IDB Unpublished manuscript]).

[3] "...that most jobs today can be done by both men and women and together they contribute to the development of the community..." (Bean, 2021 [IDB Unpublished manuscript]).

2.4.5 Corporal Punishment at Home and in Schools

Another element that could be influencing children's educational attainment is corporal punishment. Corporal punishment is generally understood as the use of force intended to cause physical pain, but not injury, to correct or control children's behavior (Straus, 1994, cited in Bailey et al., 2014). It has been associated with various negative outcomes, such as physical injury, cognitive development problems (Durrant & Ensom, 2012, cited in Bailey et al., 2014; Telson, 2018), depression, anxiety, and drug and alcohol addiction (Tomoda et al., 2009, cited in Bailey et al., 2014). Some authors have also suggested the existence of a relationship between physical punishment and the continuation of violence and aggression into adulthood, as children grow up to believe that it is an acceptable form of discipline and solving of disputes (Bailey et al., 2014; Telson, 2018). Corporal punishment in schools has been associated with high levels of aggressiveness, poor educational attainment, and dislike for teachers and school in general (Oteri & Oteri, 2018, cited in Telson et al., n.d.a.). This can lead to school absence and dropout.



These aspects of corporal punishment are particularly relevant for the Caribbean where the practice still receives support from educators and society in general (Bailey et al., 2014), despite a growing number of countries passing laws to ban it.²⁵ For example, in 2011, the JA Kids study²⁶ in Jamaica found that both slapping and shouting were extremely common practices among parents for punishing 4- and 5-year-old children, with 91 and 88 percent of parents, respectively, saying they had used these methods. Moreover, there seem to be some differences in the severity of physical punishment meted out to boys and girls: 40.5 percent of boys were beaten with implements occasionally or often, as compared to 28 percent for girls. Boys were also slapped, shouted at, and pinched more than girls.

More recent data from Barbados' and Jamaica's Surveys of Living Conditions (2016 and 2018 respectively) sheds more light on methods of disciplining children in these countries (Figure 10). In Barbados, most parents of children aged 14 or younger reported using harsh corporal punishment, such as slapping, beating and pinching, on their children. A high percentage also said they used pedagogical methods, such as taking away privileges, timeouts, talking and reasoning. Harsh verbal punishments, such as quarreling and swearing, were the least used, although the number of parents that reported using them was still high. The incidence of these practices is statistically equivalent for girls and boys in each case.

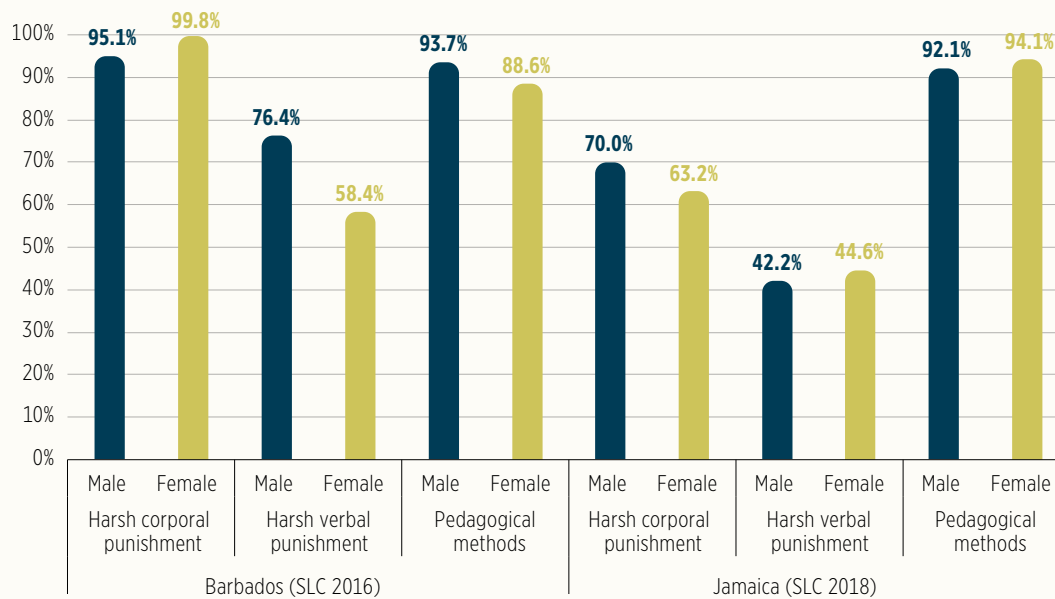
In Jamaica, the number of parents of children aged 14 or younger that reported using harsh corporal or verbal punishment was lower than in Barbados. Most parents discipline their children by using pedagogical methods. Moreover, as distinct from Barbados, boys in Jamaica are subjected to harsh corporal punishment to a significantly greater extent, while girls are more subjected to harsh verbal punishments or pedagogical methods. In Jamaica the use of harsh corporal and verbal punishments was more present in the lowest income quintiles, while pedagogical methods were used more by parents in the highest quintiles. In Barbados, although there are no big differences between quintiles, parents in the highest quintile seem to use more harsh corporal punishment, as well as pedagogical methods.

²⁵ Aruba, Curaçao and St. Maarten are the only countries in the Caribbean that prohibit all types of corporal punishment of children (laws approved in 2016, 2011 and 2013 respectively for schools). In The Bahamas, corporal punishment is prohibited by law in some alternative care settings, in some daycare facilities, and in penal institutions. However, the practice is not prohibited in the household, in schools, and as a sentence for a crime. In Barbados, the legislation prohibits corporal punishment only in day nurseries, but it is still permitted in other daycare facilities, alternative care settings, schools, children's homes, penal institutions and as a sentence for crime. In Guyana, the practice has been banned by law in penal institutions, as a sentence for crime, and in some alternative care settings and daycare facilities. However, this has not extended to schools and children's homes (The Global Initiative to End All Corporal Punishment of Children, 2021). In Jamaica, the Ministry of Education issued in 2009 an order to suspend the practice across the educational system but met with strong opposition from many stakeholders -including parents, teachers, and policy makers (Flemming, 2013 cited in Smith, 2016). Nowadays, corporal punishment is prohibited in alternative care settings, in some daycare facilities, in penal institutions, and as a sentence for crime. However, it is still allowed in households. Prohibition of corporal punishment in schools has been under discussion for a few years, but it is yet to be achieved (Global Initiative to End All Corporal Punishment of Children, 2021). In March 2020, the Safe to Learn Call to Action was endorsed as a part of the Safe to Learn Initiative, aiming at the prohibition of corporal punishment and the promotion of positive forms of discipline in Jamaican schools (Global Initiative to End All Corporal Punishment of Children, 2021). In Trinidad and Tobago, although punishment inside the household is still allowed, punishment in schools, daycare facilities, alternative care settings, penal institutions and as a sentence for crime is prohibited by law (Global Initiative to End All Corporal Punishment of Children, 2020).

²⁶ Coore-Desai et al (2019).



FIGURE 10 DISCIPLINE FOR CHILDREN BY GENDER.
BARBADOS (2016) AND JAMAICA (2018)



Note:

1) data only available for Barbados and Jamaica. Variables for the two countries have been harmonized.

2) harsh corporal punishment includes slapping, beating and pinching; harsh verbal punishment includes quarreling and swearing; pedagogical methods include taking away privileges, timeouts, talking and reasoning.

Source: own elaboration based on Barbados' 2016 Survey of Living Conditions and Jamaica's 2018 Survey of Living Conditions.

Corporal punishment has also been highly prevalent in Caribbean schools, though this is slowly changing. In Jamaica, an extremely high percentage of teachers report having used physical punishment and an extremely high percentage of students report having been subjected to it. In a survey of 11-to-12-year-old children in the country, 75 percent reported having been beaten with an object by teachers (Samms-Vaughan et al., 2000, cited in Smith, 2016). In another study, 80 percent of teachers said they had often used corporal punishment to discipline their students (Pottinger & Nelson, 2004, cited in Smith, 2016). Research in Guyana found that approximately 53 percent of schools still used corporal punishment (Ministry of Labour, Human Services and Social Security, 2006, cited in Bailey et al., 2014). In their 2014 study, Bailey et al. administered a survey to students, teachers and principals in four countries in the Eastern Caribbean: Grenada, St. Kitts and Nevis, St. Vincent and the Grenadines and Trinidad and Tobago. Eighty-seven percent of the students said they had suffered corporal punishment at school, and more than 90 percent said they knew someone who also had experienced it. Those results were in line with those for teachers. Most teachers said they believed corporal punishment was not the most effective form of discipline and could possibly be harmful to children. Yet more than 70 percent



said they still believed it was justified. Seventy-seven percent of them also thought it was not morally wrong. Both teachers and principals, however, felt corporal punishment should only be used as a last resort.

In a survey of 10-to-11-year-old students in Barbados, Payne (1998, cited in Parry, 2000) found that over 60 percent were in favor of flogging/caning, at least occasionally. Anderson & Payne's (1994) 1989/90 study in Barbados showed similar results. Some authors believe that the reason behind students' continued approval of the practice is their lack of knowledge of alternative measures, or their lack of faith in them (British Psychological Society, 1980, Mercurio, 1975, cited in Anderson & Payne, 1994).

Boys in the Caribbean are more likely to experience harsher forms of punishment at school than their female counterparts (Gregory, 1995 cited in Telson et al., n.d.a.). They are also expected to respond to punishment in a way that can lead to or exacerbate educational underperformance, as mentioned in Section 2.4.2 (George et al., 2019, cited in Telson et al., n.d.a.). Anderson & Payne (1994) reach similar conclusions in their study of Barbados. According to the authors, boys were more likely than girls to suffer corporal punishment "very" or "quite" often at school, although this difference was not statistically significant. Several boys also said that girls usually "get off" while they themselves were "always" being flogged. These authors also found that most students believed that corporal punishment was more effective as a deterrent for generally well-behaved students, than in reforming those who misbehaved. One girl remarked in an interview, "When I first began this school, I saw the children getting beaten, and it stopped me from learning because I was afraid. I never wanted to go to school because I thought I might get beaten as well." This highlights how corporal punishment can be an important factor affecting children's learning, attendance, and even dropout.



3 Gender Gaps in the Labor Market

The previous sections have shown that girls in the English-speaking Caribbean are outperforming boys in terms of access to the educational system and learning outcomes. These differences, however, do not seem to give them an advantage in the labor market, where conditions for females, despite their academic advantage, are less favorable than for males.

This section reviews labor market data for the five countries of this study to uncover gender differences in various outcomes. Using labor force surveys from the countries -The Bahamas, Barbados, Guyana, Jamaica, and Trinidad and Tobago- we study gender gaps in labor markets at distinct levels. In the first subsection, we analyze labor market participation and differences in wages between women and men across countries. In the second subsection, gender differences in earnings across industrial sectors are analyzed. In the third, we move to an analysis of the composition of the labor force and occupations across sectors and investigate relationships between income and education. In the final subsection, we discuss the main results.

3.1 Labor Force Participation

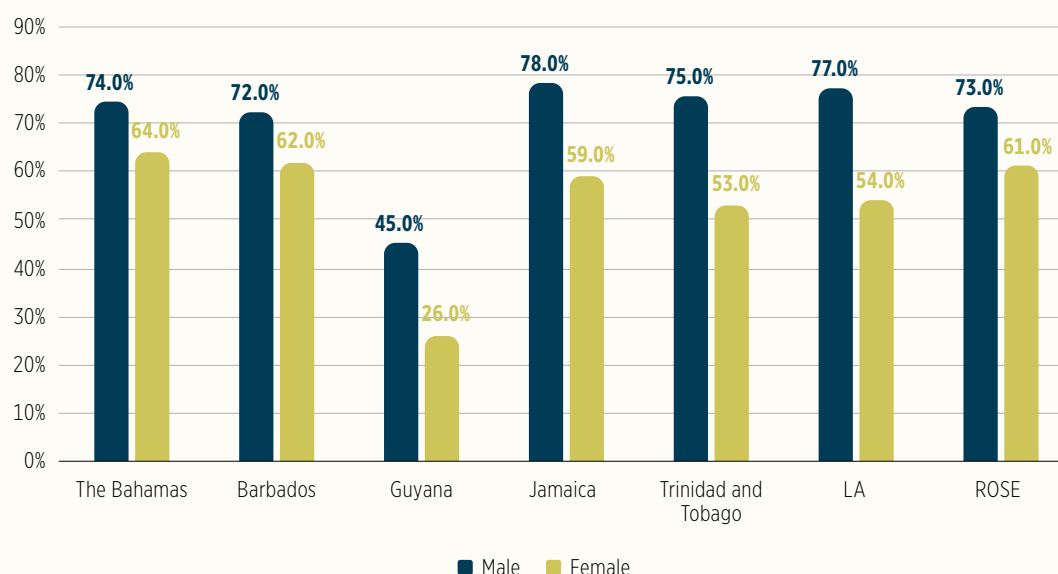
Men dominate the labor market in the English-speaking Caribbean, which is characterized by a consistently higher participation of males than females. The share of males aged 25 or older that participates in the labor market (working or unemployed) ranges from between 45 percent in Guyana to 78 percent in Jamaica, averaging 71.6 percent in the five countries studied. The same figure for females ranges from 26 percent in Guyana to 64 percent in The Bahamas, averaging 52.4 percent.²⁷ These nations lag in terms of female participation compared to the countries in the ROSE category, where it averages 61 percent; but they are roughly on par with the ROSE countries' rate of 73 percent for male participation.²⁸ When compared to Latin American (LA) countries, Caribbean countries underperform in terms of male participation, since in LA the participation rate for males is 77 percent. The Caribbean countries are almost on par with the LA countries' female participation rate of 54 percent. The participation gender gap is smaller in Caribbean countries than in LA (Figure 11).

²⁷ The age considered for these figures is 25 years old or older.

²⁸ The data is collected from International Labor Organization Statistics. See: <https://ilostat.ilo.org/data/>.



FIGURE 11 WORKFORCE PARTICIPATION (INDIVIDUALS AGED 25 OR OLDER). THE BAHAMAS (2014), BARBADOS (2016), GUYANA (2019), JAMAICA (2016), TRINIDAD AND TOBAGO (2015), LATIN AMERICA (CIRCA 2020), AND ROSE (2020)



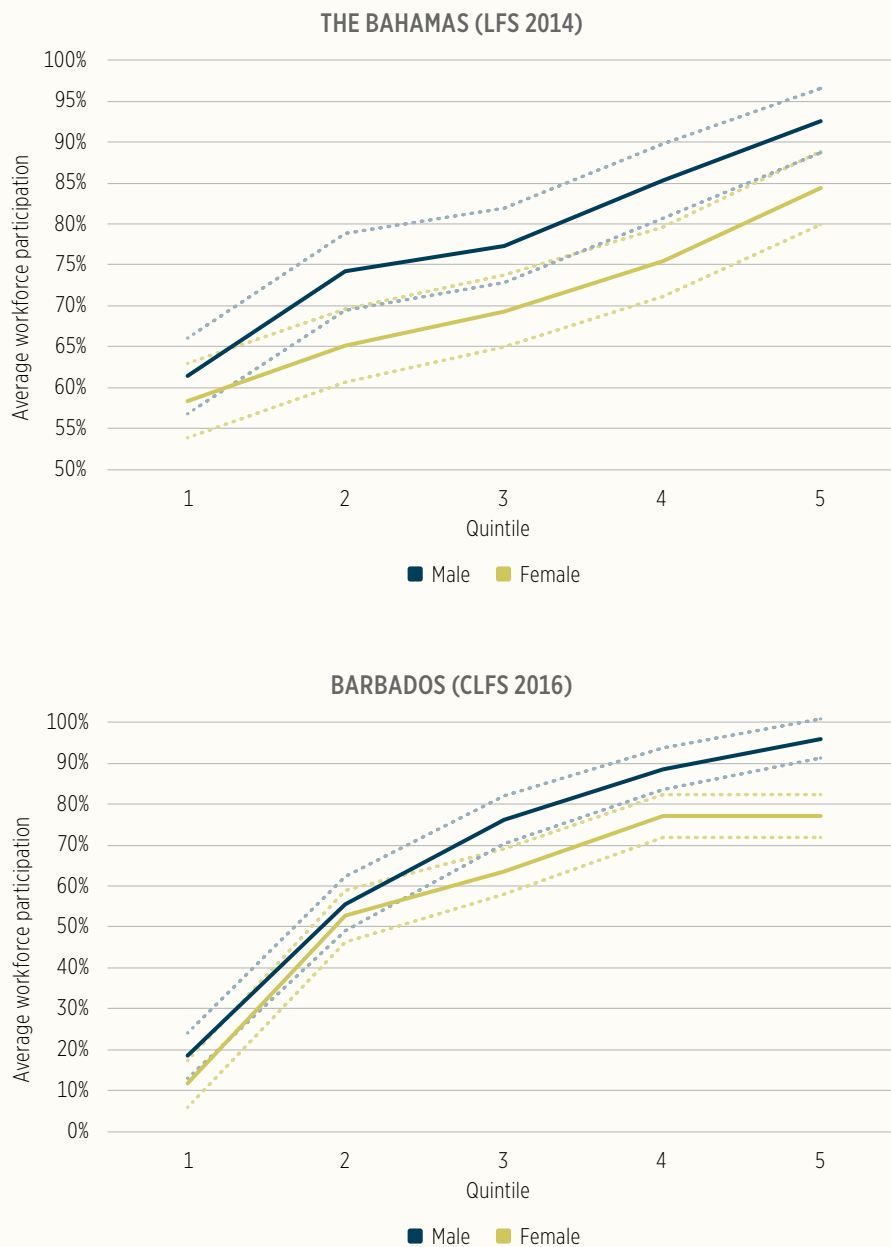
Note: Rest of Small Economies (ROSE) include Bhutan, Botswana, Cyprus, Gabon, Lesotho, Mauritius, Mongolia, Montenegro, Macedonia, Timor-Leste (World Development Indicators 2020, World Bank). LA represents Latin American countries' average, including Argentina (2020), Brazil (2020), Bolivia (2020), Colombia (2020), Ecuador (2020), Mexico (2020), Nicaragua (2014), Panama (2019), Peru (2020) and Paraguay (2020).

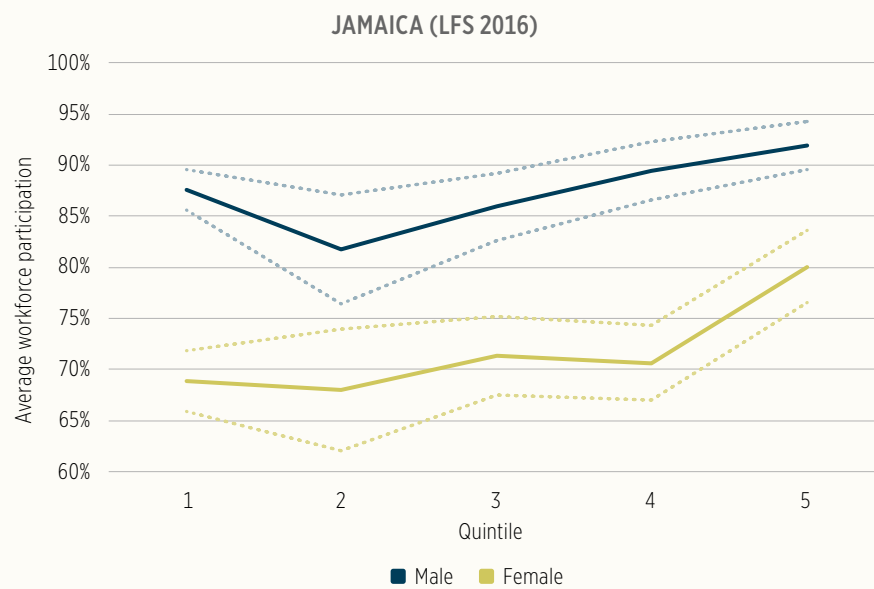
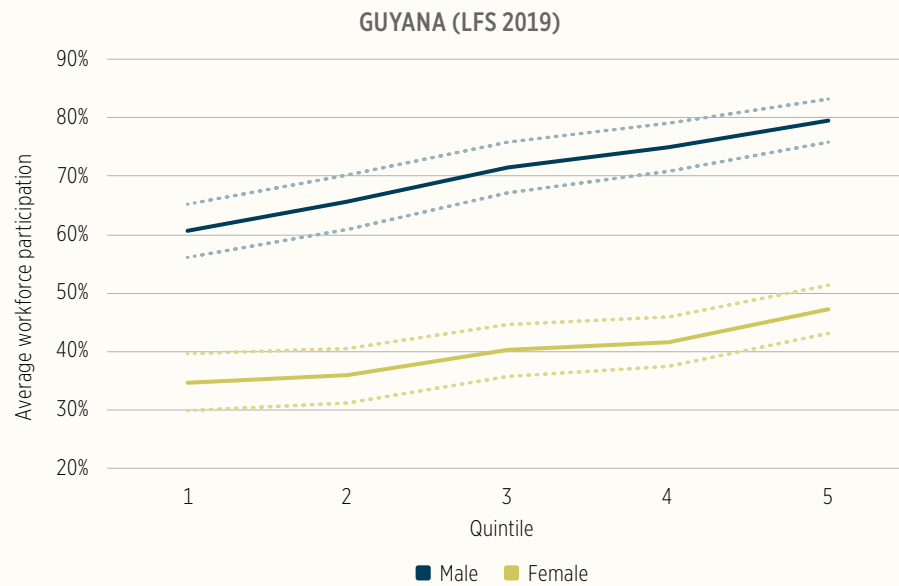
Source: own elaboration based on The Bahamas' 2014 Labor Force Survey, Barbados' 2016 Continuous Labor Force Survey, Guyana's 2019 Labor Force Survey, Jamaica's 2016 Labor Force Survey, Trinidad and Tobago's 2015 Continuous Sample Survey of Population, and International Labour Organization (ILO) data for Latin America and ROSE countries.

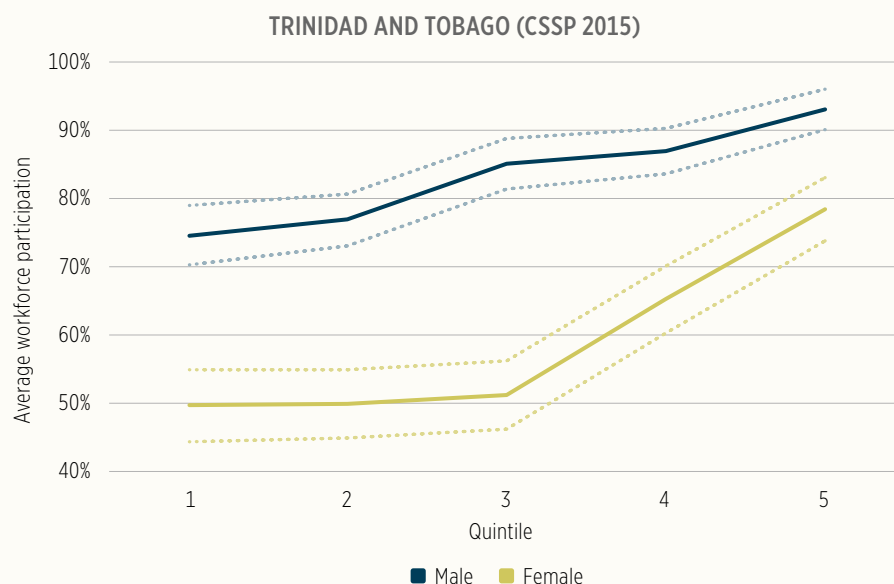
A relevant question is whether the documented gender gaps vary by socio-economic status. Unfortunately, labor force surveys do not collect necessary data on living standards. Nonetheless, we proxy socio-economic status with the household level per capita earnings. Figure 12 shows that, overall, labor force participation increases with per capita earnings. Furthermore, except for the lowest two earnings quintiles in Barbados, we also observe that the gender gap favoring males is generally ubiquitous across all quintiles of per capita earnings.



FIGURE 12 WORKFORCE PARTICIPATION (INDIVIDUALS AGED 25 OR OLDER) BY PER CAPITA EARNINGS QUINTILE. THE BAHAMAS (2014), BARBADOS (2016), GUYANA (2019), JAMAICA (2016), TRINIDAD AND TOBAGO (2015)





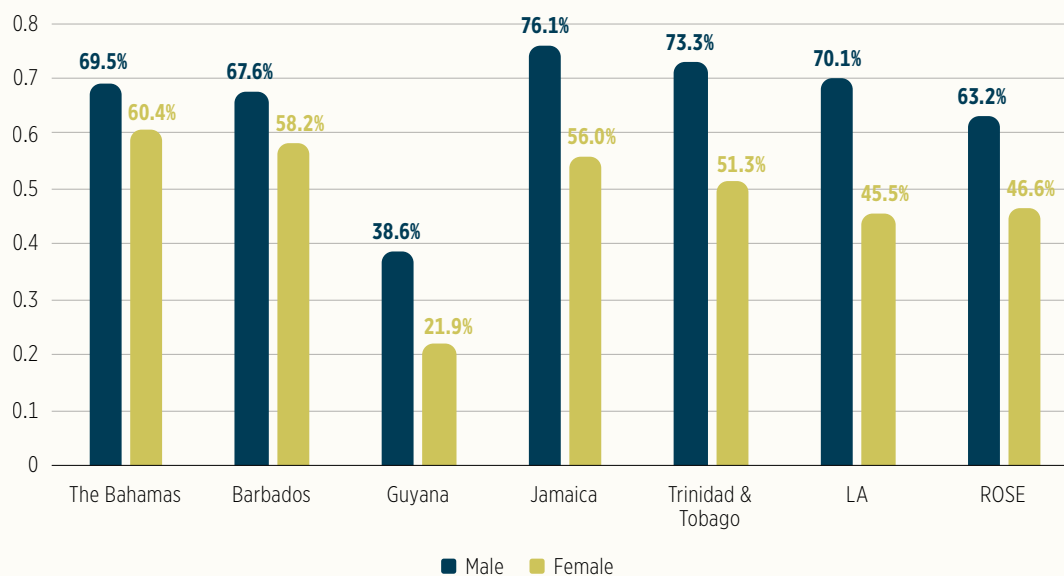


Source: own elaboration based on The Bahamas' 2014 Labor Force Survey, Barbados' 2016 Continuous Labor Force Survey, Guyana's 2019 Labor Force Survey, Jamaica's 2016 Labor Force Survey, Trinidad and Tobago's 2015 Continuous Sample Survey of Population.

Among those actively participating in the labor market, males tend to be employed in a higher proportion. The employment figure (as a share of the population aged 25 or older) for males in the English-speaking Caribbean ranges from 39 percent in Guyana to 76 percent in Jamaica, averaging 68.9 percent in these five countries. This figure is systematically lower for women in every country considered: from 22 percent in Guyana to 60 percent in The Bahamas, averaging 49.7 percent. Here, the Caribbean countries perform similarly to ROSE (47 percent for females and 63 percent for males), and, with the exception of Guyana, outperform Latin American countries. The gender gap in terms of the employment rate is lower in the Caribbean countries than in LA (Figure 13).



FIGURE 13 EMPLOYMENT RATE (INDIVIDUALS AGED 25 OR OLDER). THE BAHAMAS (2014), BARBADOS (2016), GUYANA (2019), JAMAICA (2016), TRINIDAD AND TOBAGO (2015), LATIN AMERICA (CIRCA 2020), AND ROSE (2020)



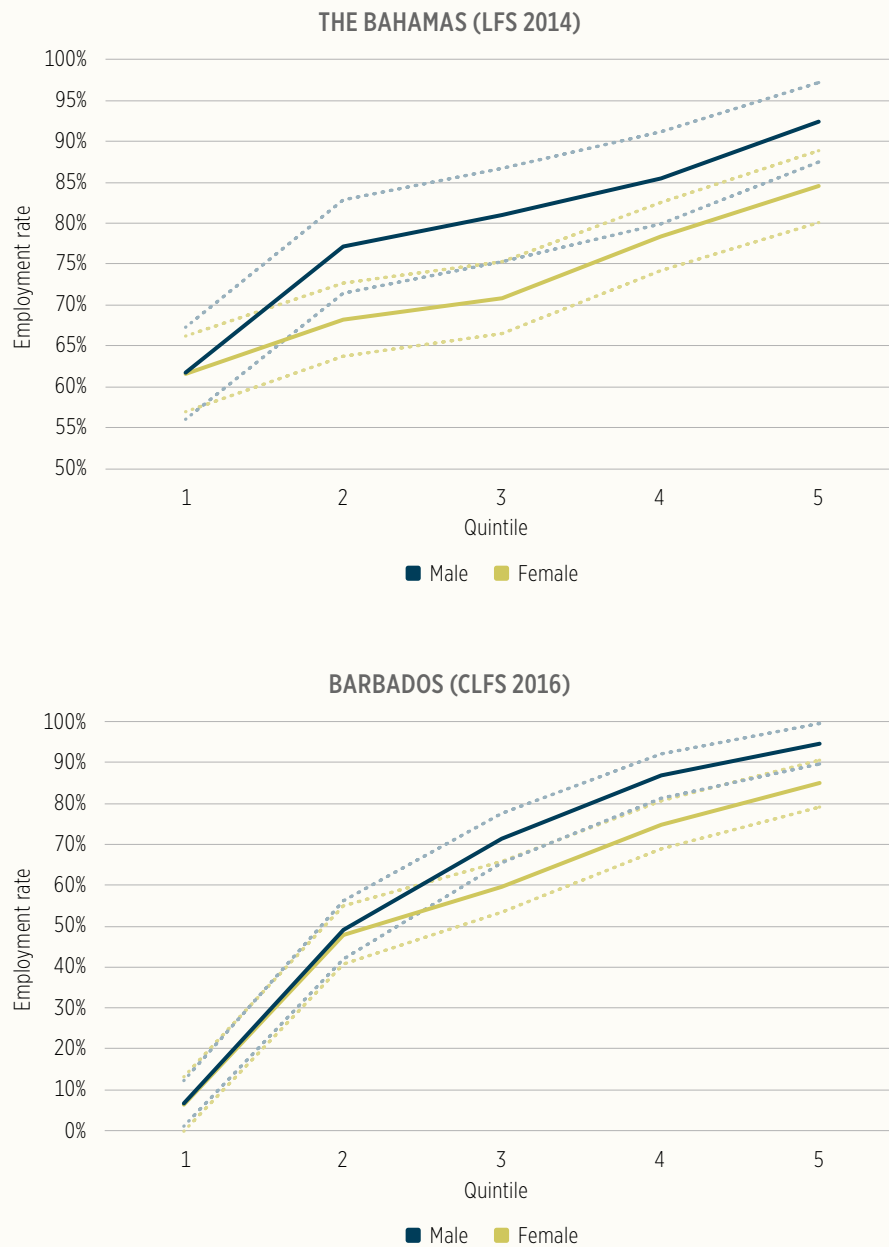
Note: Rest of Small Economies (ROSE) include Bhutan, Botswana, Cyprus, Gabon, Lesotho, Mauritius, Mongolia, Montenegro, Macedonia, Timor-Leste (World Development Indicators 2020, World Bank). Latin America represents Latin American countries' average including: Argentina (2020), Brazil (2020), Bolivia (2020), Colombia (2020), Ecuador (2020), Mexico (2020), Nicaragua (2014), Panama (2019), Peru (2020) and Paraguay (2020).

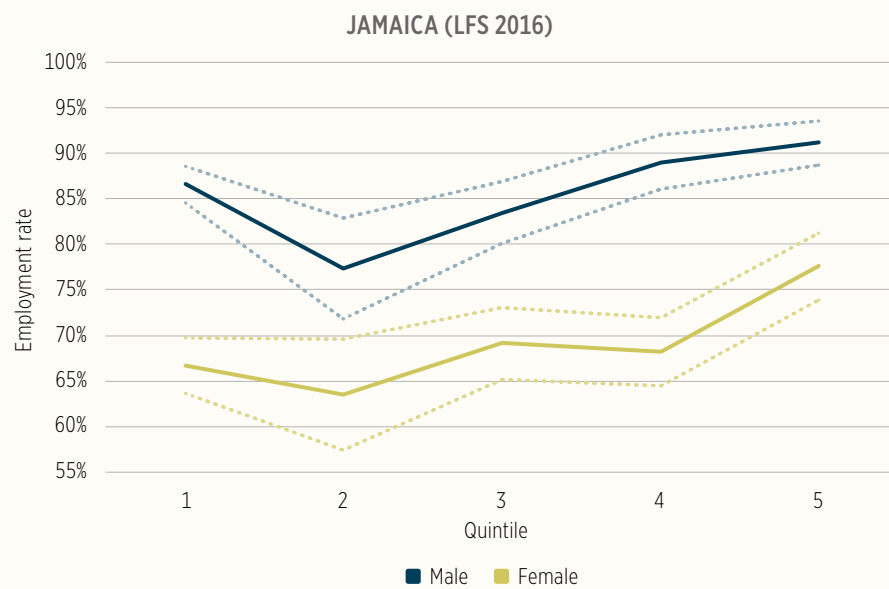
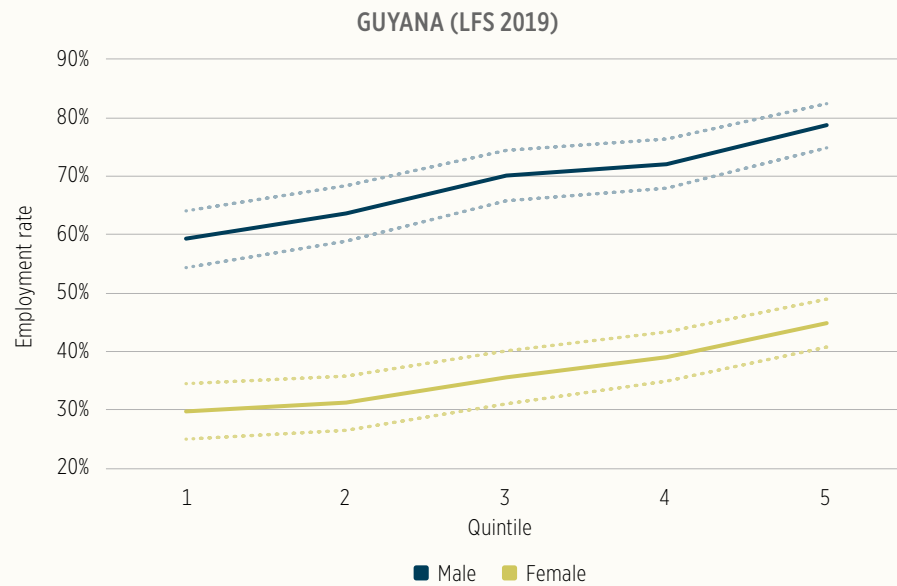
Source: own elaboration based on The Bahamas' 2014 Labor Force Survey, Barbados' 2016 Continuous Labor Force Survey, Guyana's 2019 Labor Force Survey, Jamaica's 2016 Labor Force Survey, Trinidad and Tobago's 2015 Continuous Sample Survey of Population, and International Labour Organization (ILO) data for Latin America and ROSE countries.

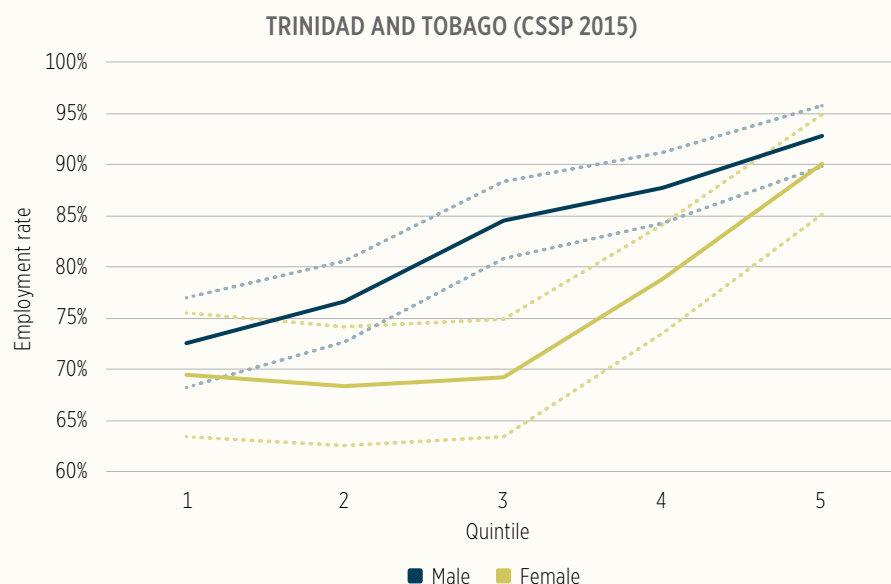
Mimicking the patterns in labor force participation, employment rates are also positively correlated with earnings per capita as shown in Figure 14. In addition, it is also evident that gender gaps favoring males are present across the entire spectrum of earnings per capita. The only exceptions to this pattern are observed in the lowest earnings quintile in The Bahamas and the two lowest quintiles in Barbados.



FIGURE 14 EMPLOYMENT RATE (INDIVIDUALS AGED 25 OR OLDER) BY PER CAPITA EARNINGS QUINTILE. THE BAHAMAS (2014), BARBADOS (2016), GUYANA (2019), JAMAICA (2016), TRINIDAD AND TOBAGO (2015)







Source: own elaboration based on The Bahamas' 2014 Labor Force Survey, Barbados' 2016 Continuous Labor Force Survey, Guyana's 2019 Labor Force Survey, Jamaica's 2016 Labor Force Survey, Trinidad and Tobago's 2015 Continuous Sample Survey of Population.

The labor market in the region is diverse in terms of industrial sector labor force distribution.²⁹ The following figures show the distribution of employment by sectors, in aggregated terms, and by gender in the Caribbean countries. In The Bahamas, for example, accommodation and food services represent 17 percent of total employees. The proportion of females in this sector is the highest of all: 20 percent of employed women work there, versus 14 percent for males. That is closely followed by the health sector with 19.8 percent and education with 16.5 percent of total employed women, versus 5.9 and 15.9 percent for males. Males, however, have a higher representation in manufacturing (26 versus 3 percent) (Figure 15).³⁰

The case of Barbados closely follows that of The Bahamas. Although the economy of Barbados is also based on services, the largest employment sector is "other services" which comprises transportation and storage, administrative support service activities, information and communication, financial and insurance activities, real estate activities, professional, scientific and technical activities, other services and activities, and construction, the latter containing more than

²⁹ For disaggregated data, please refer to the Annex where we find that some sectors show a reduction on gender wage gaps over time.

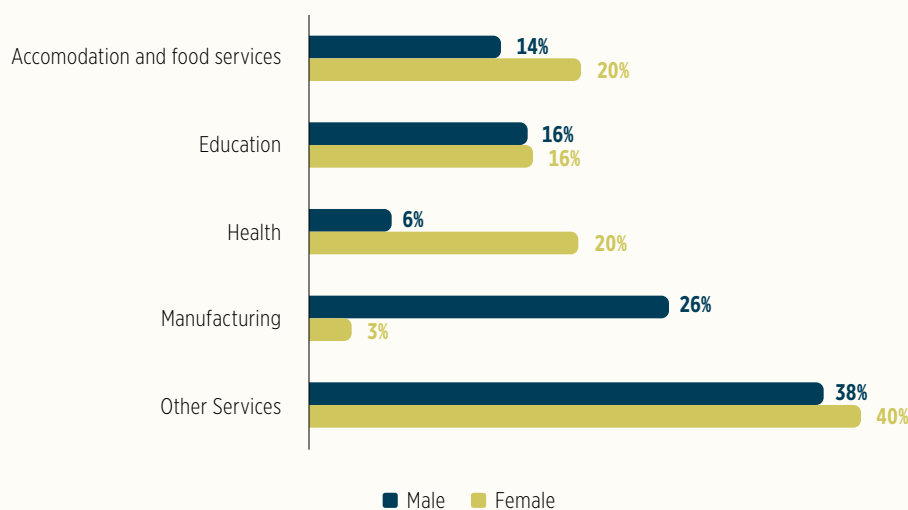
³⁰ The share of employed individuals that is collected in the category "other services" comes from transportation and storage, administrative support service activities, information and communication, financial and insurance activities, real estate activities, professional, scientific and technical activities, and other services and activities. The figure for "manufacturing" comes from adding the mining and quarrying, manufacturing, and water supply, sewerage, waste management sectors.



17 percent of total employment. The top three sectors where women’s participation in the labor market surpasses men’s are accommodation activities, health, and activities of households as employers of domestic personnel, this one located inside the “other services” category (Figure 16). Males have a higher representation in education and manufacturing.³¹

Jamaica’s economy is also based on services. The employment threshold in that country is driven by services and mining operations which are contained in the “other services” category.³² These two sectors are the largest employers in Jamaica’s economy, absorbing 22 and 19 percent of employed individuals, respectively. The top three sectors where the proportion of women surpasses that of men are wholesale, with 27 percent of employed women, education, and activities of the household as employers of domestic personnel, with 12 percent each. These three sectors account for 50 percent of employed women in Jamaica. As in The Bahamas and Barbados, males have a higher representation in manufacturing (Figure 17).

FIGURE 15 EMPLOYMENT RATE (INDIVIDUALS AGED 25 OR OLDER) BY SECTOR AND GENDER. THE BAHAMAS (2014)



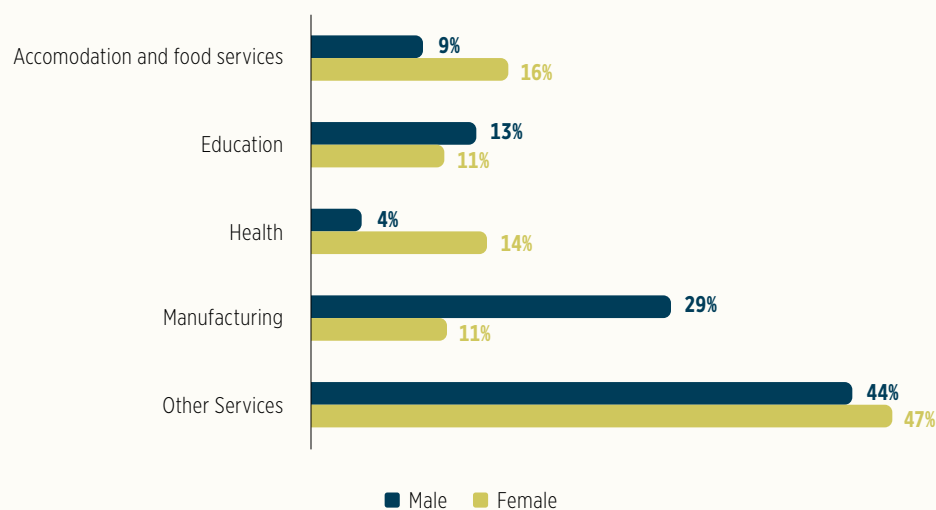
Source: own elaboration based on The Bahamas’ 2014 Labor Force Survey.

³¹ In the case of Barbados, the manufacturing sector collects information from mining and quarrying, manufacturing, and water supply, sewerage, waste management and remediation activities sectors.

³² In the case of Jamaica, “other services” contains transportation and storage, administrative support service activities, information and communication, financial and insurance activities, real estate activities, professional, scientific and technical activities, and other services and activities, and construction sectors. The category “manufacturing” contains mining and quarrying, manufacturing, and water supply, sewerage, waste management and remediation activities sectors.

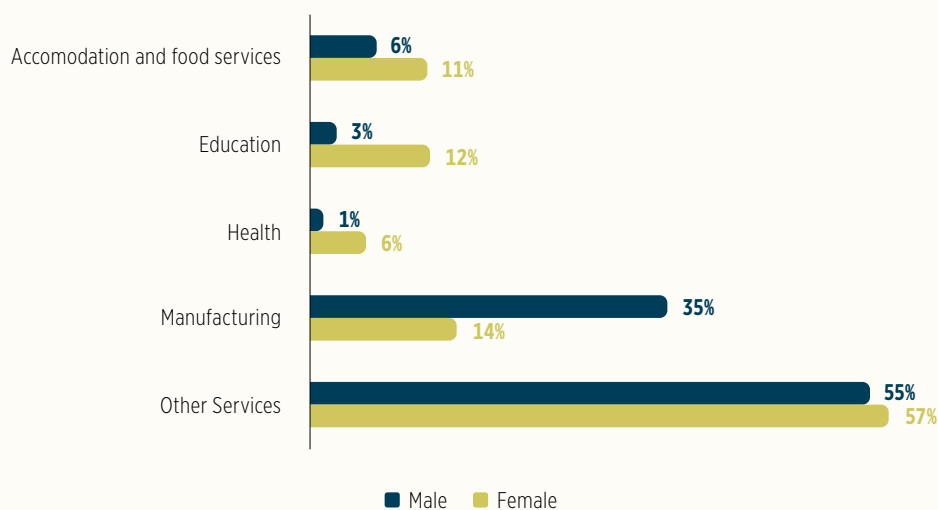


FIGURE 16 EMPLOYMENT RATE (INDIVIDUALS AGED 25 OR OLDER) BY SECTOR AND GENDER. BARBADOS (2016)



Source: own elaboration based on Barbados' 2016 Continuous Labor Force Survey.

FIGURE 17 EMPLOYMENT RATE (INDIVIDUALS AGED 25 OR OLDER) BY SECTOR AND GENDER. JAMAICA (2016)



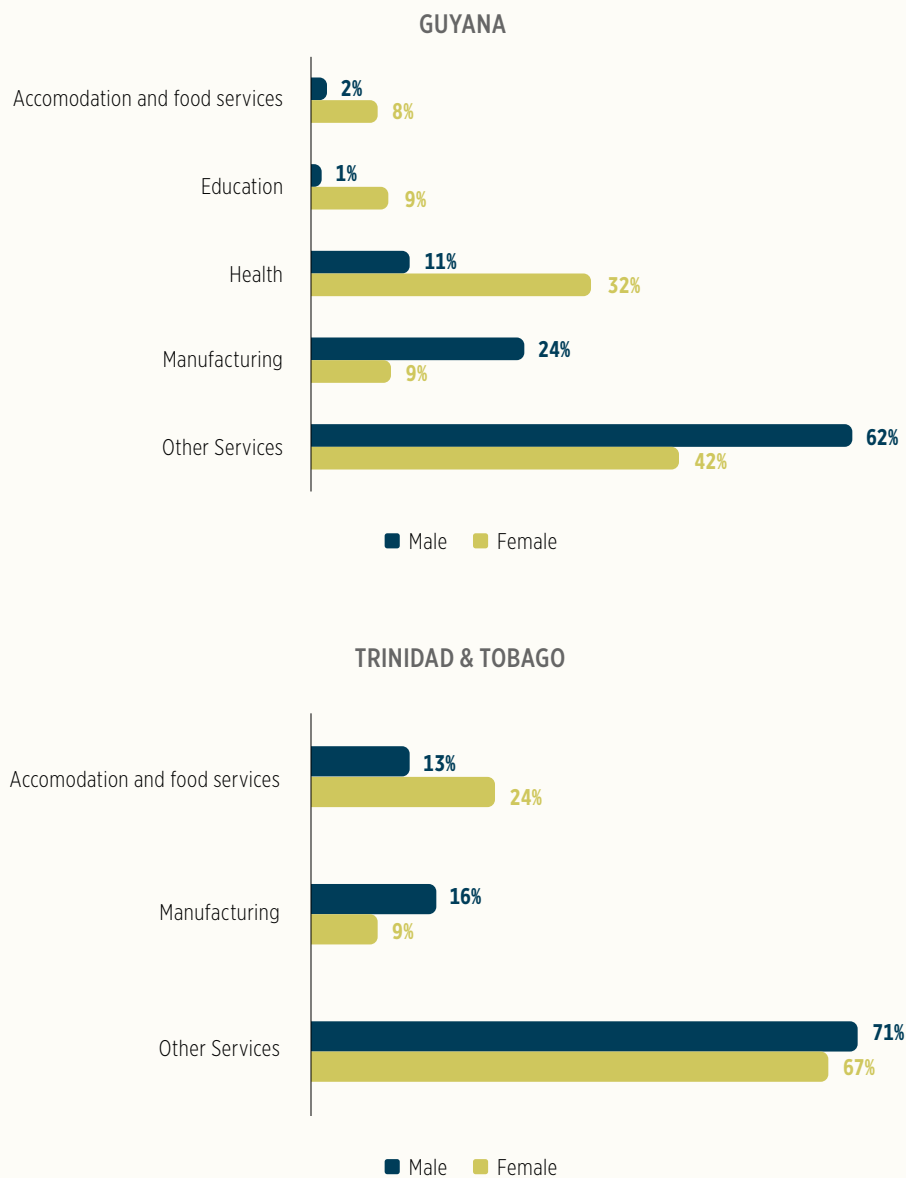
Source: own elaboration based on Jamaica's 2016 Labor Force Survey.



Guyana's main employment sector consists of human health and social work activities. This sector accounts for 19 percent of the total labor force in the country. It is also the highest employer of women, encompassing 37 percent of employed females. The other two top employment sectors for women are wholesale and manufacturing, absorbing 12 and 6 percent of employed women, respectively. Again, males have a higher representation in manufacturing. In Trinidad and Tobago, the largest share of the employed population, 34.4 percent, performs professional activities. The top three employers for women in Trinidad and Tobago correspond to professional activities, accommodation and food activities, and financial activities, with 45, 24, and 12 percent, respectively. Males have a higher representation in manufacturing and other services.



FIGURE 18 EMPLOYMENT RATE (INDIVIDUALS AGED 25 OR OLDER) BY SECTOR AND GENDER. GUYANA (2019) AND TRINIDAD AND TOBAGO (2015)



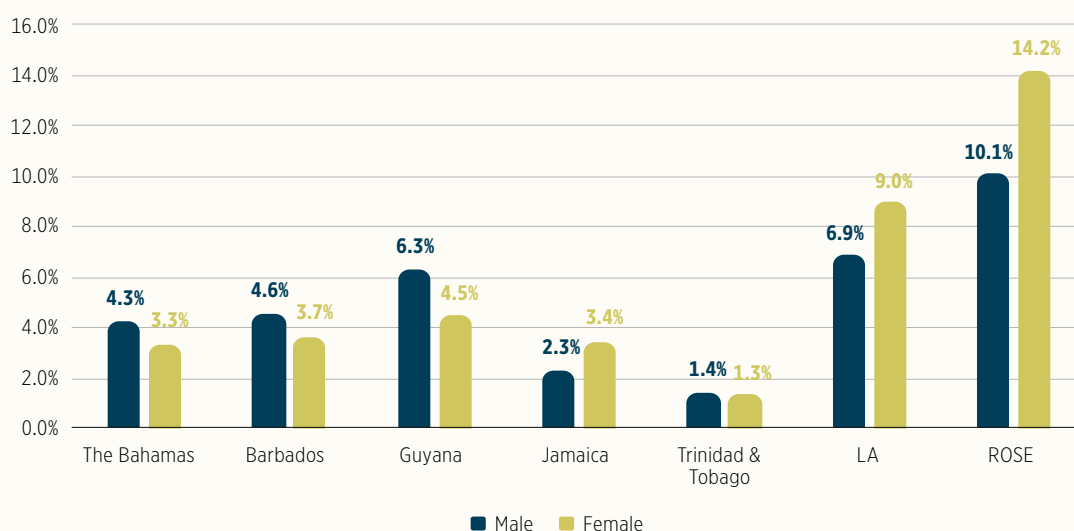
Note: for Trinidad and Tobago, data available does not allow to separate education and health from the rest of the categories.
Source: own elaboration based on Guyana's 2019 Labor Force Survey and Trinidad and Tobago's 2015 Continuous Sample Survey of Population.



The unemployment rate tends to be lower for females in the English-speaking Caribbean. The exception is Jamaica, where unemployed females³³ surpass unemployed males. The lowest female unemployment rate is in Trinidad and Tobago, where it stands at slightly over 1 percent, and the highest is in Guyana, with 4.5 percent, for an average of 2.7 percent across the five countries studied. In general, the region does relatively well in comparison with ROSE countries where, on average, 14.2 percent of women aged 25 or older are unemployed (compared to 10 percent of their male counterparts). Unemployment rates in the Caribbean also seem to be lower than in LA (6.9 percent for males and 9 percent for females). Unemployment rates for females are higher than those of men in both ROSE countries and in LA.

In the following subsections, we delve deeper into the composition of the labor market in the Caribbean. We review how this labor market participation also shows disparities in terms of earnings, not only in the economy generally but at the sector level as well. We also study the distribution of occupations between males and females, according to the industrial sector.

FIGURE 19 UNEMPLOYMENT RATE (INDIVIDUALS AGED 25 OR OLDER). THE BAHAMAS (2014), BARBADOS (2016), GUYANA (2019), JAMAICA (2016), TRINIDAD AND TOBAGO (2015), LATIN AMERICA (CIRCA 2020), AND ROSE (2020)



Note: Rest of Small Economies (ROSE) include Bhutan, Botswana, Cyprus, Gabon, Lesotho, Mauritius, Mongolia, Montenegro, Macedonia, Timor-Leste (World Development Indicators 2020, World Bank). Latin America represents Latin American countries' average including: Argentina (2020), Brazil (2020), Bolivia (2020), Colombia (2020), Ecuador (2020), Mexico (2020), Nicaragua (2014), Panama (2019), Peru (2020) and Paraguay (2020).

Source: own elaboration based on The Bahamas' 2014 Labor Force Survey, Barbados' 2016 Continuous Labor Force Survey, Guyana's 2019 Labor Force Survey, Jamaica's 2016 Labor Force Survey, Trinidad and Tobago's 2015 Continuous Sample Survey of Population, and International Labour Organization (ILO) data for Latin America and ROSE countries.

³³ Aged 25 or older.



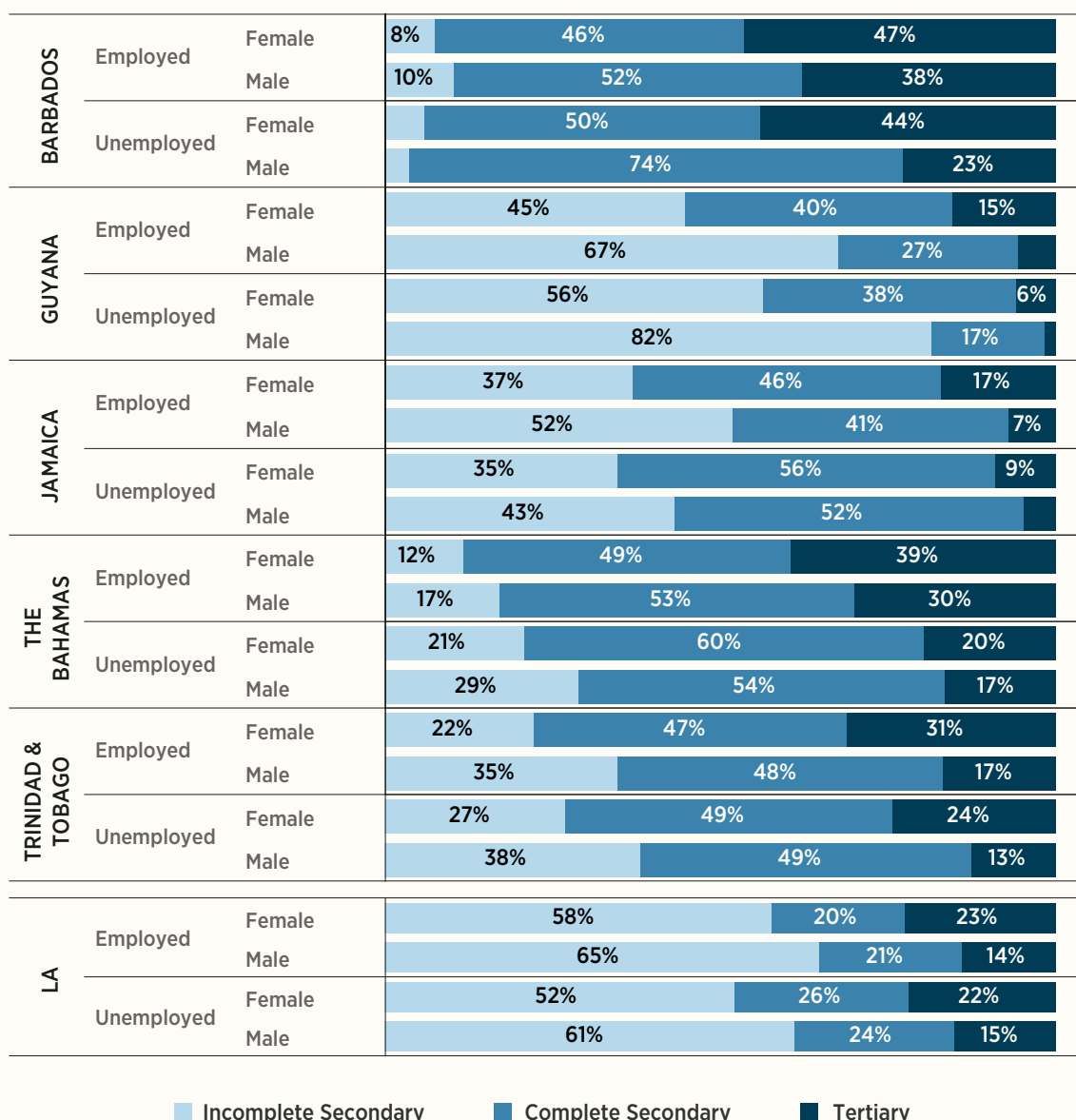
3.2 Education and Labor Market Participation

As discussed in previous sections, females tend to be more academically prepared than men. The most consistent observation when studying the sample of working-age individuals is that more females than males have tertiary education as their highest level of education (5.4 percentage points difference), while a higher proportion of males tend to have secondary school as their highest level of education, compared to females (3.6 percentage points difference). The cases where women are systematically more educated than males at both secondary and tertiary education are Guyana, where the share of females is higher at both educational levels but the difference in secondary is higher than in tertiary, and Jamaica.

Figure 20 shows that females tend to have higher levels of tertiary education than males. In general, the shares of employed and unemployed females with tertiary education are larger than those for males. The proportion of employed females with tertiary education is also larger than the proportion of unemployed females with the same level of schooling, and a similar situation can be observed in the males' group. However, the proportion of females and males whose highest level of education is lower than tertiary education is higher for the unemployed group than for the employed group. Based on these results we can conclude that for females, tertiary education does not translate into better chances of being employed than for males. Males' unemployment rate is lower with less education attained. This is also seen when looking at employment status, since employed females tend to have a higher level of education than employed and unemployed males.



FIGURE 20 EDUCATIONAL ATTAINMENT BY EMPLOYMENT AND UNEMPLOYMENT STATUS. THE BAHAMAS (2014), BARBADOS (2016), GUYANA (2019), JAMAICA (2016), AND TRINIDAD AND TOBAGO (2015)



Note: Latin America's average includes Argentina (2020), Brazil (2020), Bolivia (2020), Colombia (2020), Ecuador (2020), Mexico (2020), Nicaragua (2014), Panama (2019), Peru (2020) and Paraguay (2020).

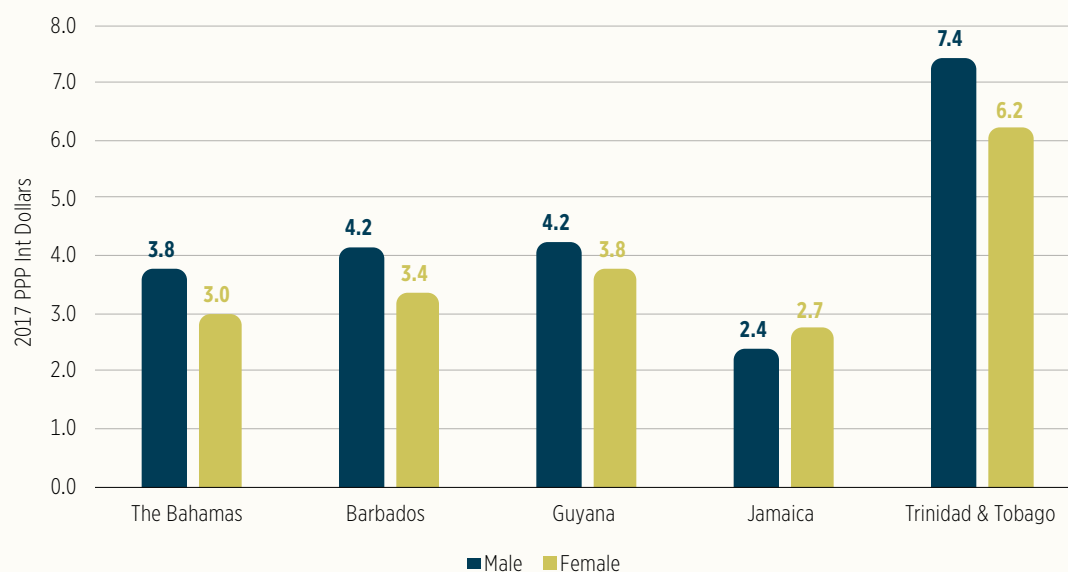
Source: own elaboration based on The Bahamas' 2014 Labor Force Survey, Barbados' 2016 Continuous Labor Force Survey, Guyana's 2019 Labor Force Survey, Jamaica's 2016 Labor Force Survey, and Trinidad and Tobago's 2015 Continuous Sample Survey of Population.



3.3 Wage Disparities in the Region

Countries across the Caribbean, except for Jamaica, show a systematic difference in wages between males and females. Considering only the English-speaking Caribbean countries, males' average hourly salary is around PPP\$4.14, whereas for females it is approximately PPP\$3.5. The highest hourly wage for males is in Trinidad and Tobago, with PPP\$7.4, and the lowest is in Jamaica, where males earn PPP\$2.4 per hour. For females, the highest hourly wage is in Trinidad and Tobago (PPP\$6.2), and the lowest is in Jamaica (PPP\$2.7).³⁴

**FIGURE 21 HOURLY WAGE (2017 PPP INTERNATIONAL DOLLARS).
THE BAHAMAS (2014), BARBADOS (2016), GUYANA (2019),
JAMAICA (2016), AND TRINIDAD AND TOBAGO (2015)**



Source: own elaboration based on The Bahamas' 2014 Labor Force Survey, Barbados' 2016 Continuous Labor Force Survey, Guyana's 2019 Labor Force Survey, Jamaica's 2016 Labor Force Survey and Trinidad and Tobago's 2015 Continuous Sample Survey of Population.

³⁴ 2017 PPP international dollars.



In this section, we examine the potential factors related to labor productivity that could be associated with the gender wage gap in the English-speaking Caribbean.³⁵ We estimate a model that captures the returns to education and other observed characteristics of workers³⁶ to understand the potential difference between the returns obtained by females and those obtained by males. In the next section, we explore the contribution of the labor market's non-observable characteristics.³⁷

While the wage gap in the English-speaking Caribbean tends to disfavor women, the returns to education are similar for females and males.³⁸ Indeed, after estimating the model using the available microdata, we found that there is no statistically significant difference in returns to education between the genders. The reader should interpret the parameter of the returns to education as having complete secondary school or tertiary education versus having attained a level below secondary school. Put differently, the labor market rewards educational attainment evenly between females and males.³⁹ Therefore, the observed wage gender gaps across the Caribbean cannot be explained by differential returns to education.

³⁵ There is a significant body of research studying the differences in earnings between females and males and across ethnic groups in the Caribbean. For example, Coppin & Olsen (1998) propose an analysis using Trinidad and Tobago's 1993 Continuous Sample Survey of Population and standard decomposition of earnings techniques to determine the existence of discrimination at the ethnic level. The authors' findings indicate the existence of differences in earnings, where Africans and Indians, who represent 80 percent of the labor force, tend to earn less than other races, considering these other races "...were historically accorded higher status than Africans and Indians...". According to the study, these differences are partly explained by the human capital component. However, a large part of the difference remains unexplained.

³⁶ For the complete model and explanation of the variables used, please refer to section 6.6 in the Annex.

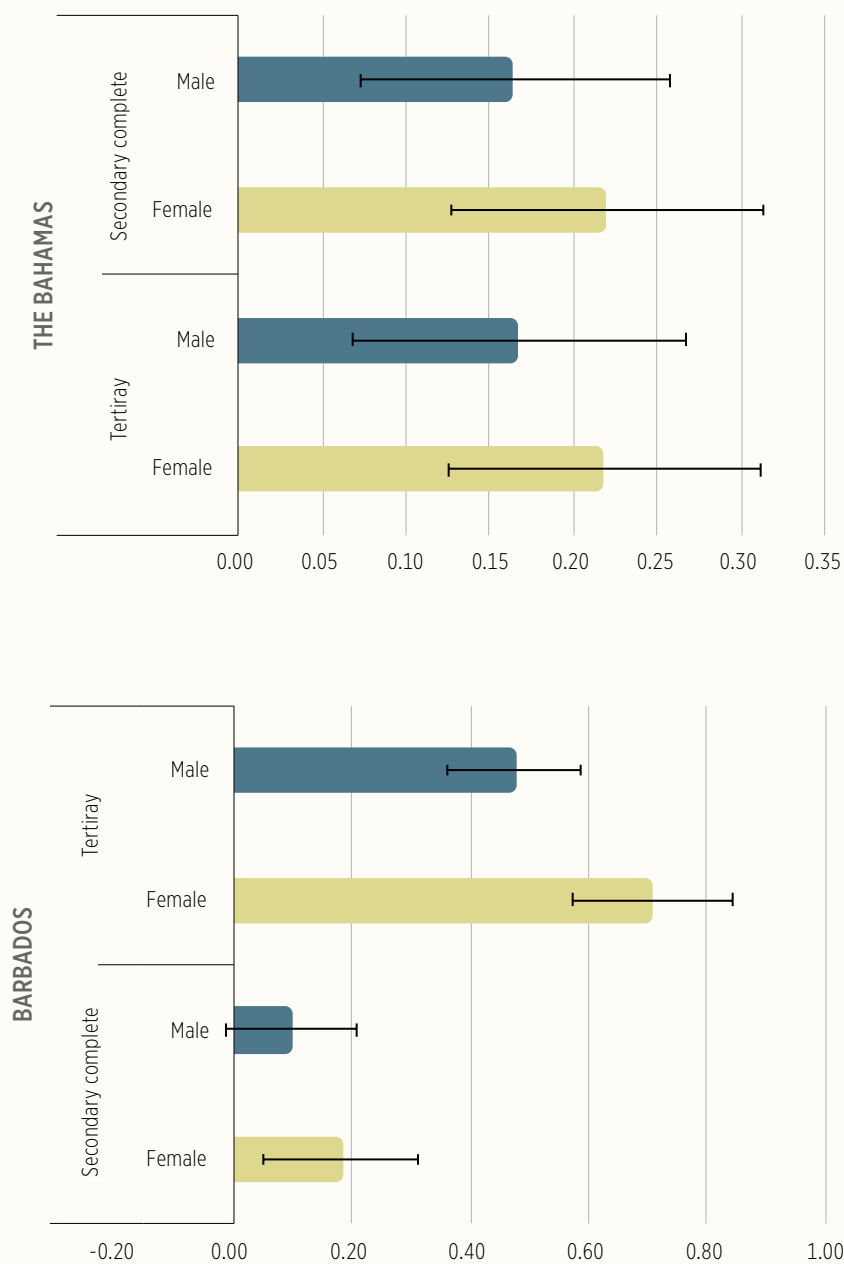
³⁷ One of the most recent case studies looking at gender gaps in Caribbean labor markets, by Bellony et al. (2010), explores earnings gap determinants. These authors use data from Barbados and Jamaica and the Nopo decomposition to estimate the most important determinants of the gender earnings gap. However, results are mixed. On the one hand, sector segregation is found to reduce Barbados' gap and increase Jamaica's. On the other hand, due to data issues, there was a more significant gap among the left tail of income distribution only for Jamaica. Although the paper's goal is to shed light on the gap determinants, there is no additional explanation of the trends to show the situation in terms of differences in education or initial household conditions that would also guide the discussion.

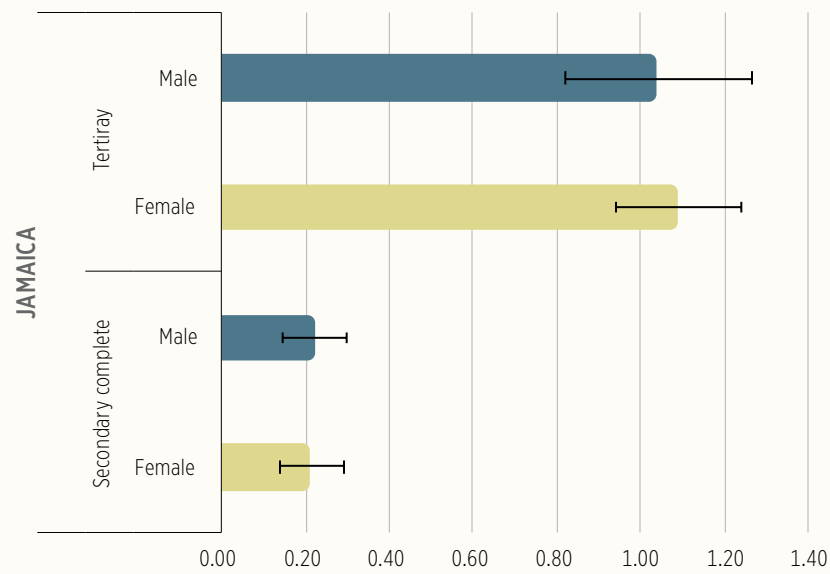
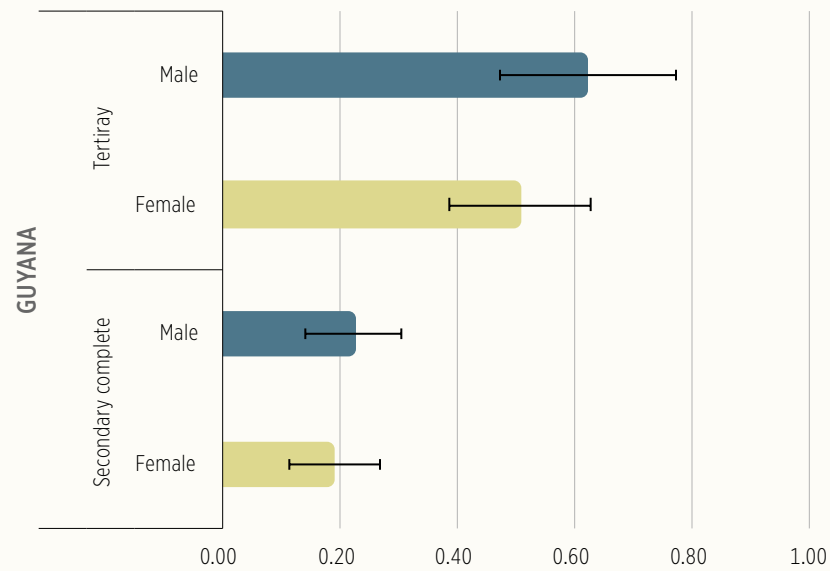
³⁸ Please refer to Annex 6.7 for definitions and the estimated model.

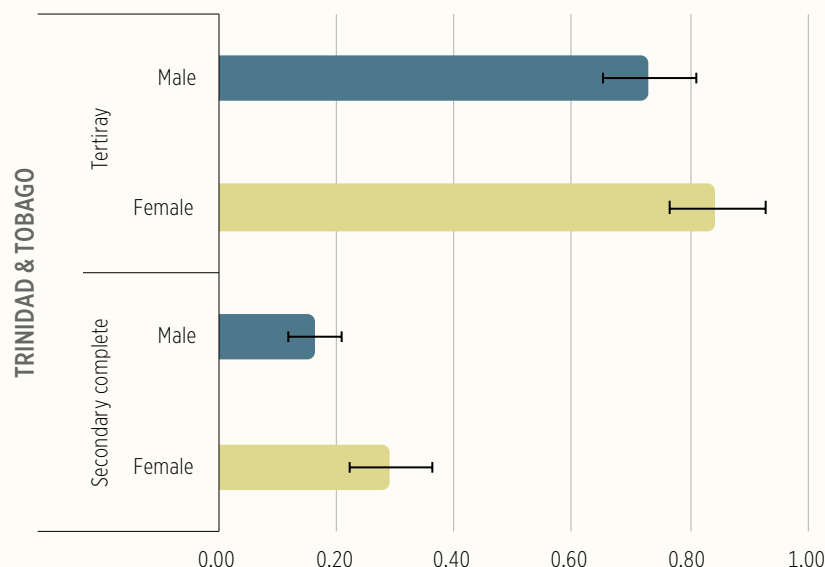
³⁹ We also assessed the possibility of differential returns to education across different economic sectors. Our analysis revealed that the overall finding of even returns to education by gender also holds when disaggregating the assessment at the economic sector level.



FIGURE 22 RETURNS TO EDUCATION. THE BAHAMAS (2014), BARBADOS (2016), GUYANA (2019), JAMAICA (2016), AND TRINIDAD AND TOBAGO (2015)







Note: the interpretation of the figure is as follows: the gray bars correspond to the point estimate of in the case of complete secondary and for tertiary education, and the lines that depart from the right of each bar correspond to the confidence interval. If the confidence interval does not cross the zero line, the parameter is statistically significant; on the other hand, if comparing parameters, those confidence intervals overlap, there is no statistical difference between them.

Source: own elaboration based on The Bahamas' 2014 Labor Force Survey, Barbados' 2016 Continuous Labor Force Survey, Guyana's 2019 Labor Force Survey, Jamaica's 2016 Labor Force Survey and Trinidad and Tobago's 2015 Continuous Sample Survey of Population.

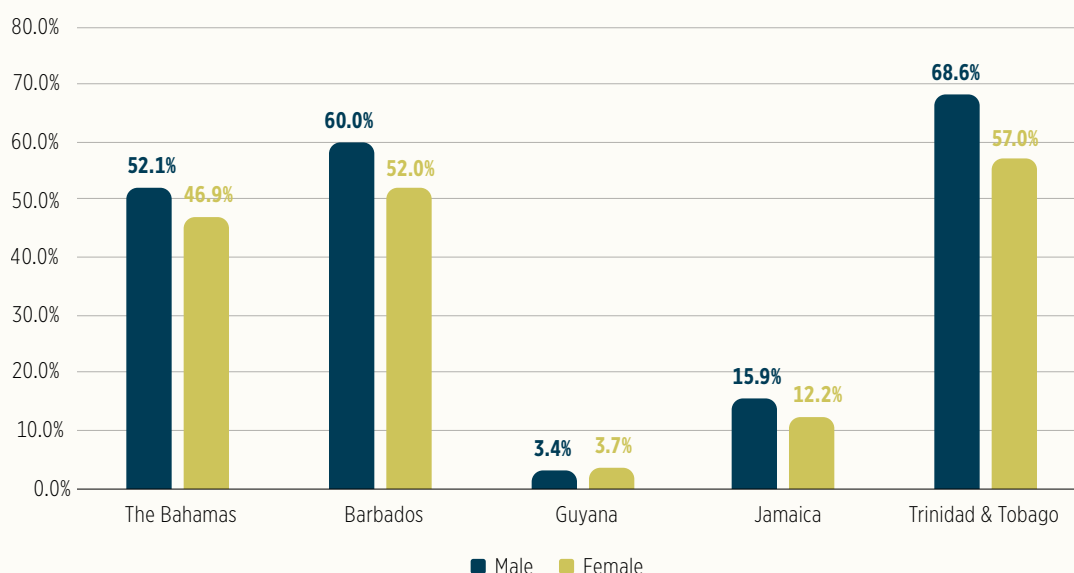
3.4 On-the-Job Training

Another potential way to accumulate human capital is through on-the-job training. As can be seen in Figure 23, systematically, a higher proportion of males than females say they have received on-the-job training. The only country that diverges from this pattern is Guyana, which is also the country with the smallest proportion of workers saying they have received this type of training.⁴⁰

⁴⁰ The variable is estimated using the following data: Barbados ("Were you trained for any occupation?"); The Bahamas ("Did you receive special training for your current job?"); Guyana ("In the last 12 months have you received training for any occupation?"); Jamaica ("Did you receive special training for your/his/her job?"); Trinidad and Tobago ("Have you received/attempted any special training to fit for employment?").



FIGURE 23 ON-THE-JOB TRAINING BY COUNTRY. THE BAHAMAS (2014), BARBADOS (2016), GUYANA (2019), JAMAICA (2016), AND TRINIDAD AND TOBAGO (2015)



Source: own elaboration based on The Bahamas' 2014 Labor Force Survey, Barbados' 2016 Continuous Labor Force Survey, Guyana's 2019 Labor Force Survey, Jamaica's 2016 Labor Force Survey and Trinidad and Tobago's 2015 Continuous Sample Survey of Population.

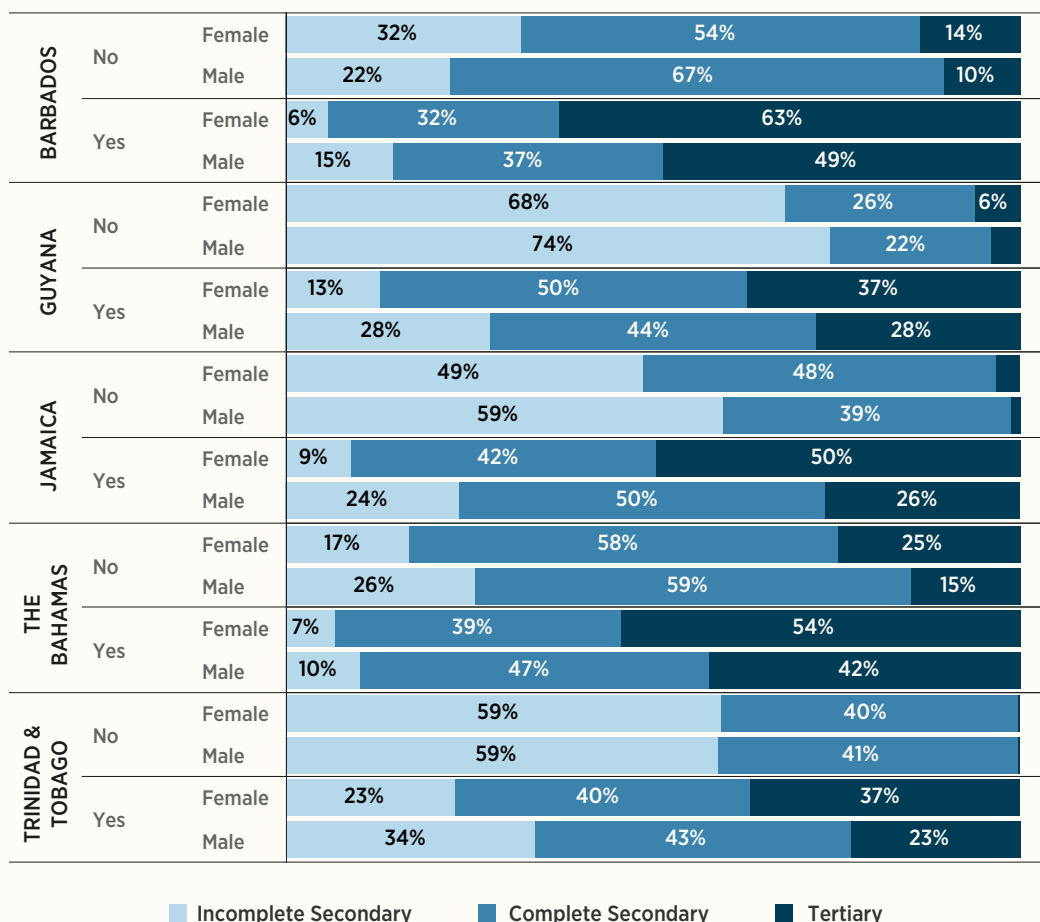
However, when analyzing the issue and considering educational attainment, females do better than males in some cases. Figure 24, for example, shows that systematically, of the females who said they had received on-the-job training, a higher share had tertiary education than men, with these percentages being more balanced only for Guyana. On the other hand, for individuals who completed secondary school, the share of males receiving on-the-job training is higher than that of females, except in the case of Jamaica. This also replicates for lower educational levels. In this sense, females continue to gain more human capital over time than males in the Caribbean.

Figure 25 displays the estimated coefficients from the model of returns to on-the-job training by gender, along with their 95 percent confidence intervals. Our results suggest no evidence of positive returns to on-the-job training by gender. For all countries, males that have received on-the-job training earn lower wages than their counterparts who have not, which could indicate that this type of training is offered to relatively less productive workers. In Barbados, Guyana, and Trinidad and Tobago, training makes no difference for women in terms of earnings.

Overall, this suggests that the observed wage gender gaps cannot be explained by potential differential returns to on-the-job training. Given that males participate relatively more in this modality of training and that the returns for them are less favorable than for women, this would ameliorate the observed wage gender gaps which currently disfavor women.



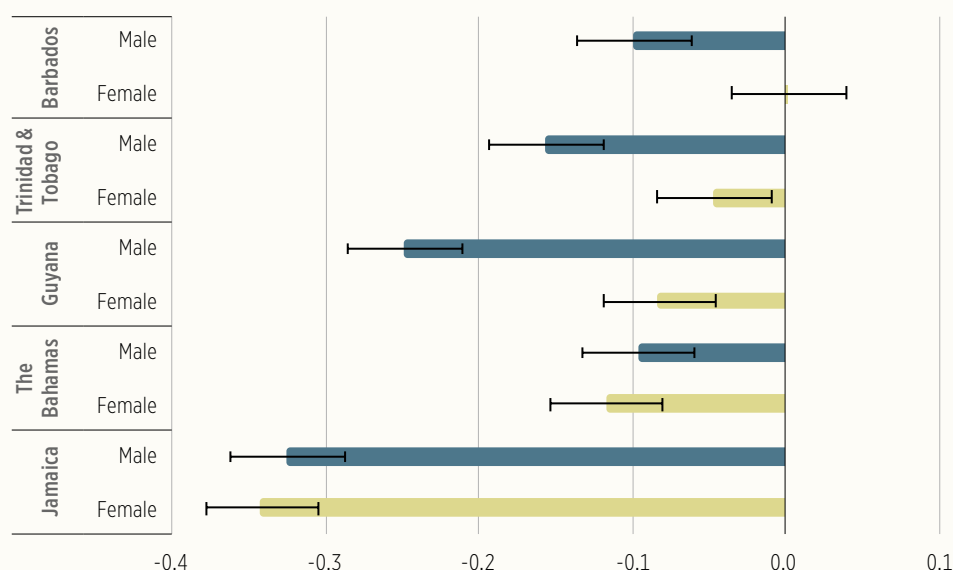
**FIGURE 24 ON-THE-JOB TRAINING BY EDUCATIONAL ATTAINMENT.
THE BAHAMAS (2014), BARBADOS (2016), GUYANA (2019),
JAMAICA (2016), AND TRINIDAD AND TOBAGO (2015)**



Source: own elaboration based on The Bahamas' 2014 Labor Force Survey, Barbados' 2016 Continuous Labor Force Survey, Guyana's 2019 Labor Force Survey, Jamaica's 2016 Labor Force Survey and Trinidad and Tobago's 2015 Continuous Sample Survey of Population.



**FIGURE 25 RETURNS TO ON-THE-JOB TRAINING, BY GENDER.
THE BAHAMAS (2014), BARBADOS (2016), GUYANA (2019),
JAMAICA (2016), AND TRINIDAD AND TOBAGO (2015)**



Source: own elaboration based on The Bahamas' 2014 Labor Force Survey, Barbados' 2016 Continuous Labor Force Survey, Guyana's 2019 Labor Force Survey, Jamaica's 2016 Labor Force Survey and Trinidad and Tobago's 2015 Continuous Sample Survey of Population.

3.5 Explanatory Factors for Wage Differences

We have spent some time exploring reasons that might help explain the gender wage gap in the Caribbean. We have found that observable characteristics are not responsible for such a difference. We have studied individual factors, such as access to education and human capital formation, labor market structure, and the availability of on-the-job training, and we have found that these do not translate into a difference in income between males and females. Other elements to consider include the non-observable characteristics of the labor market, such as structure (entrepreneurial culture, organization, institutional rules, etc.), biases, management behaviors, and others that are not possible to measure, and that could be potentially rewarding males more than females.

Ñopo (2008) developed a strategy to determine by how much, in terms of female's income, observable and non-observable characteristics add to the gender gap. We estimated a model using the observable characteristics studied in this and previous sections and found that, as



mentioned by other authors like Bellony et al. (2010), an important part of the mentioned gap is due to non-observable characteristics of the labor market.⁴¹

After running a model that contains information on age, educational attainment, professional status, whether the individual is a household head, whether there are children in the household, whether there are other earners in the household, geographic location, labor experience, occupation, industrial sector, and type of employment, we show in Figure 26 that non-observed characteristics are related to the gender gap in the Caribbean.⁴²

For The Bahamas and Guyana, non-observable characteristics are the main sources of the gender wage gap, explaining over 80 percent of the gap. By contrast, in Barbados, Jamaica and Trinidad and Tobago most of the gap is attributable to observable characteristics. The main characteristics explaining the gap are industrial sectors, type of employment, experience, and type of occupation.⁴³ As such, in The Bahamas (where most of the gap is attributable to unobserved characteristics), closing gender disparities in terms of experience, occupation, industrial sector, and type of employment would only lead to a 3.3 percentage points reduction of the gender wage gap. By contrast, in Trinidad and Tobago, closing gender disparities in terms observable characteristics, would imply a 9.3 percentage points reduction of the gender wage gap.⁴⁴ Please refer to the Annex for a disaggregated analysis.

⁴¹ Along the same lines, Olsen & Coppin (2001) use two approaches -some regressions by gender and ethnicity and the Oaxaca-Blinder decomposition- to analyze the causes of the gender income gap. Main results suggest that the income differential is about 19 percent in favor of men and that this differential is poorly explained by observable characteristics valued by the labor market. According to the authors, this finding suggests that this difference in earnings can be attributed to gender discrimination.

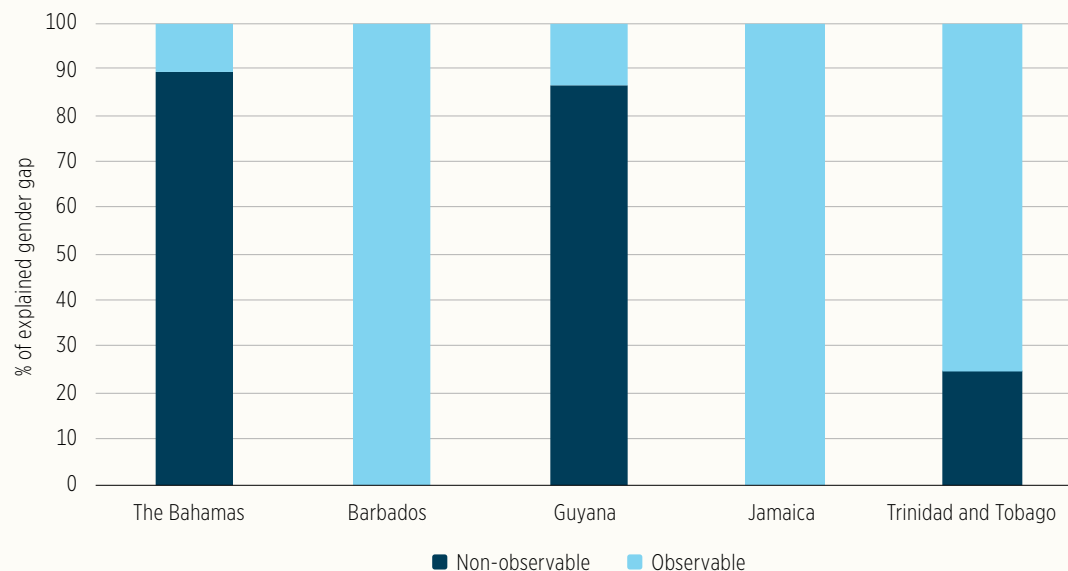
⁴² According to Women, Business & Law (WBL) (World Bank, 2021), there are still opportunities to improve labor markets in the English-speaking Caribbean through legislation positively affecting women's decisions to enter the labor market: protection in the workplace against discrimination, occupational segregation, and wage gender gaps, and protections in favor of parenthood (since there still are challenges to tackle in terms of women's work conditions during and after pregnancy).

⁴³ For individual estimations, please refer to section 6.8 in the Annex.

⁴⁴ In this instance, the estimated gaps are lower than those found by Bellony et al. (2010), who report 18.9 percent in Barbados and -0.8 percent in Jamaica. We did not attain the same results as the mentioned authors, probably because the gap's conditions are different for this study (time and space). Due that this document is intended to be general to the region, we decided to maintain this comparison with the paper aside.



FIGURE 26 SHARE OF GENDER WAGE GAP ATTRIBUTED TO OBSERVABLE AND NON-OBSERVABLE CHARACTERISTICS OF THE LABOR MARKET. THE BAHAMAS (2014), BARBADOS (2016), GUYANA (2019), JAMAICA (2016), AND TRINIDAD AND TOBAGO (2015)



Source: own elaboration based on The Bahamas' 2014 Labor Force Survey, Barbados' 2016 Continuous Labor Force Survey, Guyana's 2019 Labor Force Survey, Jamaica's 2016 Labor Force Survey and Trinidad and Tobago's 2015 Continuous Sample Survey of Population.



4 Concluding Remarks

This document sought to contribute to an understanding of the reasons behind gender gaps in education and labor markets in the English-speaking Caribbean. Given the relevance of this phenomenon to the region, we tried to answer the following questions: What are the main characteristics of these gaps? Are they observed through the entire life cycle? Do they grow over time? What factors can explain them?

The analysis of a variety of educational and labor market data for five countries of the English-speaking Caribbean -Barbados, Guyana, Jamaica, The Bahamas and Trinidad and Tobago- confirms previously identified trends. Males tend to underachieve in terms of secondary and post-secondary studies when compared to females. This is not only true in terms of quantity, as measured by enrollment and completion rates, but also when it comes to learning outcomes.

In this regard, we found that enrollment in primary and secondary school, as well as primary completion rates, are similar for girls and boys. However, secondary school completion rates largely favor females. We found that women also outperform men when it comes to enrollment in post-secondary education and that they are significantly less likely to be in the share of population not in education, employment, or training (NEETs). Both secondary and post-secondary learning gaps consistently favor women across Caribbean countries. Such gaps in educational attainment are larger among the younger population, showing that women in the Caribbean are relatively more educated now than in the past. While educational attainment increases with socio-economic status, the gap favoring women is ubiquitous across all the socio-economic spectrum. These differences could be driven by different factors within the English-speaking Caribbean region, such as gender roles, socialization processes for both girls and boys, classroom pedagogy in Caribbean schools, school curricula, and corporal punishment both in households and in schools.

Despite females' better results in education, their outcomes in the labor market are less favorable than those of males. Women show lower participation in the labor market, and among labor market participants, they have higher unemployment rates and lower wages than men. For The Bahamas and Guyana, we document that wage gaps are primarily driven by non-observable characteristics unrelated to labor productivity. By contrast, in Barbados, Jamaica and Trinidad and Tobago, wage gaps are mainly driven by labor market experience, occupational rank, and industrial sector. Therefore, reductions in gender-based sectoral and occupational segregation could significantly close the wage gaps observed in the latter countries.

Further investigation of these issues demands the availability of relevant microdata. One priority in this regard should include the design and execution of representative longitudinal household surveys with a special focus on women and diverse groups where data is lacking. Given the potential geographical and socio-economic heterogeneity of gender inequalities, these potential



data collection exercises would benefit from being designed with enough representativeness at the sub-national levels. These measurements should be undertaken with a pre-defined periodicity. Best practices suggest yearly measurements as in, for example, Jamaica. However, intervals of five years are also acceptable. Another promising area includes ameliorating the existent data silos across public agencies such that different administrative registries could be linked at the individual level. These registries could include, for example, social security records, historical educational records, emigration records, civil registries, health records, police arrests, and judicial records. Matched registries provide a powerful analytical tool for measuring and tracking social trends (including gender gaps) to inform diverse policies. Coordination between different government agencies is fundamental for the success of such an initiative. Timely and accurate disaggregated data are key inputs that could inform the policy-making process and could have a great positive impact in achieving inclusive and sustainable development.



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6 Annexes

6.1 Annex 1. Data Sources

The empirical analysis was defined according to the availability of official microdata on education and labor markets in the English-speaking Caribbean. Our focus is on time periods before the onset of the COVID-19 pandemic. This focus is for two principal reasons. First, this report aims to uncover structural gender gaps in both the educational sector and the labor market and, since the pandemic significantly altered those dynamics, we focus on a pre-pandemic period. Second, because of the pandemic, official microdata collection was paused in many countries during 2020 and, as we aim to achieve some level of comparability across countries, we rely on pre-pandemic periods. However, for analyses of the impact of the pandemic on Caribbean livelihoods and gender disparities in their labor markets using non-official databases, see Arteaga et al. (2020a, 2020b), Arteaga et al. (2021), and Giles-Alvarez & Khadan (2020).

A description of the official databases used in this study is presented in Table 4. Indicators were harmonized for comparability across countries. Whenever data availability allowed, the five countries considered in the study are compared with other regions, in particular Latin America, small state economies,⁴⁵ high-income economies,⁴⁶ and Rest of Small Economies (ROSE).⁴⁷

⁴⁵ Small state economies are those with a population below 1.5 million that share challenges related to their economies' size, their remote location and their state of isolation. This group includes: Antigua & Barbuda, The Bahamas, Dominica, Grenada, Kiribati, Marshall Islands, Micronesia, Nauru, Palau, St. Lucia, St. Kitts & Nevis, St. Vincent & the Grenadines, Samoa, Seychelles, Tonga, Tuvalu, Belize, Bhutan, Brunei, Djibouti, Equatorial Guinea, Estonia, Eswatini, Bahrain, Barbados, Cabo Verde, Comoros, Cyprus, Fiji, Iceland, Maldives, Guyana, Montenegro, Suriname, Mauritius, Malta, Sao Tome & Principe, Solomon Islands, Timor-Leste, Trinidad & Tobago, and Vanuatu.

⁴⁶ High-income economies include: Andorra, Antigua & Barbuda, Aruba, Australia, Austria, The Bahamas, Bahrain, Barbados, Belgium, Bermuda, British Virgin Islands, Brunei Darussalam, Canada, Cayman Islands, Channel Islands, Chile, China, Croatia, Curaçao, Cyprus, Czech Republic, Denmark, Estonia, Faroe Islands, Finland, France, French Polynesia, Germany, Gibraltar, Greece, Greenland, Guam, Hong Kong SAR (China), Iceland, Ireland, Isle of Man, Israel, Italy, Japan, Korea, Kuwait, Latvia, Liechtenstein, Lithuania, Luxembourg, Macao SAR (China), Malta, Mauritius, Monaco, Nauru, Netherlands, New Caledonia, New Zealand, Northern Mariana Islands, Norway, Oman, Palau, Panama, Poland, Portugal, Puerto Rico, Qatar, Romania, San Marino, Saudi Arabia, Seychelles, Singapore, Saint Maarten (Dutch part), Slovak Republic, Slovenia, Spain, St. Kitts and Nevis, St. Martin (French part), Sweden, Switzerland, Taiwan (China), Trinidad & Tobago, Turks and Caicos Islands, United Arab Emirates, United Kingdom, United States, Uruguay, Virgin Islands (United States).

⁴⁷ The Rest of Small Economies (ROSE) category includes: Bhutan, Botswana, Cyprus, Gabon, Lesotho, Mauritius, Mongolia, Montenegro, Macedonia, Timor-Leste. We use this set of countries as comparators since, in terms of economy size and population, they are similar to the five countries in this study. For comparison purposes, the data corresponds to year 2019.



TABLE 4 DATABASES AND AVAILABILITY

DATABASE	YEARS
Barbados	
1) Survey of Living Conditions	2016
2) Caribbean Secondary Examination Certificate (CSEC)	1993-2016
3) Caribbean Advanced Proficiency Examination (CAPE)	2005-2016
4) Labor Force Survey	2004-2016
Guyana	
1) National Population and Household Census	2012
2) Labor Force Survey	2019
Jamaica	
1) Survey of Living Conditions	2018
2) Caribbean Secondary Examination Certificate (CSEC)	2005-2020
3) Caribbean Advanced Proficiency Examination (CAPE)	2005-2020
4) Labor Force Survey	1988-2016
The Bahamas	
1) Household Budget Survey	2014
2) Labor Force Survey	2001-2014
Trinidad and Tobago	
1) Survey of Living Conditions	2014
2) Caribbean Secondary Examination Certificate (CSEC)	1998-2016
3) Caribbean Advanced Proficiency Examination (CAPE)	2005-2016
4) Continuous Sample Survey of Population	1999-2015

Source: own elaboration.



6.2 Annex 2. Educational Structure

**TABLE 5 EDUCATIONAL STRUCTURE FOR THE ENTIRE POPULATION.
THE BAHAMAS (2014), BARBADOS (2016), GUYANA (2012),
JAMAICA (2018), AND TRINIDAD AND TOBAGO (2014)**

EDUCATION LEVEL	THE BAHAMAS (HS 2014)	BARBADOS (SLC 2016)	GUYANA (CENSUS 2012)	JAMAICA (SLC 2018)	TRINIDAD AND TOBAGO (SLC 2014)
None	3.80%	11.11%	26.00%	19.73%	31.74%
Complete primary	21.17%	22.54%	50.44%	40.12%	18.52%
Complete secondary	50.80%	38.89%	17.92%	27.70%	31.81%
Complete post-secondary	7.07%	11.37%	3.89%	5.83%	8.72%
Complete university	17.17%	16.08%	1.76%	6.62%	9.21%
Total	100.00%	100.00%	100.00%	100.00%	100.00%

Note: post-secondary education includes all the degrees above complete secondary school and below a bachelor's degree.

Source: own elaboration based on The Bahamas' 2014 Household Survey, Barbados' 2016 Survey of Living Conditions, Guyana's 2012 National Population and Household Census, Jamaica's 2018 Survey of Living Conditions and Trinidad and Tobago's 2014 Survey of Living Conditions.

**TABLE 6 EDUCATIONAL STRUCTURE FOR WORKING-AGE POPULATION
(25-65 YEARS OLD). THE BAHAMAS (2014), BARBADOS (2016), GUYANA
(2012), JAMAICA (2018), AND TRINIDAD AND TOBAGO (2014)**

EDUCATION LEVEL (25-65)	THE BAHAMAS (HS 2014)	BARBADOS (SLC 2016)	GUYANA (CENSUS 2012)	JAMAICA (SLC 2018)	TRINIDAD AND TOBAGO (SLC 2014)
None	3.70%	0.38%	13.98%	2.16%	21.21%
Complete primary	13.87%	12.46%	56.67%	40.00%	15.85%
Complete secondary	51.86%	48.36%	20.24%	39.99%	39.87%
Complete post-secondary	8.99%	15.72%	6.01%	8.21%	11.97%
Complete university	21.57%	23.08%	3.09%	9.64%	11.10%
Total	100.00%	100.00%	100.00%	100.00%	100.00%

Note: post-secondary education includes all the degrees above complete secondary school and below a bachelor's degree.

Source: own elaboration based on The Bahamas' 2014 Household Survey, Barbados' 2016 Survey of Living Conditions, Guyana's 2012 National Population and Household Census, Jamaica's 2018 Survey of Living Conditions and Trinidad and Tobago's 2014 Survey of Living Conditions.



6.3 Annex 3. Educational Assessments

6.3.1 The Bahamas⁴⁸

GLAT: Grade Level Assessment Tests. Administered at the end of grades 3 and 6.

BJC: The Bahamas Junior Certificate. Administered at the end of grade 9. It is designed to measure mastery of the curriculum's core subjects. Students must pass it in order to move onto the next level.

BGCSE: The Bahamas General Certificate of Secondary Education. This is an exit exam, generally taken at the end of grade 12. It is required in order to attend university or to continue studying for a professional qualification.

6.3.2 Barbados

BSSEE: Barbados Secondary School Entrance Examination. This is used to allocate students to secondary schools in Barbados (Pilgrim et al., 2018).

6.3.3 Jamaica

GOILP: Grade One Individual Learning Profile. It assesses the proficiency level of students in six subsets: general knowledge, number concepts, oral language, reading, writing and drawing, work habits and classroom behavior. It aims to determine the school readiness of children for grade 1, as well as schools' readiness to accept these children.⁴⁹

G3DT: Grade Three Diagnostic Test. It assesses the performance of grade 3 students and determines their starting point.⁵⁰

GFLT and GFNT: Grade Four Literacy Test and Grade Four Numeracy Test. The literacy component comprises the assessment of word recognition, reading comprehension and writing. For the numeracy part, students are tested on number operations and representation, measurement and geometry, and algebra and statistics. After completion, students may be assigned a mastery level (master all three sub-tests/strand combinations), an almost mastery level (master one or two sub-tests/strand combinations) or a non-mastery (not master any of the sub-tests/strand

⁴⁸ <https://www.thebahamas.gov.bs/>.

⁴⁹ http://www.jamaicaobserver.com/magazines/career/grade-one-test-stats-being-put-to-good-use--mdash--education-ministry_10302150/.

⁵⁰ <https://jis.gov.jm/education-ministry-urges-schools-to-prepare-students-for-curriculum/>.



combinations). Students who do not achieve mastery in both literacy and numeracy cannot sit for the PEP (see further) and must retake the examinations in grade 5.⁵¹

PEP: Primary Exit Profile (from 2019, replacing the GSAT, Grade Six Achievement Test). This is a competency-based exam that assesses students' knowledge as well as their 21st century skills. It is used as a placement test to determine which high school students will attend. In the first term of grade 6, students draw up a prioritized list of the seven high schools they wish to attend, and based on the results from the PEP, they are placed at a school from their list.⁵²

TEE: Technical Entrance Examination. It is open to students in all-age schools and primary junior high schools. It allows successful candidates to access five-year secondary level institutions.

GNAT: Grade Nine Achievement Test. It is open to students in all-age schools and primary junior high schools. It allows successful candidates to access five-year secondary level institutions.

6.3.4 Guyana⁵³

NGTA: National Grade Two Assessment. It is based on grades 1 and 2's language and mathematics curriculum guide. It is diagnostic in nature, but 5 percent of the final grade contributes to the NGSA results (see further).

NGFA: National Grade Four Assessment. It is based on grades 1 to 4's curriculum, including literacy and numeracy. It is diagnostic in nature, but 10 percent of the final grade contributes to the NGSA results (see further).

NGSA: National Grade Six Assessment (replacing the SSEE, Secondary School Entrance Examination). It is used to place pupils into secondary schools. It tests four core subjects: mathematics, language, science, and social studies. In order to sit for this exam, students must have already sat for the NGTA and the NGFA.

NGNA: National Grade Nine Assessment. It is based on grade 7 to 9's curriculum and it is diagnostic in nature.

⁵¹ <https://moey.gov.jm/grade-four-students-sit-literacy-and-numeracy-exams-june-21-and-22/>.

⁵² <https://moey.gov.jm/>.

⁵³ <https://education.gov.gy/>.



6.3.5 Trinidad and Tobago

SEA: Secondary Entrance Assessment. It is taken by children aged 11 to 12 as part of the admissions process for all public secondary schools.⁵⁴

NCSE: National Certificate of Secondary Education. It is Trinidad and Tobago's certification for entry into the upper secondary system. It is taken by form 3 students (third year of secondary school).

6.3.6 Regional

CSEC: Caribbean Secondary Examination Certificate. It is a regional certification of general and technical proficiencies offered by the Caribbean Examinations Council (CXC). It provides students with certification for further studies and entry to the workplace. In order to obtain a CSEC Certificate, students must pass five subjects with grades I to III, including English language and math. This is required for matriculation in four-year university programs, community colleges, teachers' colleges and any other tertiary institution offering post-secondary programs.⁵⁵

CAPE: Caribbean Advanced Proficiency Examination. This is a regional exam offered by CXC for students who have completed a minimum of five years of secondary education and wish to pursue university studies. Subjects are organized in 1-unit or 2-unit courses, each of them containing three modules. The CXC offers three types of certifications at this level: 1) a certificate with each completed CAPE unit; 2) the CAPE Diploma, received by those candidates who pass at least six units, including Caribbean studies; 3) the CXC Associate Degree, received by those who satisfactorily complete a prescribed cluster of eight CAPE units, including Caribbean studies, communication studies and math. For the CAPE Diploma and the CAPE Associate Degree, candidates have five years to complete the cluster of required units. Grades go from I to IV, I being the highest. To complete a unit, students have to achieve a grade of V or lower.⁵⁶

6.3.7 World

PISA: Program for International Students Assessment. This assesses the extent to which 15-year-old students who are near the end of compulsory education have acquired key knowledge and skills essential for full participation in modern societies. The assessment focuses on core school subjects: science, reading and mathematics (OECD, 2016). Countries from around the world may take part in the exam. From the five countries in this study, two have participated in PISA - Trinidad and Tobago (2009 and 2015) and Jamaica (2022).

⁵⁴ <https://www.ttconnect.gov.tt/>.

⁵⁵ <https://www.cxc.org/examinations/csec/>.

⁵⁶ <https://www.cxc.org/examinations/cape/>.



6.4 Annex 4. Educational systems

TABLE 7 SUMMARY OF COUNTRIES' EDUCATIONAL SYSTEMS AND EXAMINATIONS

Structure	BAHAMAS			BARBADOS			JAMAICA			GUYANA			TRINIDAD AND TOBAGO		
	Grade	Age	Exams	Grade	Age	Exams	Grade	Age	Exams	Grade	Age	Exams	Grade	Age	Exams
Primary	Grade 1	5-6		Reception	4-5		Grade 1	6	GOILP	Grade 1	5-6		Infants 1	5-6	
	Grade 2	6-7		Infants A	5-6		Grade 2	7		Grade 2	6-7	NGTA	Infants 2	6-7	
	Grade 3	7-8	GLAT	Infants B	6-7		Grade 3	8	G3DT	Grade 3	7-8		Standard 1	7-8	
	Grade 4	8-9		Class 1	7-8		Grade 4	9	GFLT GFNT	Grade 4	8-9	NGFA	Standard 2	8-9	
	Grade 5	9-10		Class 2	8-9		Grade 5	10		Grade 5	9-10		Standard 3	9-10	
	Grade 6	10-11	GLAT	Class 3	9-10		Grade 6	11	PEP	Grade 6	10-11	NGSA	Standard 4	10-11	
				Class 4	10-11	BSSEE							Standard 5	11-12	SEA
Secondary	Grade 7	11-12		Form 1	11-12		Grade 7	12		Grade 7	12-13		Form 1	12-13	
	Grade 8	12-13		Form 2	12-13		Grade 8	13	TEE*	Grade 8	13-14		Form 2	13-14	NCSE
	Grade 9	13-14	BJC	Form 3	13-14		Grade 9	14	GNAT*	Grade 9	14-15	NGNA	Form 3	14-15	
	Grade 10	14-15		Form 4	14-15		Grade 10	15		Grade 10	15-16	SSPE*	Form 4	15-16	
	Grade 11	15-16		Form 5	15-16	CSEC	Grade 11	16	CSEC	Grade 11	16-17	CSEC	Form 5	16-17	CSEC
	Grade 12	16-17	BGCSE	Form 6	16-17	CAPE	Grade 12	17	CAPE	Grade 12	18	CAPE	Sixth Form	17+	CAPE
							Grade 13	18							

Notes:

1) Grades 12 and 13 in Jamaica correspond to the Career Advancement Programme (CAP) and the sixth form/pre-university program that some schools offer.

2) TEE and GNAT exams in Jamaica are only taken by those students in all-age schools and junior high schools who wish to continue on to high school.

3) SSPE exam in Guyana is only taken by students in community schools and secondary departments of primary schools who wish to attend another high school.

Source: own elaboration.

6.4.1 The Bahamas^{57, 58}

The education system in The Bahamas is based upon the traditional British model and comprises both public and private institutions. The public education system has 113 primary and all-age schools, 34 junior and senior high schools, and 11 special education schools. However, due to capacity constraints, the system is unable to provide primary and secondary education for all Bahamian children. For that reason, the government provides funding for the 32 registered independent primary and all-age schools, 15 secondary schools, and one special education school, which operate mainly in New Providence and Grand Bahama.

⁵⁷ <https://www.thebahamas.gov.bs/>.

⁵⁸ UNESCO (2007).



The education structure comprises six years of primary school (ages 5 to 10-11 approximately) and six years of secondary school, which includes three years of junior high school (ages 11-12 to 13-14 approximately) and three years senior high school (ages 14-15 to 16-17 approximately). National examinations are administered to students at four stages: they sit for the GLAT at the end of grades 3 and 6, for the BJC at the end of grade 9, and for the BGCSE as an exit exam, at the end of grade 12.

6.4.2 Barbados^{59, 60}

The public education system in Barbados comprises 12 nursery schools, 68 primary schools, 29 secondary schools and 4 special schools. Most primary and secondary public schools are co-educational. Public primary schools have no fees, while at the secondary level there is a small book fee. There are 16 nurseries, 27 primary schools, 10 secondary schools and five (5) special schools in the private system. School fees are required in these schools.

Primary school starts at age 4-5 and continues until age 11, when students sit for the BSEE and transition to secondary level education. Secondary school is attended by children aged 11 to 17-18. At age 16, students sit for the CSEC, and at age 18, those students who continue on in school can sit for the CAPE.

6.4.3 Guyana^{61, 62}

Guyana's public education is free and compulsory from ages 5 through 16. After an optional pre-school period, children enter primary school, which comprises six years, from ages 5 to 11. At the end of grade 6, students take the NGSA to gain a place at the secondary school level. In grades 2, 4 and 9, students also take the NSTA, NGFA and NGNA.

Secondary schooling in Guyana is composed of senior secondary schools -which are more academically oriented- junior secondary schools, community high schools and secondary departments of primary schools. Students are assigned according to their scores on the NGSA, with good marks ensuring positions at high performing schools. Students in these schools attend grades 7 to 11 before sitting for the CSEC and continue to grade 12 if they are interested in the CAPE qualification. Both these exams are needed to gain entrance to tertiary education.

⁵⁹ <https://mes.gov.bb/>.

⁶⁰ De Lisle (2022).

⁶¹ UNESCO (2006).

⁶² <http://www.guyana.org/Handbook/educatio.html/>.



Those students with the lowest performance on the NGSA are usually placed in community high schools or the secondary departments of primary schools, which offer four-year programs -until grade 10- and are mostly oriented towards the acquisition of pre-vocational skills. These schools offer students the possibility to prepare for the SSPE, which allows them to transfer to junior or senior secondary schools. They do not offer the possibility to sit for CSEC and CAPE.

6.4.4 Jamaica⁶³

The Jamaican education system comprises up to three years of pre-primary education, six years of primary school and five years of secondary school. Most children in Jamaica usually attend early childhood education centers, which are available for 3-to-5-year-olds. In the public sphere, pre-primary education is offered in infant and basic schools and the infant departments of some primary schools. Despite the government's efforts to slowly expand public offerings, most pre-primary programs are still private. Primary education starts at age 6 and goes from grades 1 to 6 in primary, primary and junior high, all-age and preparatory schools. During primary school, students sit for different exams as part of Jamaica's National Assessment Programme, such as the GOILP in grade 1, the G3DT in grade 3, and the GFLT and GFNT in grade 4. At the end of grade 6, students sit for the PEP in order to gain admission to high schools. Based on their grades, they are placed in high schools or the secondary department of all-age and primary and junior high schools.

The secondary system consists of three cycles. The first cycle goes from grades 7 to 9 of all-age, primary and junior high and high schools, including technical high and independent and private high schools. The second cycle includes grades 10 and 11 in high schools, technical high schools, and independent and private high schools. Grades 12 and 13 comprise the third cycle, which is only offered in some schools.

All-age schools and junior high schools cover only the first cycle of secondary education. Students placed in these schools usually had the lowest performance on the PEP. However, they can transfer to other high schools by sitting two exams: the TEE in grade 8, in order to gain entry to technical schools, and the GNAT in grade 9 for other types of high schools. As such, students who did not perform well on the PEP still have the opportunity to attend the later cycles of high school.

In those schools that cover the second cycle of secondary education, students sit for the CSEC at the end of grade 11. Some high schools also have a continuing education program provided under the Sixth Form/Pre-university Programme -grades 12 and 13- where students are prepared for entry to tertiary institutions. Students in the Sixth Form sit for the CAPE at the end of grades 12 and 13.

⁶³ <https://moey.gov.jm/>.



For those aged 16 to 18 years old who did not complete secondary education and do not work, there is the Career Advancement Programme (CAP). The purpose of this two-year program is to ensure competency in literacy and numeracy (up to at least grade 9 level), providing youth with the basic academic and vocational education necessary to enter technical and general pathways.⁶⁴

6.4.5 Trinidad and Tobago^{65, 66}

Children's education in Trinidad and Tobago is free and compulsory from age 5 to 16. Pre-primary education (from 2 and a half years old) is not mandatory, but the majority of children participate. At the age of 5, students start primary education, which comprises seven years. During the final year, Standard 5, students sit for the SEA, which determines placement in secondary school level institutions.

At the end of Form 3, during secondary level education, students sit for the NCSE. In order to pursue further studies, they sit for the CSEC at the end of Form 5. Those with satisfactory grades may opt to continue to the Sixth Form, a two-year period leading to the CAPE.

⁶⁴ The program is implemented in the framework of the Compulsory Education Policy (CEP), which aims to ensure that all children aged 3 to 18 are attached to and attend structured learning/education and training programs appropriate to their age and development (<https://jfl.gov.jm/home/index.php/cap/about-cap/>).

⁶⁵ <https://oxfordbusinessgroup.com/overview/trinidad-and-tobagos-education-system-multi-faceted-and-well-funded/>.

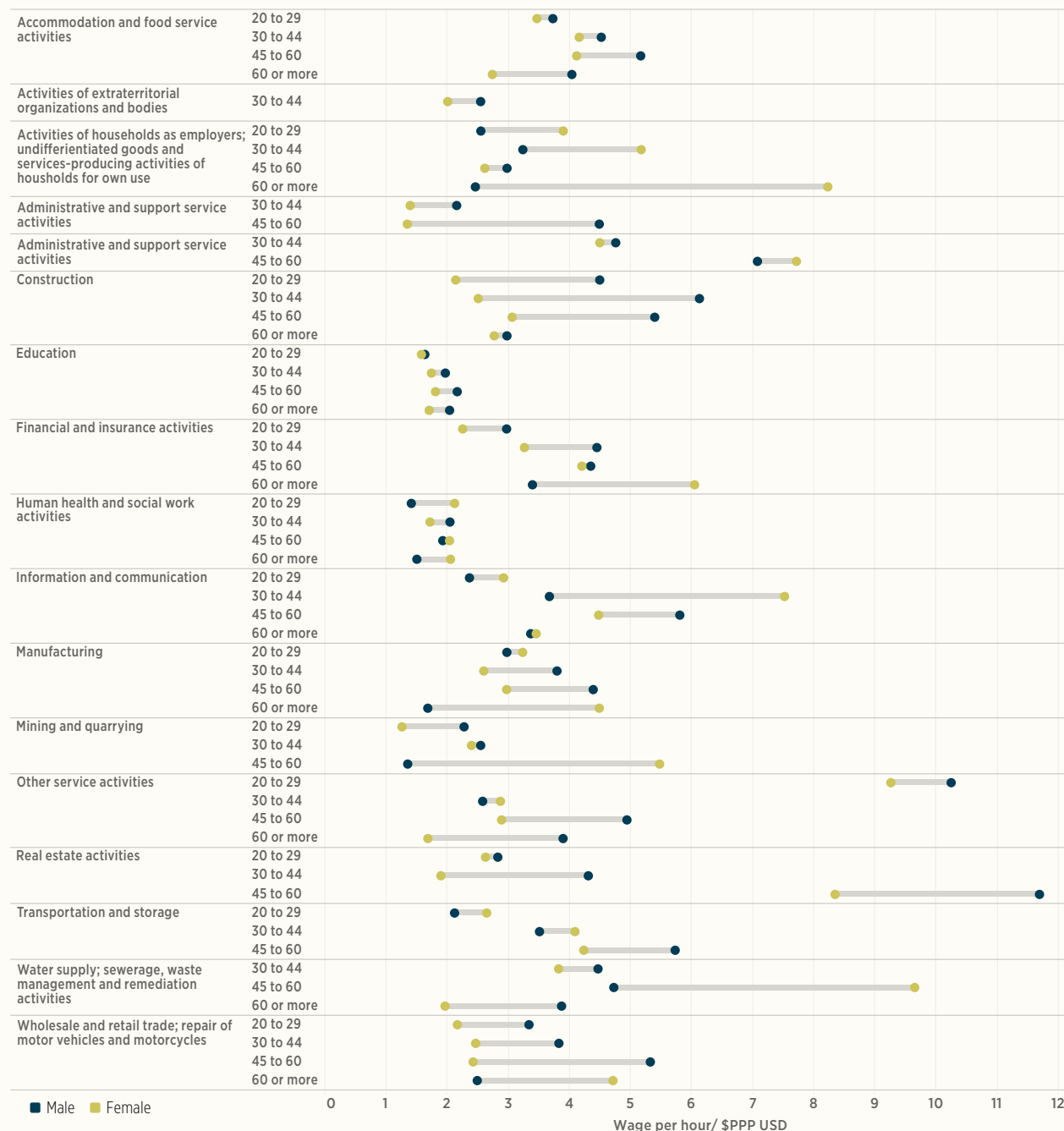
⁶⁶ <https://morningeval.com/2017/06/28/trinidad-tobago-education-overview/>.



6.5 Annex 5. Hourly wage per gender and age group

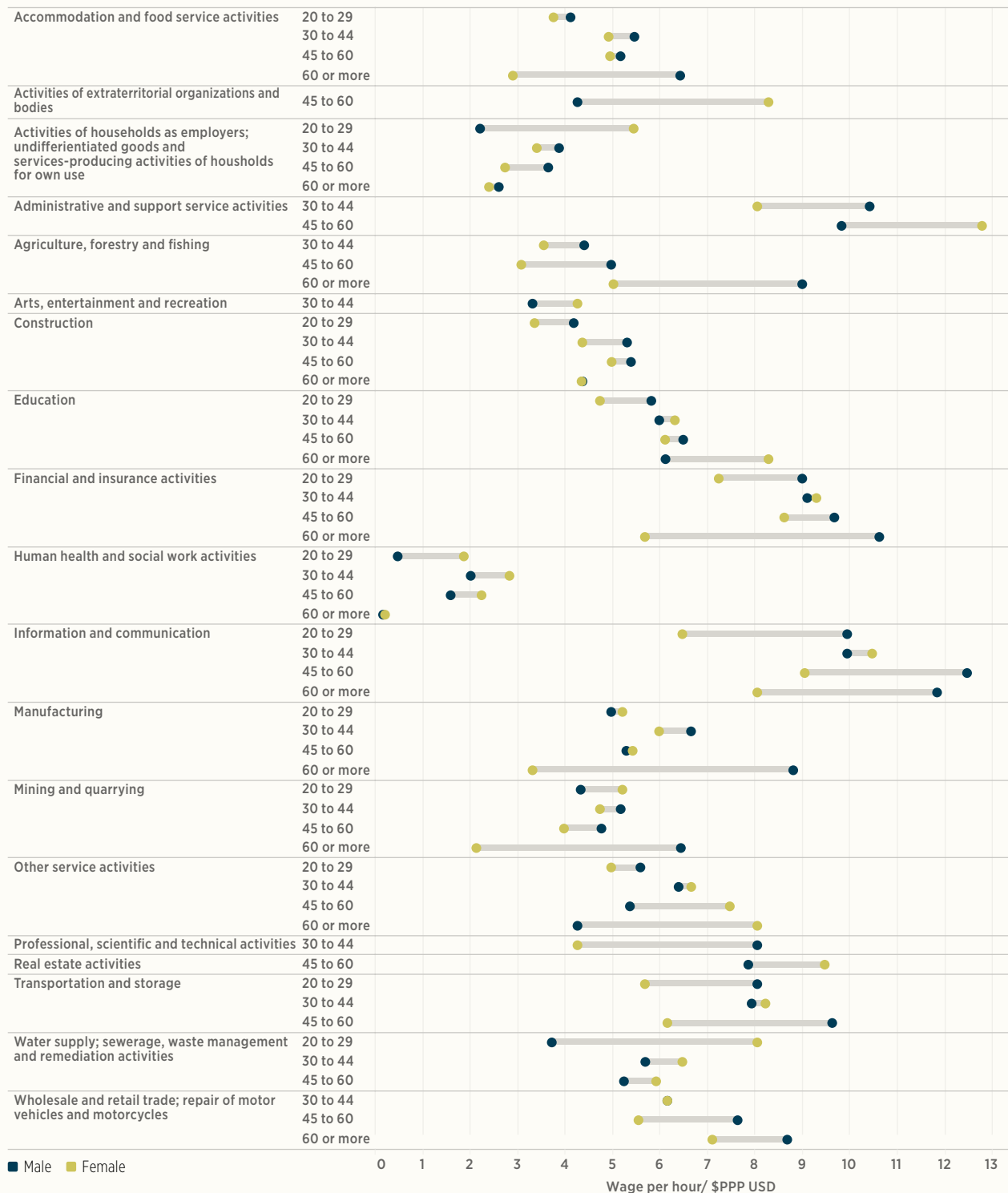
FIGURE 27 HOURLY WAGE PER GENDER AND AGE GROUP (2017 PPP INTERNATIONAL DOLLARS), BY INDUSTRIAL SECTOR. THE BAHAMAS (2014), BARBADOS (2016), GUYANA (2019), JAMAICA (2016) AND TRINIDAD AND TOBAGO (2015)

THE BAHAMAS, WAGES BY GENDER, INDUSTRY & AGE GROUP



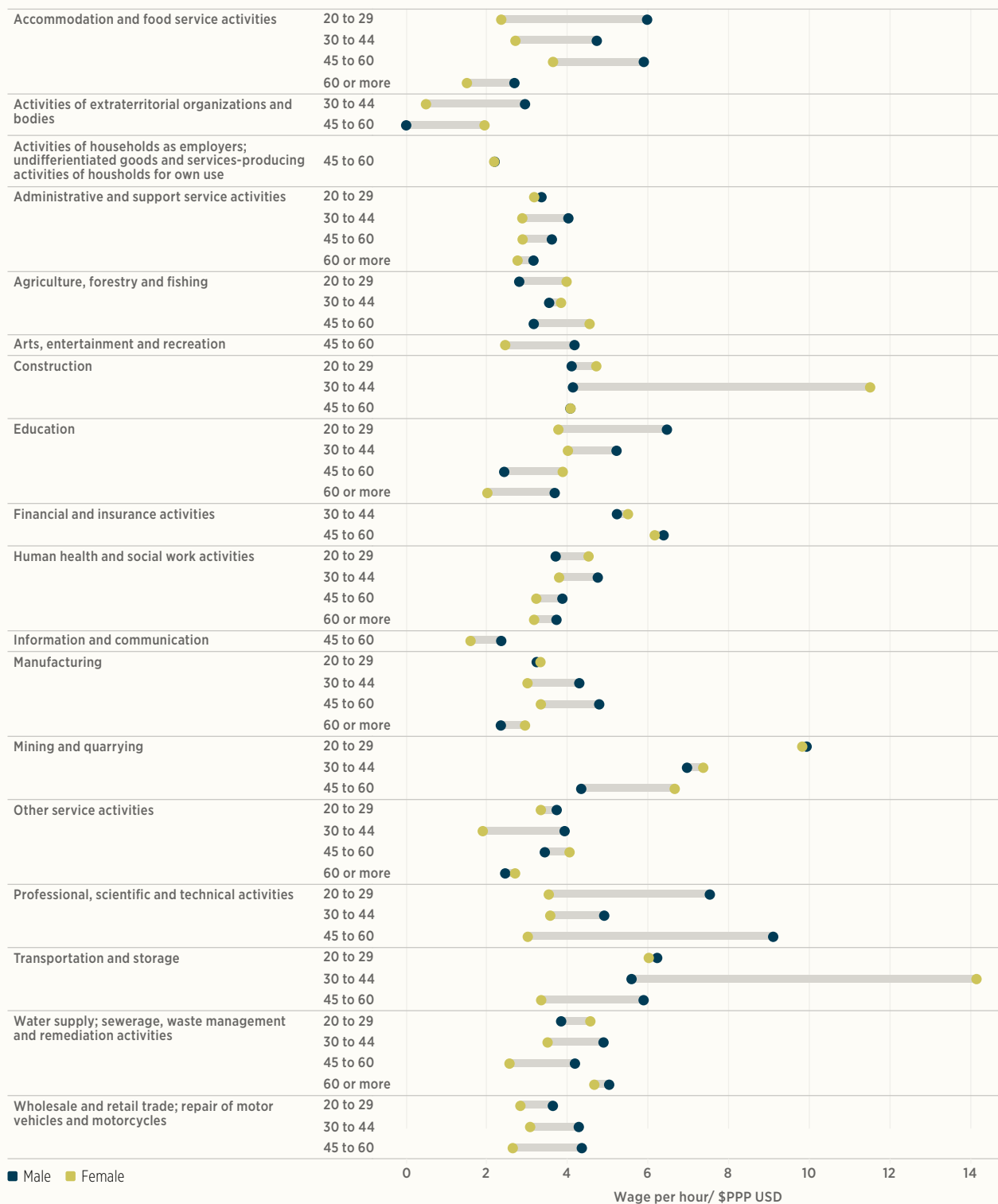


BARBADOS, WAGES BY GENDER, INDUSTRY & AGE GROUP



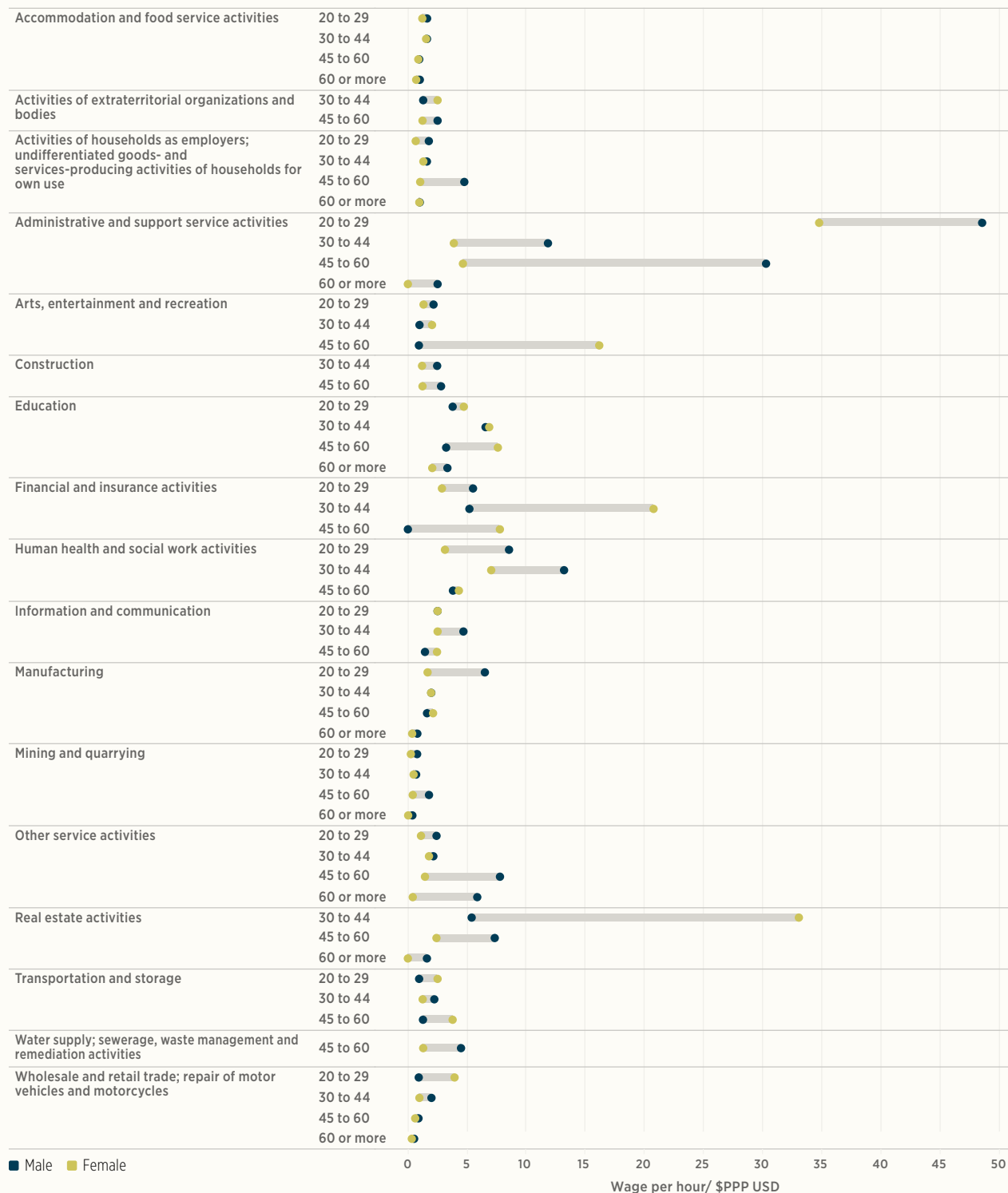


GUYANA, WAGES BY GENDER, INDUSTRY & AGE GROUP



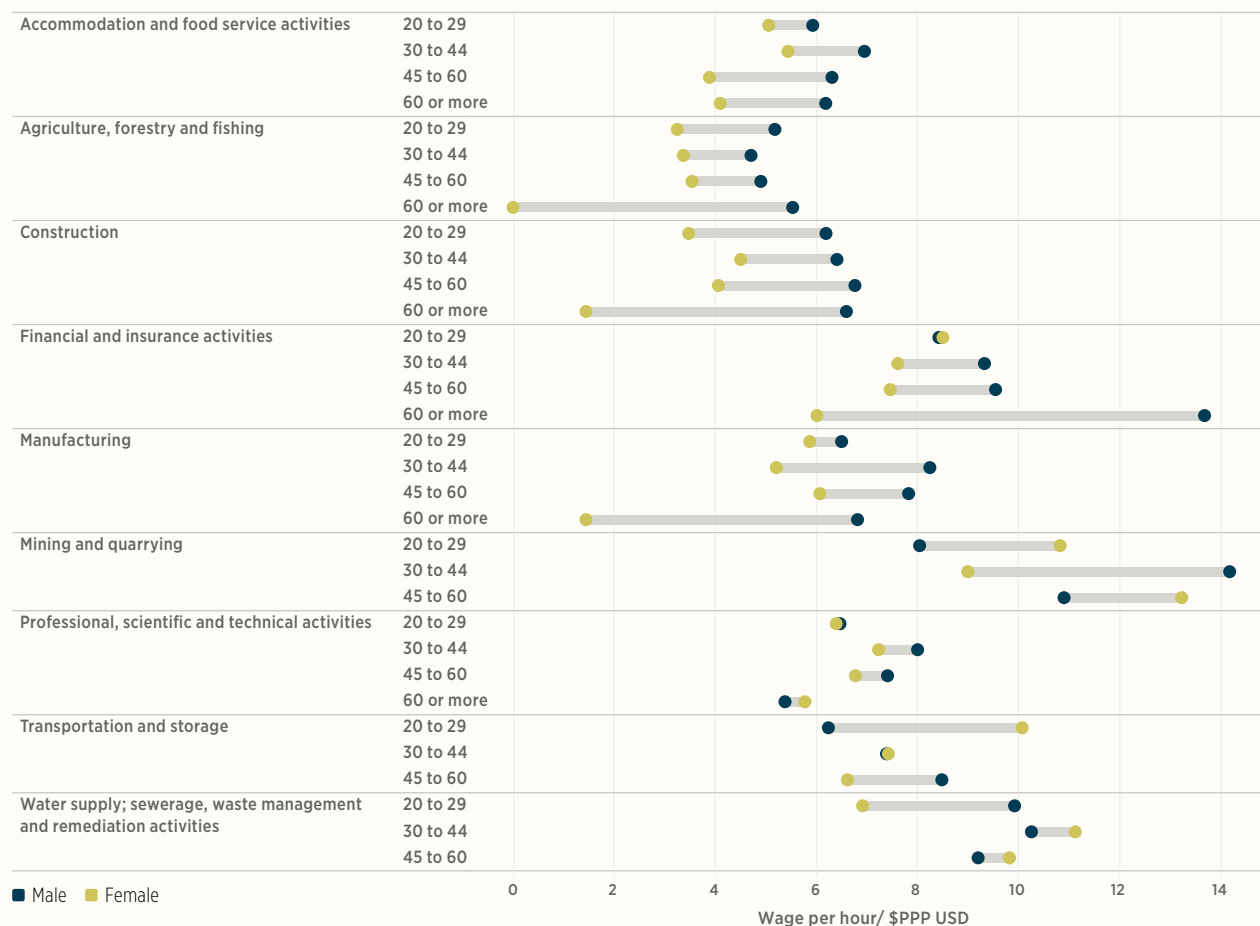


JAMAICA, WAGES BY GENDER, INDUSTRY & AGE GROUP





TRINIDAD & TOBAGO, WAGES BY GENDER, INDUSTRY & AGE GROUP



Source: own elaboration based on The Bahamas' 2014 Labor Force Survey, Barbados' 2016 Continuous Labor Force Survey, Guyana's 2019 Labor Force Survey, Jamaica's 2016 Labor Force Survey and Trinidad and Tobago's 2015 Continuous Sample Survey of Population.



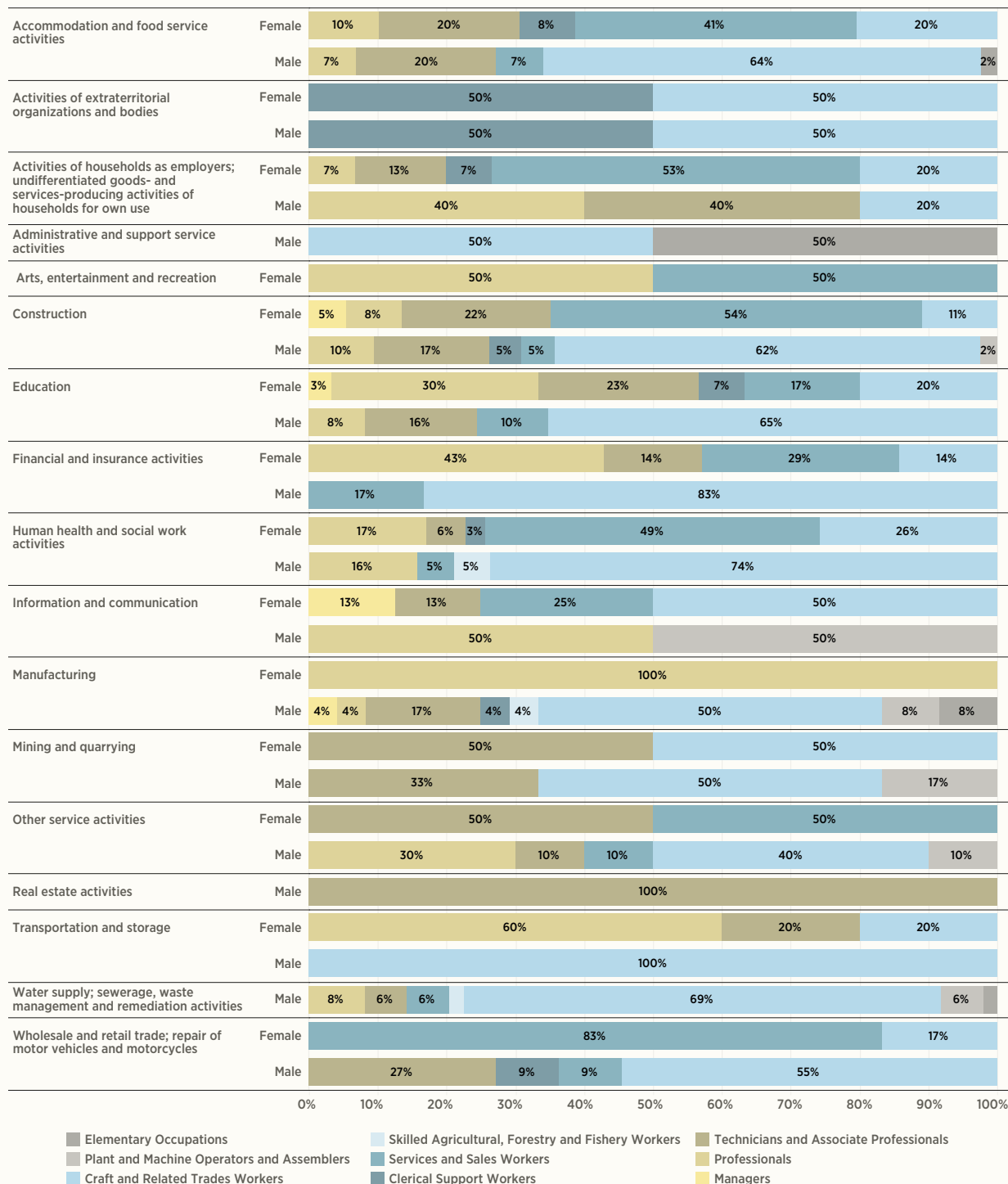
6.6 Annex 6. Occupations and Education in the Caribbean

One key aspect to consider in understanding the potential wage gap in the English-speaking Caribbean is the occupations males and females have in each sector. The following figures present the distribution of occupations by sector for males and females. Males tend to hold, in a larger proportion than females, managerial, professional or technical positions. On the other hand, females tend to surpass males in occupations such as clerical support or services and sales. This would imply that promoting access to women to professional or managerial positions may help reduce the gender wage gap since those positions or occupations are generally better paid.



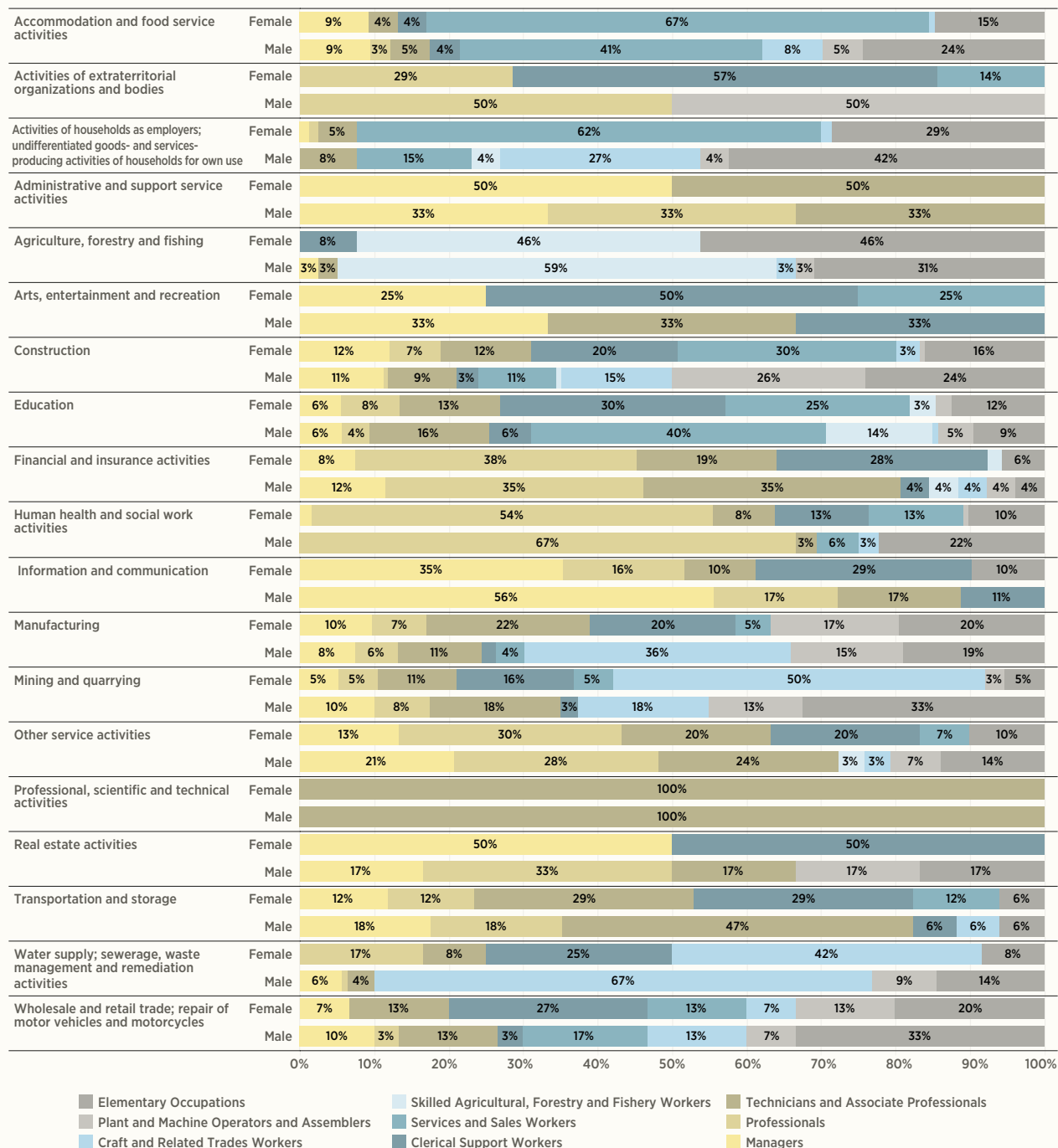
FIGURE 28 OCCUPATION DISTRIBUTION BY GENDER AND INDUSTRIAL SECTOR. BARBADOS (2016), GUYANA (2019), JAMAICA (2016) AND TRINIDAD AND TOBAGO (2015)

TYPE OF WORKER BY GENDER & COUNTRY - **THE BAHAMAS**



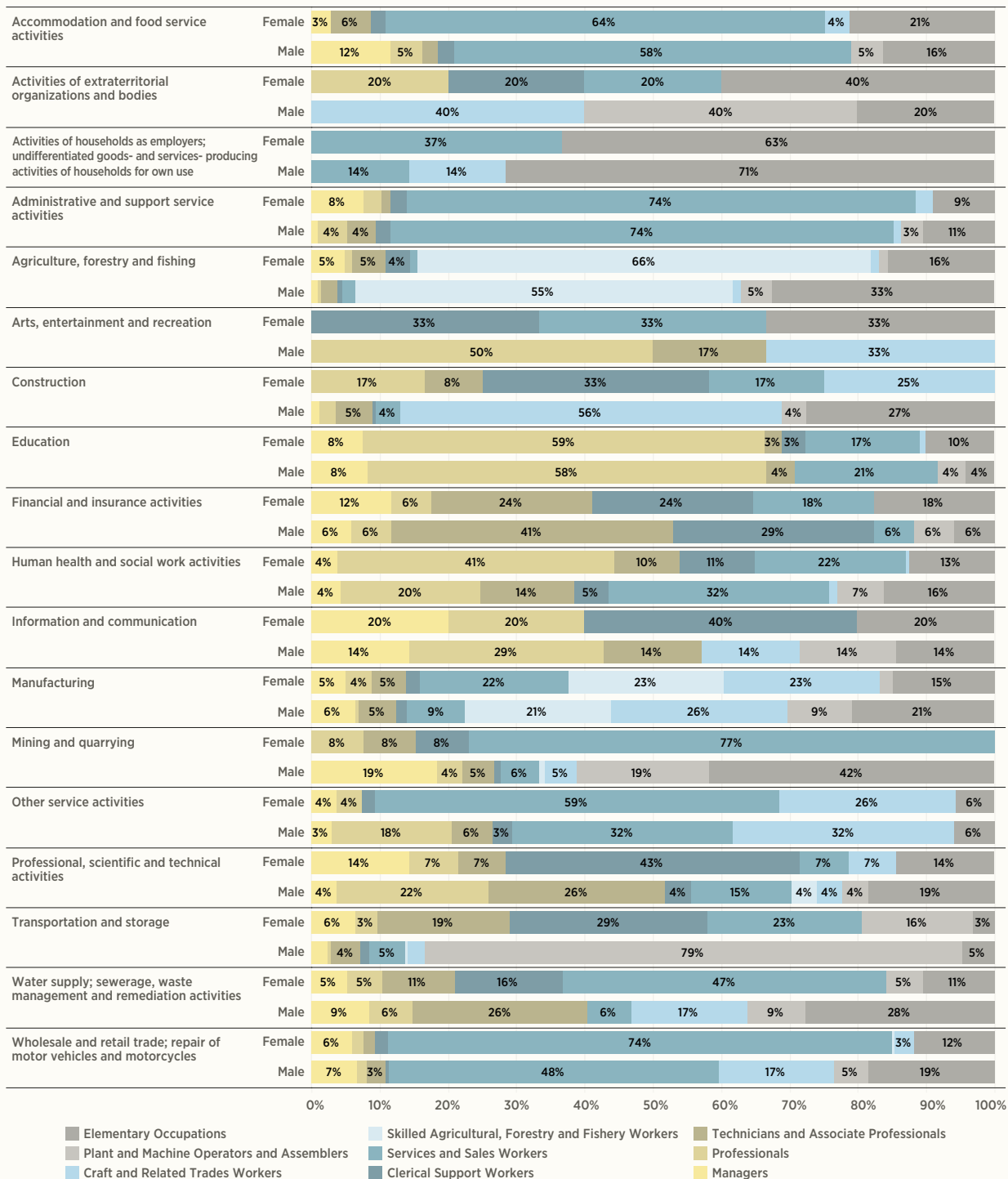


TYPE OF WORKER BY GENDER & COUNTRY - **BARBADOS**



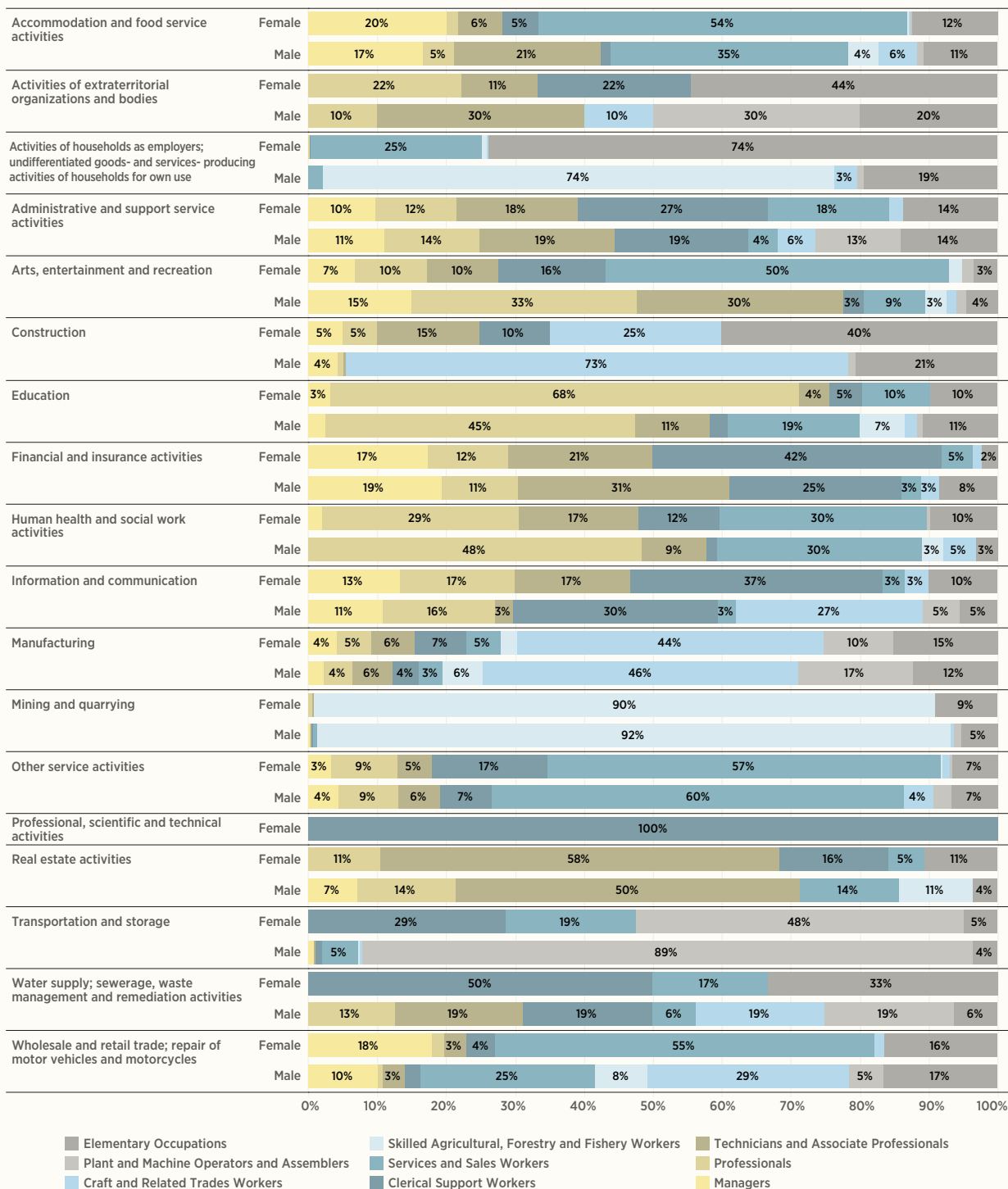


TYPE OF WORKER BY GENDER & COUNTRY - GUYANA



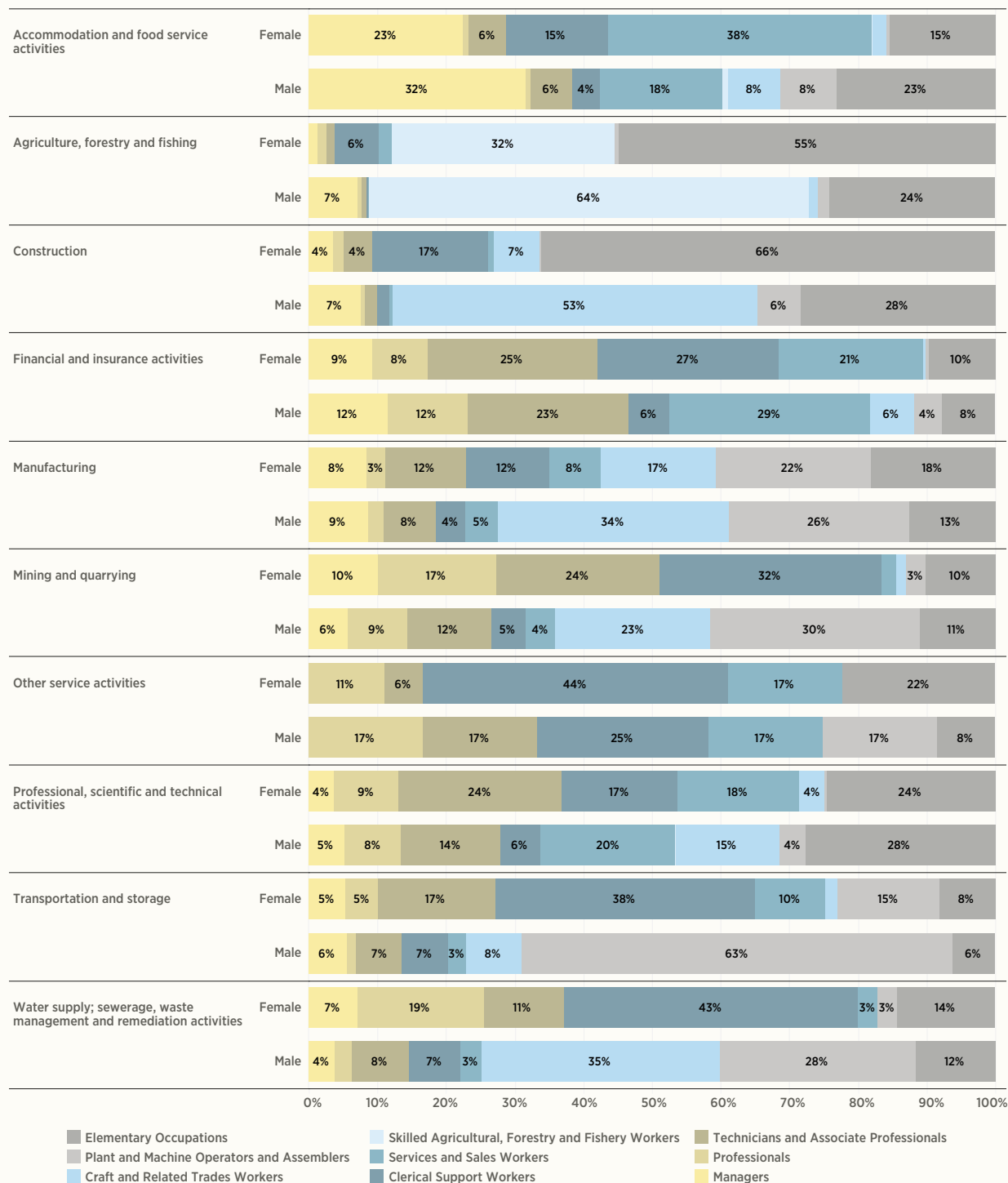


TYPE OF WORKER BY GENDER & COUNTRY - JAMAICA





TYPE OF WORKER BY GENDER & COUNTRY - TRINIDAD & TOBAGO



Source: own elaboration based on The Bahamas' 2014 Household Survey, Barbados' 2016 Continuous Labor Force Survey, Guyana's 2019 Labor Force Survey, Jamaica's 2016 Labor Force Survey and Trinidad and Tobago's 2015 Continuous Sample Survey of Population.



6.7 Annex 7. The Estimation of Returns to Education and Other Factors

We estimate returns to education by country to explore if the potential wage gap is explained by educational attainment. In principle, we would like to know if there are statistically significant differences between the returns to education for females and males. Therefore, we estimate the following model:

$$\ln(y)_{ci} = \alpha + \beta_1 * SC_{ci} + \beta_2 * t_{ci} + \varepsilon_{ci} \quad \text{Eq. 1}$$

This equation represents the relationship between the natural logarithm of hourly wage and educational attainment. In particular, $\ln(y)_{ci}$ represents the natural logarithm of hourly wage of individual i in country c , SC_{ci} is a dummy that takes a value of one if individual i in country c has attained secondary school, and zero otherwise, t_{ci} is a dummy that takes a value of one if individual has attained tertiary education and zero otherwise. The parameters of interest are β_1 and β_2 that represent the returns to secondary completed (with respect to below secondary education) and the returns to tertiary education (with respect to below secondary education).

To explore potential differential returns to on-the-job training, we estimate a regression model as follows:

$$\ln(y)_{ci} = \alpha + \beta_1 * SC_{ci} + \beta_2 * t_{ci} + \sum_{s=1}^4 \gamma_{csi} * S_{csi} + \delta * OJT_{ci} + \varepsilon_{ci} \quad \text{Eq. 2}$$

This equation represents the relationship between the natural logarithm of hourly wage and educational attainment, the industrial sector, and having received on-the-job training. As before, $\ln(y)_{ci}$ represents the natural logarithm of the hourly wage of individual i in country c , SC_{ci} is a dummy that takes a value of one if individual i in country c has attained secondary school, and zero otherwise, t_{ci} is a dummy that takes a value of one if the individual has attained tertiary education and zero otherwise. The returns to the economic sector are captured by dummies S_{csi} that takes the value of one if the individual i in country c works in sector s . Lastly, the variable OJT_{ci} takes the value of one if individual i living in country c has received on-the-job training. The parameter of interest in this instance is δ , the returns to training that will measure the positive or negative relation with wages.



6.8 Annex 8. A Note on Ñopo's Decomposition

Different authors cited in this document have studied the determinants of the gender wage gaps. Recently, Ñopo and others (Ñopo, 2008; Bellony et al., 2010) studied how observable characteristics and the difference between them for males and females could explain the gender gap, or at least to what extent. The procedure that these authors implement also allows for an estimation of what portion of the gap is attributed to unobservable characteristics. Table 8 shows the results for the estimation of different models that contain information at the individual level for some socio-economic and labor market characteristics.

Efforts to understand the main drivers of wage gaps are present in the literature. In the case of Barbados and Jamaica, Bellony et al. (2010) studied the principal drivers that could explain the wage gender gaps using data from household and labor force surveys. The methodology used corresponds to the one designed by Ñopo (2008), based on the literature on gap decomposition led by Blinder (1973) and Oaxaca (1973), who examine the gender wage gaps comparing differential returns to education for males and females. The basic idea behind this approach is to understand what part of the wage gap corresponds to endowments (aspects valued by the labor market), and which part remains unexplained (commonly attributed to discrimination against a particular population).

The analysis of Bellony et al. (2010) in Barbados and Jamaica is based on matching procedures. The methodology introduced by Ñopo (2008) has the advantage of propensity score matching, a procedure widely used in impact evaluation studies. In the adaptation introduced by the authors, they compare the distributions of observable characteristics between females and males. The idea is to study the combination of characteristics that best explains the difference in wages between these two groups. This methodology ends up with three kinds of individuals to analyze: females who do not share characteristics with any male, females and males that share the same distribution of characteristics (the matched ones), and, finally, males that do not share characteristics with any female. With this, the total wage gap (D) is equal to the sum of the share attributed to each population: the difference attributed to those females who do not share characteristics with any male, the difference attributed to the characteristics of males, and the difference attributed to the same distribution of characteristics ($DF+DM+DX$). The remaining part of the gap, D , is what the authors call unexplained (D_0).

The objective of the Ñopo decomposition is to allow the gap analysis to consider not only the characteristics of the individuals in levels, but also their distributions. This procedure implies, as in the case of the impact evaluation's propensity score matching, the problem of dimensionality. This issue relates to the fact that adding more variables or characteristics to the analysis would reduce the number of potentially matched individuals. To account for that, the author suggests adding those characteristics that reduce the unexplained part of the wage gap the most.



The following table summarizes the results of the Ñopo decomposition for the studied countries. The difference, D, is expressed in terms of the average female's wage, meaning that, when positive, males earn x percent more than females. Results show that adding demographic characteristics (age, education, marital status, presence of children in the household, and the availability of other wage earners in the household) and labor characteristics, such as training, experience, occupation, sector, and type of employment variables, will reduce the share of the gap that is unexplained, although it will remain the main part of the wage gap.

We can see that the largest potential contributor to a reduction of the unexplained gap is occupation since the hypothetical complete elimination of gender inequalities would imply a reduction of gender wage gaps between 7.6 percentage points in Guyana and 1 percentage point in The Bahamas. The inclusion of all the variables at once, meaning a hypothetical reduction of gender inequalities at the experience, occupation, sector, and type of employment level, would lead to a reduction of wage gender gaps between 3.3 percentage points in The Bahamas and 9.3 percentage points in Trinidad and Tobago. However, it is important to mention that in the case of Barbados the impact of such a hypothetical reduction in gender inequality on the variables mentioned would more than compensate the wage gap; and in the case of Jamaica would equal the actual pro-female gender gap.

TABLE 8 ÑOPO DECOMPOSITION RESULTS FOR DIFFERENT SETS OF CHARACTERISTICS. THE BAHAMAS (2014), BARBADOS (2016), GUYANA (2019), JAMAICA (2016), AND TRINIDAD AND TOBAGO (2015)

COUNTRY	CONTROLS	D	D0	DM	DF	DX	PERCM	PERCF
The Bahamas	Age	15.29%	16.08%	-0.14%		-0.65%	99.60%	100.00%
	Age + Education	15.29%	17.68%	-1.27%	0.48%	-1.61%	94.35%	97.17%
	Age + Education + Married	15.29%	18.13%	-1.49%	0.65%	-1.99%	88.80%	92.54%
	Age + Education + Married + Children	15.29%	18.13%	-1.49%	0.65%	-1.99%	88.80%	92.54%
	Age + Education + Married + Children + Earners	15.29%	17.23%	-1.72%	1.13%	-1.34%	81.96%	84.60%
	Age + Education + Married + Children + Earners + Geographic info	15.29%	17.91%	-2.11%	2.32%	-2.83%	67.39%	68.74%
	Demographics + Experience	15.29%	17.91%	-2.11%	2.32%	-2.83%	67.39%	68.74%
	Demographics + Occupation	15.29%	16.88%	-2.12%	2.27%	-1.73%	55.80%	57.74%
	Demographics + Sector	15.29%	13.82%	-2.42%	6.21%	-2.31%	35.28%	34.41%
	Demographics + Type of Employment	15.29%	15.37%	-5.58%	5.19%	0.31%	55.00%	50.98%
	Full set	15.29%	13.65%	-4.05%	7.77%	-2.08%	23.79%	21.84%



COUNTRY	CONTROLS	D	D0	DM	DF	DX	PERCM	PERCF
Barbados	Age	4.06%	3.98%	0.19%	0.04%	-0.15%	98.72%	99.50%
	Age + Education	4.06%	6.53%	0.07%	0.02%	-2.56%	94.64%	98.99%
	Age + Education + Married	4.06%	6.39%	0.06%	0.28%	-2.67%	90.94%	94.47%
	Age + Education + Married + Children	4.06%	5.51%	0.70%	0.97%	-3.12%	80.48%	85.55%
	Age + Education + Married + Children + Earners	4.06%	5.34%	1.42%	1.51%	-4.20%	72.70%	73.99%
	Age + Education + Married + Children + Earners + Geographic info	4.06%	4.06%	2.41%	-0.31%	-2.10%	44.90%	42.59%
	Demographics + Experience	4.06%	7.67%	1.23%	-4.56%	-0.28%	17.47%	15.83%
	Demographics + Occupation	4.06%	7.61%	3.85%	-5.48%	-1.92%	11.73%	11.68%
	Demographics + Sector	4.06%	6.24%	2.69%	-4.14%	-0.72%	18.49%	16.71%
	Demographics + Type of Employment	4.06%	3.42%	4.99%	-2.11%	-2.24%	27.42%	26.76%
	Full set	4.06%	-11.33%	40.21%	-17.82%	-6.99%	2.04%	1.51%
Guyana	Age	11.45%	11.72%	-0.04%	-0.05%	-0.17%	98.56%	99.73%
	Age + Education	11.45%	15.55%	-0.35%	-0.29%	-3.46%	90.46%	94.69%
	Age + Education + Married	11.45%	14.30%	-0.82%	-0.50%	-1.53%	79.73%	89.51%
	Age + Education + Married + Children	11.45%	15.15%	-0.94%	-1.54%	-1.21%	66.19%	80.11%
	Age + Education + Married + Children + Earners	11.45%	13.22%	-1.07%	-1.03%	0.34%	49.04%	63.76%
	Age + Education + Married + Children + Earners + Geographic info	11.45%	13.30%	1.61%	-2.63%	-0.83%	33.17%	44.82%
	Demographics + Experience	11.45%	10.97%	0.28%	0.64%	-0.44%	23.72%	32.56%
	Demographics + Occupation	11.45%	5.74%	9.72%	-5.30%	1.30%	7.69%	9.67%
	Demographics + Sector	11.45%	14.35%	5.63%	-7.42%	-1.11%	13.78%	18.39%
	Demographics + Type of Employment	11.45%	13.30%	1.61%	-2.63%	-0.83%	33.17%	44.82%
	Full set	11.45%	9.91%	13.99%	-13.44%	1.00%	3.29%	2.72%
Jamaica	Age	-6.18%	-2.33%	-0.36%		-3.50%	99.60%	100.00%
	Age + Education	-6.18%	9.05%	-2.99%	-0.06%	-12.17%	94.03%	98.35%
	Age + Education + Children	-6.18%	11.38%	-3.27%	-1.84%	-12.45%	89.60%	93.59%
	Age + Education + Children + Earners	-6.18%	11.38%	-3.27%	-1.84%	-12.45%	89.60%	93.59%
	Age + Education + Children + Earners + Geographic info	-6.18%	12.63%	-7.62%	-13.55%	2.36%	43.43%	47.65%
	Demographics + Experience	-6.18%	12.84%	-4.48%	-17.37%	2.84%	34.68%	37.28%
	Demographics + Occupation	-6.18%	16.39%	13.47%	-32.85%	-3.18%	11.74%	12.57%
	Demographics + Sector	-6.18%	25.41%	0.75%	-24.77%	-7.57%	21.34%	24.10%
	Demographics + Type of Employment	-6.18%	21.57%	-1.63%	-24.85%	-1.26%	23.98%	26.24%
	Full set	-6.18%	8.75%	54.58%	-67.52%	-1.99%	4.68%	4.27%



COUNTRY	CONTROLS	D	D0	DM	DF	DX	PERCM	PERCF
Trinidad and Tobago	Age	9.64%	9.48%	-0.09%		0.26%	98.60%	100.00%
	Age + Education	9.64%	14.24%	-0.67%	0.16%	-4.09%	93.41%	98.43%
	Age + Education + Married	9.64%	14.04%	-1.02%	-0.37%	-3.01%	85.89%	93.53%
	Age + Education + Married + Children	9.64%	14.29%	-0.61%	-0.54%	-3.50%	70.04%	85.88%
	Age + Education + Married + Children + Earners	9.64%	14.67%	-0.63%	-0.62%	-3.77%	56.32%	78.82%
	Age + Education + Married + Children + Earners + Geographic info	9.64%	11.69%	1.59%	-0.59%	-3.04%	25.03%	33.24%
	Demographics + Experience	9.64%	8.92%	0.45%	1.70%	-1.44%	15.91%	22.16%
	Demographics + Occupation	9.64%	9.26%	-0.40%	0.56%	0.22%	4.99%	8.14%
	Demographics + Sector	9.64%	7.33%	3.96%	1.39%	-3.04%	16.18%	20.59%
	Demographics + Type of Employment	9.64%	9.11%	3.71%	-1.12%	-2.05%	12.12%	15.98%
	Full set	9.64%	2.40%	1.02%	5.47%	0.76%	0.87%	1.47%

Source: own elaboration based on The Bahamas' 2014 Labor Force Survey, Barbados' 2016 Continuous Labor Force Survey, Guyana's 2019 Labor Force Survey, Jamaica's 2016 Labor Force Survey and Trinidad and Tobago's 2015 Continuous Sample Survey of Population.

